CAIIB MADE SIMPLE

BANK FINANCIAL MANAGEMENT

(CAIIB PAPER - 2)

Version 1.0

(A Very useful book for Day to Day Banking and all Knowledge Based Examinations)

COMPILED BY

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Preface

Dear Friends,

Banking/Financial sector in our country is witnessing a sea change & banker's business has become more complex & difficult in this driven era of knowledge & technology. There are mass retirements happening due to super annuation & many new recruits are joining the Bank. More than 40% staff strength is newly recruited in last three to four years. An official working in the Banking sector has to keep pace with Updated knowledge, skills & attitude, as the same is required everywhere. There is need to issue a comprehensive book covering all the aspects so that new recruits get updated very fast without referring many voluminous books.

This book titled " CAIIB MADE SIMPLE " has many unique features to its credit & consists of all topics/syllabus required for CAIIB examination with clear concept & simple language with latest changes during 2015-16 (upto June/July 2015 as per IIBF/ CAIIB exams.requirement) also included. This Book is divided into four Modules namely A, B, C & D with Practice Teat Papers / Teat Yourself based on latest IIBF syllabus for CAIIB examination.

The Book also covers the full syllabus (latest) of CAIIB examination and also recalled questions & MCQ based on IIBF examination Pattern will be helpful to all aspirants who are taking up CAIIB examination

During preparation of this book, I have received tremendous support from Team RSTC, Mumbai, many friends & colleagues especially Sri V Manoj from RSTC, Guwahati, my wife Mrs Renu, who is also a banker, my son Master Ritwiz Aryan & Special thanks to Sri B P Desai Sir (Our Ex. AGM & now Faculty on Contract at RSTC, Mumbai) for vetting & compilation of this book.

As any work will have always scope for further improvement, I shall be grateful if any feedback is provided for improvement in contents of the book.

I wish you all the best for the written test & hope the study material will help in achieving the goal.

Place : Mumbai
Date : 11.12.2015

SANJAY KUMAR TRIVEDY
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ABOUT CAIIB EXAMINATION

CAIIB EXAMINATION – Dec 2015

OBJECTIVE

CAIIB aims at providing advanced knowledge necessary for better decision making covering risk, financial and general bank management.

MEDIUM OF EXAMINATION : Either in Hindi or English

ELIGIBILITY : Candidates must have completed JAIIB or PART-1 of the Associate Examination, and their membership subscription should not be in arrears.

SUBJECT OF EXAMINATION

I. Compulsory Paper

1. Advanced Bank Management
2. Bank Financial Management

II. Elective Papers (Candidates to choose any one of their Choice)

1.	Corporate Banking	7.	Human Resources Management
2.	Rural Banking	8.	Information Technology
3.	International Banking	9.	Risk Management
4.	Retail Banking	10.	Central Banking
5.	Co-operative Banking	11.	Treasury Management
6.	Financial advising		

There is no exemption in any of the above subject/s for prior qualification/s.

The Institute has introduced electives to give opportunities for candidates to specialize in the vertical of their choice. Candidates may choose the elective in the area they are currently working or in the area they would like to work in future. It is suggested that the candidates may choose the elective in the area they are currently working and later move to other elective as this will enable appropriate skills / build up for handling different banking verticals.

Cut-off Date of Guidelines / Important Developments for Examinations

In respect of the exams to be conducted by the Institute during May / June of a calendar year, instructions / guidelines issued by the regulator(s) and important developments in banking and finance up to 31st December of the previous year will only be considered for the purpose of inclusion in the question papers. In respect of the exams to be conducted by the Institute during November / December of a calendar year, instructions / guidelines issued by the regulator(s) and important developments in banking and finance up to 30 June of that year will only be the considered for the purpose of inclusion in the question papers**. (This has been taken from IIBF – Vision Monthly Magazine , June 2015, Page no. 7)**

Further, questions based on current developments in banking and finance may be asked. Candidates are advised to refer to financial news papers / periodicals more particularly "IIBF VISION" and "BANK QUEST" published by the Institute.

MODE OF EXAMINATION

Examination will be conducted in Online Mode at majority of centres and under offline mode (paper and pencil) at selected centres as per the notification given on the web site in this regard. Examination will be held on three consecutive Sundays (one paper on each Sunday).

PROCEDURE FOR APPLYING FOR EXAMINATION

Application for examination should be made online from the Institute's website www.iibf.org.in. No physical form will be accepted by the Institute with effect from 1 January, 2013.

PATTERN OF EXAMINATION : Each Question Paper will contain approximately 100 objective type multiple choice questions, carrying 100 marks including questions based on case study / case lets. The Institute may, however, vary the number of questions to be asked for a subject. There will NOT be **negative marking** for wrong answers.

Further, questions based on current developments in banking and finance may be asked. Candidates are advised to refer to financial news papers / periodicals more particularly "IIBF VISION" and "BANK QUEST" published by the Institute.

Questions for the CAIIB Examination will be asked for :

(a) Knowledge testing, (b) Conceptual grasp, (c) Analytical / logical exposition, (d) Problem solving, (e) Case analysis

TYPES OF QUESTIONS

100 Objective Type Multiple Choice Questions - carrying 100 marks – 120 minutes and question will be based on Knowledge Testing, Conceptual Grasp, Analytical / Logical Exposition, Problem Solving & Case Analysis

A. MULTIPLE CHOICE- (Each Questions 01 Marks)– QUESTIONS & ANSWERS (40-50 QUES)
B. MULTIPLE CHOICE – (Each Questions 01 Marks)– PROBLEMS & SOLUTIONS (15-20 QUES)
C. MULTIPLE CHOICE–(Each Questions 01 Marks)–APPLIED THEORY–QUES. & ANS. (15-20 QUES)
D. MULTIPLE CHOICE – (Each Questions 01 Marks)– CASE STUDIES & CASE LETS (10-15 QUES)

QUESTIONS MODELS : TYPES OF QUESTIONS

Type – A : MULTIPLE CHOICE – QUESTIONS & ANSWERS

The Best Method for assessing working capital limit used by the bank for seasonal Industries is :
1. Operating Cycle Method, 2. Projected Networking Method, 3. Projected Turn over Method & 4. Cash Budget Method

Type – B : MULTIPLE CHOICE – PROBLEMS & SOLUTIONS

Mr. Ram Kumar is having overdraft account with Canara bank upto Rs.100,000. The present Debit Balance in the account was Rs. 80550.00. The bank has received attachment order from Income tax deptt. For Rs. 16,200.00. What can the bank do in this situation ?

- Unless the bank is a debtor, there can be no attachment and an unutilized overdraft account does not render the bank a debtor (but creditor) & hence can not attach.

Type – C : MULTIPLE CHOICE – APPLIED THEORY – QUES. & ANS

Financial Institution wish to have the money lent by them repaid in time. Secured advances sanctioned by banks possess what kind of security ?

- Secured Advances have impersonal security i.e. Tangible Security

Type –D : MULTIPLE CHOICE – CASE STUDIES & CASE LETS (PROBLEMS & SOLUTIONS)

Economic development of a country to a large extent depends upon Agril. & Industrial sectors.

Development of agril. Depends upon irrigation facilities while industrial development on availability of power, good transport and fast communication facilities. All these are called infrastructure. Read the case let & explain which industries constitute infrastructure ?

a. Energy, Transport & Communication
b. Irrigation, construction of bridges & dams over Rivers & stable govt. at Centre.
c. Availability of Funds for PMEGP , SJSRY & Indira Awas Yojana

DURATION OF EXAMINATION: The duration of the examination will be of 2 hours.

PERIODICITY AND EXAMINATION CENTRES

The examination will be conducted normally twice a year in May / June and November / December on Sundays.

Pass: Minimum marks for pass in every subject - 50 out of 100 marks.

Candidate securing at least 45 marks in each subject with an aggregate of 50% marks in all subjects of CAIIB examination in a single attempt will also be declared as having passed JAIIB Examination.

Candidates will be allowed to retain credits for the subject/s they have passed in one attempt till the expiry of the time limit for passing the examination as mentioned bellow,

TIME LIMIT FOR PASSING THE EXAMINATION

Candidates will be required to pass CAIIB examination within a time limit of 2 years (i.e. 4 consecutive attempts). Initially a candidate will have to pay examination fee for a block of one year i.e. for two attempts. In case a candidate is not able to pass CAIIB examination within 1st block of 2 attempts, he / she can appear for a further period of 1 year (2nd block) i.e. 2 attempts on payment of requisite fee. Candidates who have exhausted the first block of 2 attempts, should necessarily submit the examination application form for the next attempt, without any gap. If they do not submit the examination form immediately after exhausting the first block, the examination conducted will be counted as attempts of the second block for the purpose of time limit for passing.

Candidates not able to pass CAIIB examination within the stipulated time period of two years are required to re-enroll themselves afresh by submitting fresh Examination Application Form. Such candidates will not be granted credit/s for subject/s passed, if any, earlier.

Attempts will be counted from the date of application irrespective of whether a candidate appears at any examination or otherwise.

“CLASS OF PASS” CRITERIA

The Institute will consider the FIRST PHYSICAL ATTEMPT of the candidate at the examination as first attempt for awarding class. In other words, the candidate should not have attempted any of the subject/s pertaining to the concerned examination any time in the past and has to pass all the subjects as per the passing criteria and secure prescribed marks for awarding class. Candidate re-enrolling for the examination after exhausting all permissible attempts as per the time limit rule will not be considered for awarding class.

First Class: 60% or more marks in aggregate and pass in all the subjects in the FIRST PHYSICAL ATTEMPT. First Class with Distinction: 70% or more marks in aggregate and 60 or more marks in each subject in the FIRST PHYSICAL ATTEMPT.

CAIIB EXAMINATION –Dec 2015

(Last date for applying for examination : 10/09/2015)

ONLINE MODE		
Examination DATE	TIME	SUBJECTS
06/12/2015 Sunday	ONLINE - Will be given in the admit Letter	Advanced Bank Management
13/12/2015 Sunday	ONLINE - Will be given in the admit Letter	Bank Financial Management
20/12/2015 Sunday	ONLINE - Will be given in the admit Letter	Corporate Banking Rural Banking International Banking Retail Banking Co-operative Banking Financial Advising Human Resources Management Information Technology Risk Management Central Banking Treasury Management
Last Date for receipt of Change of Centre Requests at the respective Zonal Offices for the CAIIB/Electives Examinations scheduled for Dec 2015 : 30th October 2015		

Revised Examination Fees inclusive SERVICE TAX @14% with effect from 1st June, 2015

(Examination Eligible for Members Only)			
Sr. No.	Name of the Exam	Attempts	For Members(Rs)
1	CAIIB	First Block of 2 attempts	3078
		Second Block of 2 attempts	3078

Module: A

International Banking

Forex Business; factors determining exchange rates, Direct and indirect quotations, spot / forward rates, premium and discount, cross rates. Basics of forex derivatives; forward exchange rate contracts, Options, Swaps. Correspondent banking, NRI accounts
Documentary letters of Credit - UCPDC 600, various facilities to exporters and importers. Risks in foreign trade, role of ECGC, types of insurance and guarantee covers or ECGC. Role of Exim Bank - Role of RBI and exchange control - Regulations in India, Role and rules of FEDAI - Role of FEMA and its rules

PART – A

FOREIGN EXCHANGE MANAGEMENT ACT, 1999

The Foreign Exchange Management Act 1999 (FEMA) was enacted on December 02, 1999 to replace Foreign Exchange Regulation Act (FERA) 1973. The Act came into on June 01, 2000 and extends to the entire country, all branches, offices, agencies outside India - those owned or controlled by a person residing in India.

Objective of FEMA : (i) Facilitating external trade and payments and (ii) for promoting the orderly development and maintenance of foreign exchange market in IndiaThe Foreign Exchange Management Act, 1999, extends to the whole of India. It shall also applies to all branches, offices and agencies outside India owned or controlled by a person resident in India. It came into force wef June 01, 2000.

Important terms and definitions

Authorised person means an authorised dealer, money changer, off-shore banking unit or any other person being authorised to deal in foreign exchange or foreign securities, by RBI, Currency includes all currency notes, postal notes, postal orders, money orders, cheques, drafts, travellers' cheques, letters of credit, bills of exchange and promissory notes, credit cards or such other similar instruments, as may be notified by the Reserve Bank.

Currency notes means and includes cash in the form of coins and bank notes;Current account transaction means a transaction other than a capital account transaction and includes,-

(i) payments due in connection with foreign trade, other current business, services, and short-term banking and credit facilities in the ordinary course of business,

(ii) payments due as interest on loans and as net income from investments,

(iii) remittances for living expenses of parents, spouse and children residing abroad, and

(iv) expenses in connection with foreign travel, education and medical care of parents, spouse and children;

Foreign exchange from whom : As per Section 5, any person may sell or draw foreign exchange to or from an *authorised person* if such sale or drawal is a current account transaction. Central Government may, in consultation with the Reserve Bank, impose such reasonable restrictions for current account transactions.

Export, with its grammatical variations and cognate expressions means, the taking out of India to a place outside India any goods and provision of services from India to any person outside India; Foreign currency means any currency other than Indian currency;

Foreign exchange means foreign currency and includes,-

(i) deposits, credits and balances payable in any foreign currency,

(ii) drafts, travellers' cheques, letters of credit or bills of exchange, expressed or drawn in Indian currency but payable in any foreign currency,

(iii) drafts, travellers cheques, letters of credit or bills of exchange drawn by banks, institutions or persons outside India, but payable in Indian currency; Foreign security means any security, in the form of shares, stocks, bonds, debentures, or any other instrument denominated or expressed in foreign currency and includes securities expressed in foreign currency, but where redemption or any form of return such as interest or dividends is payable in Indian currency;

Import, with its grammatical variations and cognate expressions, means bringing into India any goods, or services;

Person resident in India means -

(I) a person residing in India for more than 182 days during the course of the preceding financial year but does not include-

(A) a person who has gone out of India or who stays outside India, in either case- (a) for or on taking up employment outside India, or (b) for carrying on a business or vocation outside India, or (c) for any other purpose, in such circumstances as would indicate his intention to stay outside India for an uncertain period;

(B) a person who has come to stay in India, in either case, otherwise than- (a) for or on taking up employment in India, or (b) for carrying on a business or vocation in India, or (c) for any other purpose, in such circumstances as would indicate his intention to stay in India for an uncertain period;

(ii) any person or body corporate registered or incorporated in India,

(iii) an office, branch or agency in India owned or controlled by a person resident outside India,
(iv) an office, branch or agency outside India owned or controlled by a person resident in India;
Person resident outside India means a person who is not resident in India.

Regulation And Management Of Foreign Exchange Dealing in foreign exchange (Sec 3): No person shall-
(a) deal in or transfer any foreign exchange or foreign security to any person not being an authorized person;
(b) make any payment to or for the Credit of any person resident outside India in any manner;
(c) receive otherwise through an authorised person, any payment by order or on behalf of any person resident outside India in any manner;
(d) enter into any financial transaction in India as consideration for or in association with acquisition or creation or transfer of a right to acquire, any asset outside India by any person.

Holding of foreign exchange: No person resident in India shall acquire, hold, own, possess or transfer any foreign exchange, foreign security or any immovable property *situated outside India, unless permitted by RBI.*

Holding of foreign currency by Residents: A person resident in India may hold, own, transfer or invest in foreign currency, foreign security or any immovable property situated outside India if such currency, security or property was acquired, held or owned by such person when he was resident outside India or inherited from a person who was resident outside India.

Holding of foreign currency by non-residents A person resident outside India may hold, own, transfer or invest in Indian currency, security or any immovable property situated in India if such currency, security or property was acquired, held or owned by such person when he was resident in India or inherited from a person who was resident in India.

Capital account transactions A transaction which alters the assets or liabilities, including contingent liabilities, outside India of persons resident in India or assets or liabilities in India of persons resident outside India, is called capital account transaction. As per Section 6 any person may sell or draw foreign exchange to or from an authorised person for a capital account transaction. Reserve Bank may, in consultation with the Central Government, specify :
(a) any class or classes of capital account transactions which are permissible;
(b) the limit up to which foreign exchange shall be admissible for such transactions:
Reserve Bank shall not impose any restriction on the drawal of foreign exchange for payments due on account of amortisation of loans or for depreciation of direct investments in the ordinary course of business. transaction. As per Section 6 any person may sell or draw foreign exchange to or from an authorised person for a capital account transaction. Reserve Bank may, in consultation with the Central Government, specify :
(c) any class or classes of capital account transactions which are permissible;
(d) the limit up to which foreign exchange shall be admissible for such transactions:
Reserve Bank shall not impose any restriction on the drawal of foreign exchange for payments due on account of amortisation of loans or for depreciation of direct investments in the ordinary course of business

Restriction on capital account transactions Reserve Bank may, by regulations, prohibit, restrict or regulate the following-
(a) transfer or issue of any foreign security by a person resident in India;
(b) transfer or issue of any security by a person resident outside India;
(c) transfer or issue of any security or foreign security by any branch, office or agency in India of a person resident outside India;
(d) any borrowing or lending in foreign exchange in whatever form or by whatever name called;
(e) any borrowing or lending in rupees in whatever form or by whatever name called between a person resident in India and a person resident outside India;
(f) deposits between persons resident in India and persons resident outside India;
(9) export, import or holding of currency or currency notes;
(h) transfer of immovable property outside India, other than a lease not exceeding five years, by a person resident in India;
(i) acquisition or transfer of immovable property in India, other than a lease not exceeding five years, by a person resident outside India;
(j) giving of a guarantee or surety in respect of any debt, obligation or other liability incurred-
(i) by a person resident in India and owed to a person resident outside India; or
(ii) by a person resident outside India.

Reserve Bank's powers to issue directions to authorised person (Section 11) : Reserve Bank, may give to the authorised persons, any direction in regard to making of payment or the doing or desist from doing any act relating to foreign exchange or foreign security, direct any authorised person to furnish such information, in such manner, as it deems fit.
Penalty on authorized person : Where any authorised person contravenes any direction given by the Reserve Bank under this Act or fails to file any return as directed by the Reserve Bank, the Reserve Bank may, after giving reasonable opportunity of being heard, impose on the authorised person a penalty which may extend to Rs.10000 and in the case of continuing contravention with for every day during which such contravention continues.
Power of Reserve Bank to inspect authorised person (Sec 12)
Reserve Bank may undertake an inspection of the business of any authorised person for the purpose of verifying the correctness of any statement, information or particulars furnished to the Reserve Bank, obtaining any information or particulars which such authorised person has failed to furnish on being called upon to do so.

CONTRAVENTION AND PENALTIES : Penalties (Sec 13) : If any person contravenes any provisions of this Act, or contravenes any rule, regulation, notification, direction or order issued in exercise of the
powers under this Act, or contravenes any condition subject to which an authorisation is issued by the Reserve Bank, he shall, upon adjudication, be liable to a penalty up to *thrice the sum involved* in such contravention where such amount is quantifiable, or up to Rs.2 lac where the amount is not quantifiable. Such contravention is a continuing one, further penalty which may extend to Rs.5000 for every day after the first day during which the contravention continues.
If any person fails to make full payment of the penalty imposed on him under section 13 within a period
of 90 days from the date on which the notice for payment of such penalty is served on him, he shall be liable to civil imprisonment u/s 14.
Power to compound contravention : U/s 15, any contravention under section 13 may, on an application made by the person committing such contravention, be compounded within 180 days from the date of receipt of application by the Director of Enforcement or such other officers of the Directorate of Enforcement and officers of the Reserve Bank as may be authorised in this behalf by the Central Government.
ADJUDICATION AND APPEAL
U/s 16 Central Government may appoint officers of the Central Government, as the Adjudicating Authorities for holding an inquiry. Adjudicating Authority may direct the said person to furnish a bond or guarantee,
- No Adjudicating Authority shall hold an enquiry except
upon a complaint in writing made by any officer authorised by a general or special order by the Central Government. Adjudicating Authority shall have the powers of a civil court.
- **All** proceedings before it shall be deemed to be judicial proceedings within the meaning of sections 193 and 228 of the Indian Penal Code.
- Adjudicating Authority shall deal with the complaint to dispose of the complaint finally within one year from the date of receipt of the complaint:

Appellate Tribunal (Sec 18): The Central Government shall, establish an Appellate Tribunal to be known as the Appellate Tribunal for Foreign Exchange to hear appeals against the orders of the Adjudicating Authorities and the Special Director (Appeals). Appellate Tribunal shall consist of a Chairperson and such number of Members as the Central Government may deem fit.
Restriction on capital account transactions Reserve Bank may, by regulations, prohibit, restrict or regulate the following-
(a)transfer or issue of any foreign security by a person resident in India;
(b) transfer or issue of any security by a person resident outside India;
(f) transfer or issue of any security or foreign
security by any branch, office or agency in India of a person resident outside India;
(g) any borrowing or lending in foreign exchange in whatever form or by whatever name called;
(h) any borrowing or lending in rupees in whatever form or by whatever name called between a person resident in India and a person resident outside India;
deposits between persons resident in India and persons resident outside India;

(9) export, import or holding of currency or currency notes;
(k) transfer of immovable property outside India,
other than a lease not exceeding five years, by a person resident in India;
(l) acquisition or transfer of immovable property in
India, other than a lease not exceeding five years, by a person resident outside India;
(m) giving of a guarantee or surety in respect of any
debt, obligation or other liability incurred-
(iii) by a person resident in India and owed to a person resident outside India; or
(iv) by a person resident outside India.

Reserve Bank's powers to issue directions to authorised person (Section 11) : Reserve Bank, may give to the authorised persons, any direction in regard to making of payment or the doing or desist from doing any act relating to foreign exchange or foreign security, direct any authorised person to furnish such information, in such manner, as it deems fit.
Penalty on authorized person : Where any authorised person contravenes any direction given by the Reserve Bank under this Act or fails to file any return as directed by the Reserve Bank, the Reserve Bank may, after giving reasonable opportunity of being heard, impose on the authorised person a penalty which may extend to Rs.10000 and in the case of continuing contravention with an additional penalty which may extend to Rs.2000.Appeal to High Court (Sec 35) : No civil court shall have jurisdiction to entertain any suit or proceeding in respect of any matter which an Adjudicating Authority or the Appellate Tribunal or the Special Director (Appeals) is empowered. Any person aggrieved by any decision or order of the Appellate Tribunal may file an appeal to the High Court within 60 days from the date of communication of the decision or order of the Appellate Tribunal to him on any question of law arising out of such order:

DIRECTORATE OF ENFORCEMENT : U/S 36, Central Government shall establish a Directorate of Enforcement with a Director and other officers. U/s 37, the Director of Enforcement and other officers of Enforcement, not below the rank of an Assistant Director, shall take up for investigation, the contravention referred to in section 13.
Empowering other officers : U/s 38, Central Government may authorise any officer of customs or any Central Excise Officer or any police officer or any other officer of the Central Government or a State Government to exercise such of the powers and discharge such of the duties of the Director of Enforcement or any other officer of Enforcement under this Act. The officers shalt exercise the like powers which are conferred on the income-tax authorities under the Income Tax Act, 1961.
Power to make regulations : U/s 47, Reserve Bank may, make regulations to carry out the provisions of this Act and the rules made there-under. Such regulations may provide for ,-
(a) the permissible classes of capital account transactions, the limits of admissibility of foreign exchange for such transactions, and the prohibition, restriction or regulation of certain capital account transactions under section 6;
(b) the manner and the form in which the declaration is to be furnished under clause (a) of sub-section (1) of section 7;
(c) the period within which and the manner of repatriation of foreign exchange under section 8;
(d) the limit up to which any person may possess foreign currency or foreign coins under clause (a) of section 9;
(e) the class of persons and the limit up to which foreign currency account may be held or operated under clause (b) of section 9;
(f) the limit up to which foreign exchange acquired may be exempted under clause (d) of section 9;
(9) the limit up to which foreign exchange acquired may be retained under clause (e) of section 9;
(h) any other matter which is required to be, or may be, specified.
Foreign Exchange in simple terms means any currency other than Home Currency (INR). It also means the conversion of one currency to another to facilitate trade, travel and movement of capital between countries. The need for foreign exchange arises because the exporter would like to receive the proceeds of exports in his home currency while the importer would like-to pay for his imports in his home currency.
Forex transaction is a contract to exchange funds, in one currency against funds in another currency at an agreed rate. Buying transaction means receiving Forex and releasing home currency and selling transaction means releasing Forex and receiving home currency.

Foreign Exchange is a commodity. Forex transactions (sale/purchase) are regulated in India under FEMA 1999.Objective of FEMA: To facilitate external trade and orderly management and development of inter-bank forex markets in India. Inter-bank forex market regulated in India by : RBI. Inter-bank forex market timing: 9 am to 5 pm (Saturday-closed).Foreign Currency rates are fixed in India by: Market forces of demand and supply (Higher demand - higher rate).Foreign trade is regulated by: DGFT. In India direct rates is used W.e.f. 1.8.1993.

Introduction

1. In India, forex transactions are subject to Foreign Exchange Management Act 1999.
2. The Act came into operation with effect from 1.6.2000.
3. The main objective of the Act is to ensure orderly conduct of forex transactions. Prior to FEMA, forex transactions were regulated by Foreign Exchange Regulation Act which provided for criminal proceedings also whereas FEMA provides for only civil proceedings.
4. In India, exchange control is exercised by RBI and trade control is exercised by DGFT (Director General of Foreign Trade.
5. Balance of Trade means export of goods minus import of goods. Balance of Payment means receipt of forex minus payment of forex.
6. Only Authorised persons i.e. who are authorised by RBI can undertake forex transactions. Authorised persons would include Authorised Dealers (AD) and Full fledged money changers.
7. AD are classified in 3 categories. AD category —I can undertake all current and capital account transactions. AD Category — II can undertake specified non-trade related current account transactions. AD Category III would include select Financial and Other institutions and can undertake transactions incidental to the foreign exchange activities undertaken by these institutions. Full fledged Money Changers can purchase as well as sell foreign currency and traveller cheques.
8. Branches are also categorised in 3 categories. Category A branches purchase and sell forex in the open market; open Nostro and Vostro accounts. Category B branches _deal with customers and undertake handling of export & import bills, open foreign currency accounts, purchase and sell forex and undertake other functions. Category C branches route their forex business through category B branches.

Correspondent Accounts

1. Banks have three types of correspondent bank accounts namely Nostro, Vostro and Loro accounts.
2. Nostro account: It means our account with you. The account of a bank in India with a foreign_correspondent bank abroad in Foreign currency is called Nostro account. For example, account of PNB Delhi with City Bank New york.
3. Vostro account: It means your account with us. The account of a foreign correspondent bank abroad with a bank in India in Indian Rupees will be a Vostro account. For example, account of City Bank New York with PNB Delhi.
4. Loro Account: Their account with them. For example, PNB has account with City Bank New York. For PNB, this account is Nostro account. For City Bank, this account is Vostro account. For any other bank, this account is Loro account.
5. All foreign exchange transactions are settled through Nostro accounts.

R RETURNS

1. R Return is a statement of purchase and sale of forex by an authorised dealer.
2. It is sent to RBI fortnightly as on 15th and last day of the month.
3. With effect from Jan 2009, it will be sent by bank as a whole.
4. R Return is prepared to know balance of payment position.

Foreign Exchange Management Act 1999: Certain Definitions

1. **Objective:** Facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India
2. It extends to the whole of India. It shall also apply to all branches, offices and agencies outside India owned or controlled by a person resident in India.
3. It was implemented from 1st June 2000.
4. "capital account transaction" means a transaction which alters the assets or liabilities, including contingent

liabilities, outside India of persons resident in India or assets or liabilities in India of persons resident outside India.
5. "current account transaction" means a transaction other than a capital account transaction and without prejudice to the generality of the foregoing such transaction includes,- (i) payments due in connection with foreign trade, other current business, services, and short-term banking and credit facilities in the ordinary course of business, (ii) payments due as interest on loans and as net income from investments, (iii) remittances for living expenses of parents, spouse and children residing abroad, and (iv) expenses in connection with foreign travel, education and medical care of parents, spouse and children;
6. "export", with its grammatical variations and cognate expressions means: (i) the taking out of India to a place outside India any goods, (ii) provision of services from India to any person outside India;
7. "foreign exchange" means foreign currency and includes,- (i) deposits, credits and balances payable in any foreign currency, (ii) drafts, travellers' cheques, letters of credit or bills of exchange, expressed or drawn in Indian currency but payable in any foreign currency, (iii) drafts, travellers cheques, letters of credit or bills of exchange drawn by banks, institutions or persons outside India, but payable in Indian currency;
8. "Person resident in India" means- (i) a person residing in India for more than one hundred and eighty-two days during the course of the preceding financial year but does not include a person who has gone out of - India or who stays outside India, in either case (a) for or on taking up employment outside India, or (b) for carrying on outside India a business or vocation outside India, or (c) for any other purpose, in such circumstances as would indicate his intention to stay outside India for an uncertain period;
9. "person resident outside India" means a person who is not resident in India;

Exchange Rates

1. Exchange Rates are applied when there is a sale or purchase of foreign exchange.
2. Direct Rates and Indirect Rates:
3. Direct Rate: When foreign currency is fixed and value of home currency is variable, it is Direct rate e.g. US$1= Rs **46.43;**
4. Indirect Rate: When home currency is fixed and value of foreign currency is variable, it is Indirect rate e.g. Rs 100= US $ 2.39.
5. In India, direct rates are applied. When direct rates are applied, the principle is "Buy Low and Sell High".
6. In India, rates are determined by market forces of demand and supply and not by RBI or any other agency.
7. Buying or Selling Rate:
8. Buying Rate: When there is inflow of forex, it is purchased and buying rate is applied. For example, in the case of purchase of export bills buying rate will be applicable. Buying rate are of two types. TT Buying rate is applied when Nostro account of the bank is credited before the payment to the tenderer e.g. payment of FDD drawn on us or collection of export bills. Bills Buying Rate is applied when Nostro account is credited later and payment made earlier as in the case of negotiation of export bills or purchase of foreign demand draft or cheque drawn abroad.
9. Selling Rate: When there is outflow of forex, it is sold and selling rate is applied. For example, in the case of retirement of import bills, selling rate will be applicable. Selling rates are of two types. Bills Selling rate is applied when handling of import bill is involved. TT Selling Rate is applied when there is sale of foreign exchange but import bill is not handled like issue of Foreign Demand draft, crystalisation of overdue export bills.
10. TT selling or buying rate is more favourable than Bills selling or buying rate.
11. The exchange rate for purchase or sale of foreign currency are most unfavourable as holding cost of currency is high.

Summary of Exchange Rate Application

Rate	Transaction
TT-Selling	Outward remittance such as DD, TC etc. Cancellation of purchase such as: • bills purchased returned unpaid, • bills transferred to collection account • forward purchase contract cancelled

Bill-selling	Transfer of proceeds of import bills even if these are by way DD or TT.
TCs/ currency note — selling	At the discretion of the AD
TT-Buying	• cancellation of outward TT, MT etc. • clean inward remittances (TT,DD, MT) where cover already received abroad • Conversion of proceeds of instruments that are sent for collection • Cancellation of forward sale contract
Bills-Buying	• Purchase of bills **and** other instruments
TCs/currency note — Buying	At the discretion of the AD

Types of Letters of Credit

1. Revocable Credit : Such a Credit can be revoked / modified amended without consent of beneficiary.
2. Irrevocable Credit : Such a Credit cannot be cancelled / modified or amended without consent of beneficiary. In the absence of any indication whether an L/C is revocable or irrevocable, it **shall** be deemed to be irrevocable. As per **UCPDC** 600, banks will issue only irrevocable LC
3. Confirmed Credit: An irrevocable credit which carries confirmation of **the** advising bank is called confirmed credit. Article 8 of UCPDC, 600 says that a confirmation of irrevocable credit by another bank (the 'Confirming Bank') upon the authorisation or request of the Issuing Bank constitutes **a definite undertaking of the confirming Bank,** in addition to that of the Issuing Bank, provided that the stipulated documents are presented to the Confirming Bank or any other Nominated Bank-and that the terms and conditions of the Credit are complied with.
4. Transferable Credit: Under a transferable VC the beneficiary requests for credit being made available in whole or in part to one or more other beneficiaries. Under Article 38 of **UCPDC,** 600 a credit is transferable only if it designated as 'Transferable' by the issuing **bank.** Unless otherwise stated in the Credit, a transferable Credit can be transferred once only. Other features of a transferable credit are :

a) Transferable credit can't be transferred at the request of the Second Beneficiary to any subsequent Third Beneficiary. However a retransfer to the First Beneficiary is allowed.

b) Fraction of a transferable Credit (not exceeding in the aggregate of the amount of the credit) can be transferred separately, provided partial shipments/drawings are not prohibited and the aggregate of such transfers will be considered as constituting only one transfer of credit. The first Beneficiary has the right to substitute his own invoice (s) (and Draft(s)) for those of the Second Beneficiary(ies), for amounts not in excess of the original amount stipulated in the Credit and for the original unit prices if stipulated in the Credit, and upon such substitution of invoice(s) (and Draft(s)) the First Beneficiary can draw under the Credit for the difference, if any, between his invoice(s) and the Second Beneficiary(ies)'s invoice(s)

5. Revolving Credit In such an L/C the amount of drawing is reinstated and made available to the beneficiary again after negotiation of documents drawn under LC. There will be restriction regarding number of times LC can revolve or maximum value upto which documents can be negotiated or both.
6. Back to Back Credit: It is an UC which is issued on the strength of original UC. Beneficiary of original UC is applicant of Back to Back credit. Normally an exporter uses his export UC as a cover for UC in favour of local suppliers.
7. Red Clause UC: This LC has a clause permitting the correspondent bank in the exporters country to grant advance to beneficiary at issuing bank's risk and responsibility. These advances
8. are adjusted from proceeds of the bills negotiated.
9. Green Clause UC: This type of UC is an extension of Red Clause L/C. Besides pre-shipment credit, Green Clause UC entails finance for storing of goods in a warehouse. Both Red clause and Green clause LC are called anticipatory credits.
10. Restricted LC: A letter of credit in which negotiation is restricted to a particular bank.
11. Stand by LC: A LC issued in lieu of Bank Guarantee.
12. DA LCs are those, where the payment is to be made on the maturity date in terms of the credit. The documents of title to goods are delivered to applicant merely on acceptance of documents drawn under LC.
13. DP LCs are those where the payment is made against documents on presentation.

Merchant Exporter will prefer transferable or back to back credit whereas manufacturer exporter will

prefer Red clause or Green clause LC. All exporters prefer Irrevocable LC

Parties to a LC transaction

1. There are 05 parties to LC i.e. a.Exporter who is beneficiary of credit, b. Issuing bank who is importer's bank.
3.Advising bank is the one through whom LC is advised to the exporter. 4. Confirming bank is the one who gives additional undertaking to make issuing bank.
45 Negotiating Bank : who will purchase or discount bills drawn under LC

Salient provisions of UCPDC

1. All LC transactions are subject to Uniform Customs and Practice for Documentary Credits (UCPDC) 600 which is effective from 1st July 2007 and has been issued by International Chamber of Commerce Paris. However, when there is a contradiction between terms of LC and UCPDC, provisions as stated in LC will prevail.
2. Advising bank is not liable for making payment under LC. His responsibility is only to ensure apparent authenticity of credit. Both issuing bank and confirming bank are liable for making the payment.
3. Banking day: A day when bank is regularly open at the place at whom an act, subject to UCPDC rules, is to be performed.
4. Credit (or LC): Any arrangement, however named or described, that is irrevocable and thereby constitutes a definite undertaking of the issuing bank to honour a complying presentation.
5. Honour: (a) to pay at sight if the credit is available by sight payment. (b) to incur a deferred payment undertaking and pay at maturity if the credit is available by deferred payment (c) **to** accept a bill of exchange (draft) drawn by the beneficiary and pay at maturity if the credit is available by acceptance.
6. Negotiation: Purchase by the nominated bank of drafts (drawn on a bank other than the nominated bank) and/or documents under a complying presentation, by advancing or agreeing to advance funds to the beneficiary on or before banking day on which reimbursement is due to the nominated bank.
7. Nominated bank: **The** bank with which the credit is available or any bank in case of a credit available with any bank.
8. A credit is irrevocable even if there is no indication to that effect.
9. On or about — Such expression will be interepreted as a stipulation that an event is to occur during a period of 5 calendar days before and until 5 calendar days after the specified **date, both** the start and **end** dates included.
10. The words 'to', 'until', 'from' and 'between' when used to determine a period of shipment include the date mentioned **and** the words 'before' and 'after exclude **the date mentioned.**
11. The words 'from' and 'after when used to determine a maturity date exclude the date mentioned.
12. The terms 'first half and 'second half of a month shall be construed respectively as the 1st to the 15th and the 16th to the last day of the month, all dates inclusive.
13. The terms 'beginning', 'middle' and 'end' of a month shall be construed respectively as the 1st to 10th, the 11th to the 20th and the 21st to the last day of the month, all dates inclusive.
14. Branches in different countries are considered to be separate banks.
15. The date of issuance of the transport documents will be deemed to be date of dispatch, taking in charge or shipped on board and the date of shipment. If the transport document indicates, by stamp or notation, a date of dispatch taking in charge or shipped on board, this date will be deemed to the date of shipment.
16. Transshipment means unloading from one means_ of conveyance and reloading to another means of conveyance (whether or not in different modes of transport) during the carriage, from the place of dispatch taking in charge or shipment to the place of final destination stated in the credit.
17. A clean transport documents is one bearing no clause or notation expressly declaring a defective condition of the goods or their packaging.
18. if there is no indication in the credit about insurance coverage, amount of insurance coverage must be at least 110% of CIF or CI P value of the goods.
19. Bill of Lading should be "On Board Bill of Lading". Since Bill of Lading is issued in more than one set, all negotiable copies of bill of lading should be obtained.

20. Bank should accept Clean Bill of Lading and not claused one. Claused Bill of Lading means the one which indicates defective condition of goods or packing. Clean bill of lading means a BL in which there are no adverse remarks on Bill of Lading.
21. Bill of Lading should be presented for negotiation within 21 days of shipment otherwise it will be treated as Stale Bill of Lading.
22. If words about is written in LC with quantity or amount, then variation of plus or minus 10% is permitted. if word 'about' is not written in LC with quantity or amount, then variation of plus or minus 5% is permitted in quantity but not in amount.
23. Insurance policy should be in the same currency as those of LC.
24. If insurance policy is dated later than the date of issue of Bill of Lading, then it should cover the risk from date of Bill of Lading.
25. If expiry date of LC falls on a holiday declared for banks, then LC can be negotiated on the next working day. But as per 'Forece Majeaure' clause, if on expiry date of LC, banks are closed due to riots or strike or any reason beyond the control of the bank, expiry date will not be extended. Force Majeure clauses envisage eventualities beyond the control of contracting parties. In the UCPDC 600, acts of terrorism have also been added to this clause.
26. Negotiating, confirming and Issuing Bank are given 5 banking days each to scrutinize that documents are as per LC.

EXCHANGE CONTROL REGULATIONS

Exchange control was first introduced in India on Sept 3, 1939. Subsequently it was brought under Foreign Exchange Regulation Act, 1973. At present it is regulated through FEMA 1999.

The objectives of ECR are
a conservation of foreign exchange;
b proper accounting of foreign exchange receipts and payments;
c stabilizing the external value of the rupee;
d to prevent flight of scarce capital by control over remittances abroad and supervision of accounts of non-residents, so that the balance of payments deficit does not occur or does'not worsen;
e to check smuggling;
f to fulfil IMF obligations .

LIBERALISED REMITTANCE SCHEME (LRS) FOR RESIDENT INDIVIDUALS

RBI introduced LRS on Feb 04, 2004. Major changes were made by RBI in LRS w.e.f. 01.06.2015 (based on Govt. notification 15.05.15).

Eligibility: All resident individuals including minors and non-individuals are eligible.

- Remittances under the facility can be consolidated in respect of family members subject to individual family members complying with the terms and conditions.
- It is mandatory to have PAN number to make remittances.

Forex can be purchased from authorised person which indude AD Category-1 Banks, AD Category-2 and Full Fledged Money Changers.
Capital Accounts transactions Remittances up to USD 250,000 per financial year can be allowed for permissible capital account transactions as under: I) opening of foreign currency account abroad; ii) purchase of property abroad;
ill) making investments abroad;
iv) setting up Wholly owned subsidiaries and Joint Ventures abroad;
v) loans including in Indian Rupees to Non-resident Indians relatives as defined in Companies Act, 2013.

Current account transactions • : All facilities (Including private/business visits) for remittances have been subsumed under overall limit of USD 250,000/FY.

Facilities for Individuals

1. Individuals can avail of forex facility for the following purposes within the limit of USD 250000. Additional remittance shall require prior approval of RBI.

1. Private visits to a country (except Nepal & Bhutan)
2. Gift or donation.
3. Going abroad for employment or immigration.
4. Maintenance of close relatives abroad
5. Travel for business, or attending a conference or specialized training or for meeting medical expenses, or check-up abroad, or for accompanying as attendant to a patient going abroad for medical treatment/ check-up. 7. Expenses for medical treatment abroad
B. Studies abroad
9. Any other current account transaction

Exception : For immigration, medical treatment and studies abroad, the individual may avail of exchange facility in excess of LRS limit if required by a country of emigration, medical institute offering treatment or the university, respectively.

Facilities for persons other than individual The following remittances shall require RBI approval:

(i) Donations beyond 1% of forex earnings in previous 3 FY or USD 5000000, whichever is less, for:

a) creation of Chairs in reputed educational institutes,
b) contribution to funds (not being an investment fund) promoted by educational institutes; and
c) technical institution/body/ association in the field of activity of the donor Company.

(ii) Commission, per transaction, to agents abroad for sale of residential flats or commercial plots in India exceeding USD 25,000 or 5% of inward remittance whichever is more.

(iii) Remittances exceeding USD 10000000 per project for any consultancy services for infrastructure projects and USD 1,000,000 per project, for other consultancy services procured from outside India.

(iv) Remittances exceeding 5% of investment brought into India or USD 100,000 whichever is higher, by an entity in India by way of reimbursement of pre-incorporation expenses.

Mode of remittance: The Scheme can be used for outward remittance in the form of 'a DD either in the resident individual's own name or in the name of beneficiary with whom he intends putting through the permissible transactions at the time of private visit abroad, can be effected, against self declaration of the remitter in the format prescribed.

Loan facility : Banks **should not extend** any kind of credit facilities to resident individuals to facilitate remittances under the Scheme.

Remittances not available under the scheme:

i. Remittance for any purpose specifically prohibited under Schedule-I (like purchase of lottery/sweep stakes, tickets, prescribed magazines etc.) or item restricted under Schedule II of FEMA (Current A/c Transactions) Rules, 2000.

ii. Remittances made to Bhutan, Nepal, Mauritius or Pakistan.

iii. Remittances made to countries identified by the Financial Action Task Force (FATF) as "non co-operative countries and territories" as available on FATF website (viz Cook Islands, Egypt, Guatemala, Indonesia, Myanmar, Nauru, Nigeria, Philippines and Ukraine) or as notified by RBI.

iv. Remittances to individuals and entities identified as posing significant risk of committing acts of terrorism as advised separately by RBI to the banks.

Reporting of the transactions: The remittances made will be reported in the R-Return in the normal course. The ADs may also prepare and keep on record dummy Form A2, in respect of remittances exceeding USD 5000.

With effect from 01.07.13, the banks are required to upload the data in Online Return Filing System (OAFS) on a monthly basis, by 5th of the following month to which it relates. Where there is no information, 'nil' figure is to be uploaded.

Rules related to release / remittance of foreign exchange to residents

AD banks can release forex to residents in India as per Rules framed u/s Sec 5 of FEMA. Forex cannot be released for Schedule I transactions. For Schedule II transactions, Govt. permission is required. For Schedule III transactions, forex can be released up to specified limit by AD banks. Beyond that limit, approval of RBI is required. Ceilings on release of amount by ADs without RBI approval are given above, under LRS.

Nepal & Bhutan - Forex for any kind of travel to or for any transaction with persons resident in Nepal and Bhutan cannot be released. Any amount of Indian currency can be used. Highest denomination of currency note can be Rs.100.

Up to Rs.25000, any denomination is allowed.

Form of foreign currency: 1. Coins, currency notes and traveller's cheques. Currency notes/coins can be up to US$ 3000. The balance can be traveller's cheque or banker's draft.

2. For Iraq and Libya currency notes and coins can be obtained up to US$ 5000 or its equivalent.
3. For Iran, Russian Federation, and other Republics of Commonwealth of Independent Countries, no ceiling.

Mode of purchase: In cash up to Rs.50,000/-. Above this, payment by way of a crossed cheque/banker's cheque/pay order/demand draft / debit card / credit card only.

Surrender of unused forex: Currency notes and travellers' cheques within 180 days of return.

Retention of unused forex : US$2,000 or its equivalent. There is no restriction on residents for holding foreign currency coins.

Use of International Credit Card (ICC): Use of the ICCs / ATMs/ Debit Cards can be made for personal payments and for travel abroad for various purposes, only up to specified limits.

Export / Import of Indian currency by Residents or non-residents : Up to Rs. 25000 each to or from any country other than Nepal or Bhutan (Pakistan & Bangladesh Rs.10000).

Import of Foreign exchange from abroad: Any amount subject to declaration on CDF.

Mandatory CDF : Where total amount exceeds US$ 10,000 (or its equivalent) and/or value of foreign currency notes exceeds US$ 5,000, declaration should be made to the Customs Authorities through Currency Declaration Form (CDF), on arrival in India.

Application for purchase of FC : Form A2. It is not required up to $ 25000. A2 to be preserved by banks for one year for verification by Auditors. endorsement on Passport : It is not mandatory for Authorised Dealers to endorse the amount of foreign exchange sold for travel abroad on the passport of the traveller. However, if requested by the traveller, AD may record under its stamp, date and signature, details of foreign exchange sold for travel.

Inward Remittance

1. Any person foreigner or Indian coming to India can bring any amount of foreign exchange in India.
2. If foreign currency being brought is more than US$ 5000 or foreign currency and traveler cheque is more than US $ 10,000, then the person bringing forex should make declaration before Customs on the Currency Declaration form. If it is not submitted to Customs, then it can be submitted to Authorised Dealer while surrendering foreign exchange.
3. Unspent Foreign exchange should be surrendered within 180 days of arrival in India whether it is foreign currency or foreign traveler cheque.
4. A resident individual can retain up to US $ 2000. There is no limit on coins.
5. Indian rupees can be brought up to Rs 25000.
6. Full fledged Money Changers (FFMCs) are permitted to encash foreign currency and make cash payment only up to USD 3000 or its equivalent. Amount exceeding USD 3000 or its equivalent has to be paid by way of demand draft or bankers' cheque. RBI has allowed banks to credit proceeds of demand drafts / bankers' cheques issued against encashment of foreign currency to the NRE account of the NRI account holder where the instruments issued to the NRE account holder are supported by encashment certificate issued by AD Category — I / Category — II.
7. Exchange regulations are not applicable in case of remittance to or from Nepal and Bhutan. Therefore, forex
can neither be taken to nor brought from Nepal and Bhutan. Indian rupees can be taken to Nepal and Bhutan in the denomination of Rs 100 or below.

Non Residents and their Accounts

Resident: As per section 2(v) of the FEMA 1999, a person is called resident in India if he stays in India for more than 182 days during the preceding financial year except those who have gone out of India for taking up employment outside India or for carrying on a business or vocation 'outside India or for any other purpose

indicating his intention to stay abroad for indefinite period.
Non Resident: Person resident outside India means a person who is not resident in India.
NRI has been defined in Income Tax Act.
RBI definition of NRI: However, as per RBI guidelines, a non resident Indian can be a person of Indian Nationality or a person of Indian Origin.
Person of Indian Nationality (PIN): A Person of Indian Nationality is one who holds an Indian passport at the time of opening the account.
Person of Indian Origin: A Person of Indian Origin is one who is presently not a national of Pakistan or Bangladesh and : (a) who at anytime held an Indian passport; or (b) he himself, either-of his parents or any of his grand parents was a citizen of India by virtue of Constitution of India or the Citizenship Act,1955 ; or (c) the person is a spouse of Person of Indian Nationality / Origin.
Overseas Corporate Bodies are those in which at least 60% shareholding is of NRI. OCBs are not allowed to open NRI accounts.
Students who go abroad for studies have also been given the facility of opening NRI accounts.
Non resident accounts are of 3 types (a) Non Resident ordinary (b) Non Resident (External) (c) Foreign Currency Non Resident (Bank) account. Salient features of these accounts are as under

Non Resident Ordinary account:

1. Type of account: Saving, Current, FD and RD
2. Credit: can be local income as well as remittance from abroad.
3. Currency of deposit Indian Rupees
4. Period of Deposit and interest rate : Fixed deposit can be opened for 7 days to 10 years and interest rate as applicable to domestic deposits
5. Joint account allowed with residents as well non residents (NRO is the only account which can be opened jointly with residents)
6. Interest income is taxable and tax will be deducted at source irrespective of type of account and amount of interest. The rate of tax on interest on deposits out of foreign remittance is 20% and on deposits from local income is 30%. Surcharge and education cess will be extra.
7. Power of Attorney is allowed to residents for making local payments. Power of Attorney **can undertake** all focal payments in rupees including payments for eligible investments subject to compliance with relevant regulations made by the Reserve Bank; and Remittance outside India of current income in India of the non-resident individual account holder, net of applicable taxes. The resident Power of Attorney holder is **not permitted** to repatriate outside India funds held in the account other than to the non-resident individual account holder nor to make payment by way of gift to a resident on behalf of the non-resident account holder or transfer funds from the account to another NRO account.
8. Repatriation is allowed as per following details: (i) Remittance outside India of current income like rent, dividend, pension, interest, etc. in India of the account holder. (ii) Remittance up to USD one million, per financial year (April- March), for all bonafide purposes, to the satisfaction of the authorised dealer bank. (iii) sale proceeds of immovable property up to US $ 10 lakh per financial year without waiting for 10 year period.

Non Resident (External) and Foreign Currency Non Resident (Bank) account

There are certain common features in these accounts like

1. Credits: Only amount received from abroad can be credited to these accounts.
2. Joint account is allowed only with Non residents and not allowed with residents.
3. Power of attorney is allowed to residents. He can make local payments. POA can remit money abroad if permitted by Power of Attorney.
4. Maximum loan against NRE and FCNR(B) is allowed up to Rs 100 lakh.
5. Interest income is free of Income tax and therefore tax is not deducted at source
6. Repatriation: Entire balance including interest can be repatriated abroad.

Distinctive features of NRE & FCNR

item	NRE	FCNR(B)
Currency of Deposit	In Indian Rupees	In USD,GBP,Yen & Euro, Can dollar, MS dollar

Type of account	savings, term deposit, current, RD	only term deposit
Exchange Risk	Exchange risk borne by account holder(s)	Exchange risk borne by the account opening bank
Period of Fixed	FD normally for **1** to 3 years in all currencies but for USD,GBP & EURO –upto five years	FD for 1 to 5 years
Interest Rate	In term deposit, rate of interest. should not exceed Domestic Rupee deposits and Banks are free to decide Rate of Interest. points. In case of SB as applicable in domestic deposits.	Rate of interest should not exceed LIBOR/SWAP for USD for 1-3 years maturity plus 200 basis Points and above 3 years maturity plus 300 basis LIBOR for concerned currency and maturity period plus 100 basis points
Periodicity of interest	Quarterly	After every 180 days

1. If NRE is opened for more than 3 years, the interest payable will as applicable for 3 years
2. Banks can grant loans against NR(E)RA and FCNR(B) deposits either to the depositors or third parties up to a maximum limit of Rs.100-lakh. Banks should not undertake artificial slicing of the loan amount to circumvent the aforesaid ceiling.
3. If FCNR(B) is up to one year, no compounding is allowed_
4. In both NRE and FCNR deposits, if there is premature payment before one year no interest is allowed. If there is premature payment after one year, penalty as per bank discretion.
5. For converting NRE to FCNR, TT selling rate will be applicable and for converting FCNR to NRE, TT buying rate will be applicable.

Foreign Currency accounts of residents

Foreign currency accounts of residents are of three types namely (a) Resident Foreign Currency account (b) Resident Foreign currency (domestic) account (c) Exchange Earners Foreign Currency account. Salient features of the same are given as under:

Resident Foreign Currency Account:

1. Who can open: This account can be opened by a resident individual who was **NRI** and returned to India after minimum stay of one year abroad.
2. Source of funds: Foreign exchange received as pension or other benefits from employer; realization of assets held abroad, proceeds of FCNR/NRE_
3. Joint account with residents or non residents is not allowed.
4. Type of deposit: Saving, current and fixed deposit.
5. Loan is not allowed against deposit.
6. Period of deposit, interest rate on deposit and currency of deposit : as decided by bank
7. Repatriation is allowed for entire balance including interest for any purpose.

Resident Foreign Currency (Domestic) account:

1. Who can open: Account can be opened by any resident individual.
2. Type of account: Non interest bearing current account.
3. Credits: Forex acquired on visit abroad, from any person on visit to India or gift or honorarium for services, gift or honorarium on a visit abroad, unspent forex acquired during travel abroad.
4. Joint account with resident or non resident not allowed.
5. Repatriation is allowed for permissible current and capital account transactions.

Exchange Earners Foreign Currency account:

1. Who can open: The account can be opened by any resident. This account will be opened by exporters.
2. Type of account: Non interest bearing current account (up to 31.10.08 FD account was also allowed)
3. Credits: 100% of foreign exchange earnings can be credited to this account.
4. Repatriation is allowed for permissible current account transaction and permissible

capital account transaction.
5. Packing credit can be adjusted out of such funds.

Export Credit

Export credit is allowed in two stages namely pre shipment or packing credit and post shipment. Salient features of packing credit are as under:

2. For packing credit eligibility conditions are (a) Exporter should have Import Export Code Number (b)Exporter should not be on the caution list of **RBI** (c) Exporter should not be on the specific approval list of ECGC (d) He should have confirmed order of LC. However, if running packing credit facility has been allowed confirmed order can be submitted later on.
2. Amount of PCL: on the basis of FOB value
3. Period of PCL: As per need of exporter. If pre-shipment advances are not adjusted by submission of export documents within 360 days from the date of advance, the advances will cease to qualify for prescribed rate of interest for export credit to the exporter ab initio.

Adjustment of PCL: Normally through proceeds of export bills or export incentives or debit to EEFC account.

Post shipment credit

1. As per Exchange Control Regulations, bills should be submitted for negotiation within 21 days of shipment.
2. Export proceeds should in general be realized within 12 months from date of shipment. (Earlier it was 6 months and for status holder exporters, 100% EOU, units in EHTP/STP, the period was 12 months from the date of shipment). In case of export for warehousing the period of realization is 15 months. In case of exports by units in Special Economic Zone there is no maximum period prescribed by **RBI.**
3. Authorised Dealer can grant extension up to 6 months if invoice amount is up to USD 1 million.
4. **If** any export is not realized within 180 days of date of shipment, in **all** cases, a report should be sent to RBI on XOS statement which is a half yearly statement submitted as at the end of June & Dec of each year. This is to be submitted by 15th of July / January.
5. Normal Transit Period is the period between negotiation of bills and credit to Nostra account. It is fixed by FEDAI and presently it is 25 days irrespective of the country.

Interest Rate on Export Credit

1. Export credit in rupees: Interest rates applicable for all tenors of rupee export credit advances sanctioned on or after July 01, 2010 **will** be at or above Base Rate. Interest Rates under the BPLR system effective upto June 30, 2010 will be 'not exceeding BPLR minus 2.5 percentage points per annum' for the following categories of Export Credit:

- Pre-shipment Credit (from the date of advance) : (a) Up to 270 days (b)Against incentives receivable from Government covered by ECGC Guarantee up to 90 days. **If** pre-shipment advances are not liquidated **from** proceeds of bills on purchase, discount, etc. on submission of export documents within 360 days from the date of advance, the advances **will** cease to qualify for prescribed rate of interest for export credit ab initio.
- Post-shipment Credit (from the date of advance): (a) On demand bills for transit period (as specified by FEDAI); (b) Usance bills (for total period comprising usance period of export bills, transit period as specified by FEDAI, and grace period, wherever applicable): i) Up to 180 days; ii) Up to 365 days for exporters under the Gold Card Scheme. (a) Against incentives receivable from Govt. (covered by ECGC Guarantee) up to 90 days (d) Against undrawn balances (up to 90 days); (e) Against retention money (for supplies portion only) payable within one year from the date of shipment (up to 90 days) (f) In respect of overdue export bills also interest rate should be charged at not more than BPLR minus 2.5% up to 180 days from date of advance.

2. Export Credit in Foreign Currency:

- Pre-shipment Credit in foreign currency (from the date of advance): (i) up to **180** days not more than **LIBOR/ EURO LIBOR/ EURIBOR plus** 200 basis points. (ii) Beyond 180 days and **up** to 360 days: Rate for initial period of 180 days prevailing at the time of extension plus 200 basis points. (iii) Beyond 360 days as per bank discretion
- Post shipment in foreign currency: (a) On demand bills for transit period: **Not** exceeding 200 basis

points over **LIBOR/EURO LIBOR/EURIBOR. (b)** Against usance bills for total period comprising usance period of export bills, transit period and grace period up to 6 months from the date of shipment: Not exceeding 200 basis points over LIBOR/EURO LIBOR/EURIBOR (c) Export Bills (Demand or Usance) realized after due date but up to date of crystallization: 200 basis points over the rate charged up to due date.

Interest Subvention on export credit in rupees:

The Government of India has decided to extend Interest Subvention of 2% from April 1, 2010 upto March 31, 2011 on pre and post shipment rupee export credit, for certain employment oriented export sectors as under: (i) Handloom (ii) Handicrafts (iii) Carpets (iv) Small & Medium Enterprises, (v) Leather and Leather Manufactures (vi) Jute Manufacturing including Floor covering (vii) Engineering Goods (viii) Textiles. The items marked bold added vide circular dated 9th Aug 10. However, the total subvention will be subject to the condition that the interest rate, after subvention will not fall below 7% which is the rate applicable to the agriculture sector under priority sector lending. The interest subvention will be available even in cases where Base Rate system has been introduced and banks can grant export credit below Base Rate after considering subvention provided it is not less than 7% p.a.

Export Refinance

1. Who will provide? Export Refinance is provided by RBI.
2. Maximum period of refinance is 180 days.
3. Extent of Refinance: 15% (w.e.f. 27.10.2009) of eligible export finance outstanding on the reporting Friday of the preceding fortnight. Outstanding Export Credit for the purpose of working out refinance limits will be aggregate outstanding export credit minus export bills rediscounted with other banks/Exim Bank/Financial Institutions, export credit against which refinance has been obtained from NABARD/Exim Bank, pre-shipment credit in foreign currency (PCFC), export bills discounted/rediscounted under the scheme of 'Rediscounting of Export Bills Abroad', overdue

rupee export credit and other export credit not eligible for refinance.
4. Interest rate is Repo Rate. 5. Packing Credit in Foreign Currency is not eligible for export refinance.

Export Declaration Forms for goods and services

Every exporter of goods or software in physical form or through any other form, either directly or indirectly, to any place outside India, other than Nepal and Bhutan, shall furnish to the specified authority, a declaration in one of the forms set out below containing the full export value of the goods or software.

a) Form GR: To be completed in duplicate for export otherwise than by Post including export of software in physical form i.e. magnetic tapes/discs and paper media.
b) Form SDF: To be completed in duplicate and appended to the shipping bill, for exports declared to Customs Offices notified by the Central Government which have introduced Electronic Data Interchange (EDI) system for processing shipping bills notified by the Central Government.
c) Form PP: To be completed in duplicate for export by Post.
d) Form SOFTEX: To be completed in triplicate for declaration of export of software otherwise than in physical form, i.e. magnetic tapes/discs, and paper media.

Declaration forms are submitted in two copies except Softex forms which are submitted in three copies. As per current guidelines no declaration is mandatory for exports with value up to $ 25,000 or its equivalent. Duplicate copy of the declaration form which is submitted to the AD is-now required to be retained by the AD for the purpose of audit and not to be forwarded to RBI.

Gold Card Scheme for Exporters

1. Exporters with good track record eligible for the Card. Their account should have been Standard for 3 years continuously with no irregularity.
2. Gold Card Scheme is not applicable to those exporters who are blacklisted by ECGC or included in RBI's defaulter's list/ caution list or making losses for the past three years or having overdue export bills in excess of 10 per cent of the 'previous year's turnover'. However, RBI has advised (Oct 09) that in view of difficulties faced by exporters on account of weakening of external demand and in realizing the dues within the stipulated time, the requirement of overdue export bills not exceeding 10% of the previous year's export turnover, has been

dispensed with for one year i.e. from April 1, 2009 to March 31, 2010.
3. Limits to Card holder exporters to be sanctioned for 3 years with provision for automatic renewal subject to fulfilment of terms and conditions. For disposal of fresh applications the period is 25 days, 15 days for renewal of limits and 7 days for sanction of ad-hoc limits.
4. A stand by limit of not less than 20% of the limits sanctioned should be made available for executing sudden orders.
5. Gold Card holder exporters will be given preference in,the matter of sanction of PCFC.
6. Gold Card holders are entitled for concessional interest on post shipment credit up to 365 days.

Trade and Exchange Control Regulations for Imports

1. Importer can import goods either on the basis of OGL or on the strength of specific import licence issued by DGFT. While issuing letter of credit or retiring import bills, the AD is required to make relative endorsement in the exchange control copy of import licence. When fully utilized, it is to be retained by the AD for verification by the auditor/inspector.
2. Payment for imports should be made within 6 months from date of shipment.
3. Advance payment against imports is allowed up to any amount. However, where the amount of advance remittance for services exceeds US $ 500,000 or its equivalent, or for goods exceeds USD 50,00,000, the same can be allowed against guarantee of an international bank of repute or guarantee of a bank in India against counter guarantee of an international bank. However, in respect of Public Sector Company or a Department/ Undertaking of the Government of India/ State Governments, approval from the Ministry of Finance, Government of India is required for advance remittance for import of goods or services without bank guarantee for an amount exceeding USD 100,000.
4. Bill of Entry is documentary evidence of physical arrival of goods into India. For advance remittance exceeding US $ 1,00,000, it should be submitted within 6 months of remittance. In case importer does not furnish the same within 3 months from the date of remittance, the Authorised Dealer should rigorously follow-up for the next 3 months. AD is required to submit to RBI, statement on form BEF on half- yearly basis (within 15 days from the close of the half-year) as at the end of June & December of every year, in respect of importers who have defaulted in submission of Bill of entry within 6 months from the date of remittance.
5. Delinking or Crystallisation of Export and Import bills: Crystallisation means converting a foreign currency liability to rupee liability. In the case of overdue export bills it will be done as per bank discretion and exchange rate will be TT selling rate. In the case of import bills conversion will be at Bills selling rate. In demand bills it will be on 10th day and in case of usance bills it will be done on due date.
6. Banks are permitted to make remittances for imports, where the import bills I documents have been received directly by the importer from the overseas supplier and the value of import bill does not exceed USD 300,000.
7. Banks are allowed to issue guarantees in favour of a non-resident service provider, on behalf of a resident customer who is a service importer, for an amount up to USD 500,000 or its equivalent. In the case of a Public Sector Company or a Department/ Undertaking of the Government of India/ State Governments, approval from the Ministry of Finance, Government of India for issue of guarantee for an amount exceeding USD 100,000 or its equivalent would be required.
8. For release of forex for imports, application should be made on Form AI if the amount of remittance exceeds USD 500. For release of forex for purpose other than import, application should be made on Form A2 if the amount of remittance is more than USD 5000.

Risk in Foreign Exchange

1. Risk in foreign exchange arises when a bank has open position in forex i.e either it is overbought or oversold. A bank is said to be overbought when purchase is more than sale and it is oversold when sale is more than purchase.
2. When a bank is overbought and it wants to square its position it will gain if rate of forex goes up and will lose if rate of forex goes down.
3. When a bank is oversold and it wants to square its position, it will gain if rate of forex goes down and will lose if rate of forex goes up.
4. The Daylight open position will be generally more than the overnight open position.

INTERNATIONAL COMMERCIAL TERMS (INCOTERMS)

INCO terms are a series of international sales terms, published by International Chamber Of Commerce (ICC) and widely used in international commercial transactions. These are accepted by governments, legal authorities and practitioners worldwide for the interpretation of most commonly used terms in international trade. This reduces or removes altogether, uncertainties arising from different interpretation of such terms in different countries. They closely correspond to the U.N. Convention on contracts for the international sale of goods. The first version of INCO terms was introduced in 1936. INCO terms 2010 (8th edition) were published on Sept 27, 2010 and these came into effect wef Jan 1, 2011. Main changes in

INCOTERMS 2010

1. Removal of 4 terms (DAF, DES, DEQ and DDU) and introduction of 2 new terms (DAP - Delivered at Place and DAT - Delivered at Terminal). As a result, there are a total of 11 terms instead of 13 (2 additions, DAP and DAT and 4 deletions, DAF, DDU, DEQ and DES).
2. Creation of 2 classes of INCOTERMS - (1) rules for any mode or modes of transport and (2) rules for sea and inland waterway [INCOTERMS 2000 had 4 categories namely E (covering departure), F (covering main carriage unpaid), C (covering main carriage paid) and D (covering arrival)].

Class-1 INCO terms

1. EXW means that a seller has the goods ready for collection at his premises (works, factory, warehouse, plant) on the date agreed upon. The buyer pays transportation costs and bears the risks for bringing the goods to their final destination. This term places the greatest responsibility on the buyer and minimum obligations on the seller.
2. FCA — Free Carrier (named places) : The seller hands over the goods, cleared for export, into the custody of the first carrier (named by the buyer) at the named place. This term is suitable for all modes of transport, including carriage by air, rail, road, and containerized / multi-modal sea transport.
3. CPT — Carriage Paid To (named place of destination): (The general/containerized/multimodal equivalent of CFR) The seller pays for carriage to the named point of destination, but risk passes when the goods are handed over to the first carrier.
4. CIP — Carriage and Insurance Paid (To) (named place of destination): Thecontainerized transport/multimodal equivalent of CIF. Seller pays for carriage and insurance to the named destination point, but risk passes when the goods are handed over to the first carrier,
5. DAP : delivered at place
6. DAT I. delivered at terminal
7. DDP — Delivered Duty Paid (named destination place): This term means that the seller pays for all transportation costs and bears all risk until the goods have been delivered and pays the duty. Also used interchangeably with the term "Free Domicile". It is the most comprehensive term for the

buyer. In most of the importing countries, taxes such as (but not limited to) VAT and excises should not be considered prepaid being handled as a "refundable" tax. Therefore VAT and excise usually are not representing a direct cost for the importer since they will be recovered against the sales on the local (domestic) market.

Class-2 INCO terms

8. FAS — Free Alongside Ship (named loading port): The seller must place the goods alongside the ship at the named port. The seller must clear the goods for export. Suitable for maritime transport only but NOT for multimodal sea transport in containers. This term is typically used for heavy-lift or bulk cargo.
9. FOB — Free on board (named loading 'port): The seller must themselves load the goods on board the ship nominated by the buyer, cost and risk being divided at ship's rail. The buyer must instruct the seller the details of the vessel and port where the goods are to be loaded, and there is no

reference to, or provision for, the use of a carrier or forwarder.

10. CFR or CNF — Cost and Freight (named destination port): Seller must pay the costs and freight to bring the goods to the port of destination. The risk is transferred to the buyer once the goods have crossed the ship's rail. Maritime transport only and Insurance for the goods is NOT included. Insurance is at the Cost of the Buyer.

11. CIF — Cost, Insurance and Freight (named destination port): Exactly the same as CFR except that the seller must in addition procure and pay for insurance for the buyer (Maritime transport only).

Contract	Seller, in addition to cost of goods, bears	Buyer bears
Ex-Works (EXW)	Goods available at factory –	All cost of insurance and freight subsequent to seller's factory.
Free alongside the ship (FAS)	Cost relating to place the goods alongside the ship	All cost relating to loading, insurance and freight after these are placed along the ship
Free on Board (FOB)	Cost up to loading the goods on the ship	All cost relating to insurance and freight once these are on board of the ship
Cost & Freight (C&F)	After shipment, cost of freight also	Insurance
Cost, insurance & freight (CIF)	Subsequent to shipment insurance and freight cost	His cost starts after the goods reach the port of destination.
Delivered at Frontier (DAF)	All cost till be goods reach the customs boarder — normally by rail or road	His liability starts after the goods reach the frontier.

PART – B

FOREIGN TRADE POLICY

The Government has unveiled a forward-looking and contemporary Foreign Trade Policy (FTP) for 2015-2020. seeking to strengthen merchandise and services exports. The policy has set a target to double India's exports in goods and services from $465 billion to $900 billion and upping the Indian share of the world exports from the current 2 percent to 3.5 percent over the over the next five years. The policy is a framework for increasing export of goods and services as well as generation of employment in keeping with the vision of Make in India.

to The FTP spoke for the first time about global value chains and their relevance in world trading order. Global value chains are fast becoming the most important aspect of any bilateral and multilateral trading arrangement. Global value chains are typically created by integrating goods and services from various countries into one composite production network to produce a single product or service. These are turning out to be a prominent feature in mega-regional trade pacts such as the Trans-Pacific Partnership (TPP), the Trans-Atlantic Trade and the Investment Partnership and Regional Comprehensive Economic Partnership.

0 A big positive step has been taken by clubbing a series of export promotion schemes under two schemes namely:

a) Merchandise Exports from India Scheme (MEIS): This will be targeted for export of specified goods to specified markets. The MEIS has replaced five existing schemes.

b) Services Exports From India Scheme (SEIS): This is meant for export of notified services. SEIS has replaced the existing Served From India Scheme (SF1S).

One significant announcement in the policy is that it will move away from relying largely on subsidies and sops. This is prompted by World Trade Organisation (WTO) requirements that export promotion subsidies should be phased out. Export-promotion measures have to move towards a more fundamental systemic measure rather than incentivising and depending on

subsidies alone. There is, therefore, a need to ensure that the exports and services are internationally competitive. Brand India must be synonymous with reliability and quality.

The FTP has acknowledged the domestic challenges — infrastructure, transaction costs, complex procedures and constraints in manufacturing — is **equally,** if not more, important than tackling **external ones.** As the trade policy document points out, the latter are largely imponderables outside any country's control.

HIGHLIGHTS OF FTP 2015-2020

A) SIMPLIFICATION & MERGER OF REWARD SCHEMES:

1) Merchandise Exports from India Scheme (MEIS):

a) Earlier there were 5 different schemes (Focus Product Scheme, Market Linked Focus Product Scheme, Focus Market Scheme, Agri. Infrastructure Incentive Scrip, VKGUY) for rewarding merchandise exports with different kinds of duty scrips with varying conditions (sector specific or actual user only) attached to their use. Now all these schemes have been merged into a single scheme, namely Merchandise Export from India Scheme (MEIS) and there would be no conditionality attached to the scrips issued under the scheme.

b) Rewards for export of notified goods to notified markets under 'Merchandise Exports from India Scheme (MEIS) shall be payable as percentage of realized FOB value in free foreign exchange. The debits towards basic customs duty in the transferable reward duty credit scrips would also be allowed adjustment as duty drawback.

2) Service Exports **from India Scheme (SEIS):**

a) Served from India Scheme (SFIS) has been replaced with Service Exports from India Scheme (SEIS). SEIS shall apply to 'Service Providers located in India' instead of 'Indian Service Providers'. Thus SEIS provides for rewards to all Service providers of notified services, who are providing services from India, regardless of the constitution or profile of the service provider.

b) The rate of reward under SEIS would be based on net foreign exchange earned. The reward issued as duty credit scrip, would no longer be **with** actual user condition and will no longer be restricted to usage for specified types of goods but be freely transferable and usable for all types of goods and service tax debits on procurement of services I goods.

3) Incentives (MEIS & SEIS) to be available for SEZs: The FTP has proposed to extend incentives (MEIS & SEIS) to units located in SEZs also.

4) Duty credit scrips to be freely transferable and usable for payment of custom duty, excise duty and service tax:

a) All scrips issued under MEIS and SEIS and the goods imported against these scrips would be fully transferable.

b) Basic Customs Duty paid in cash or through debit under Duty Credit Scrip can be taken back as Duty Drawback as per DoR Rules, if inputs so imported are used for exports.

5) Status Holders: The nomenclature of Export House, Star Export House, Trading House, Star Trading House, Premier Trading House certificate has been changed to One, Two, Three, Four, Five Star Export House. The criteria for export performance for recognition of status holder have been changed from Rupees to US dollar earnings. The new criteria is:

STATUS CATEGORY	EXPORT PERFORMANCE FOB / FOR (as converted) Value (in US $ million) during current and previous two years
One Star Export House	03
Two Star Export House	25
Three Star Export House	100
Four Star Export House	500
Five Star Export House	2000

6) Approved Exporter Scheme — Self certification by Status Holders: Manufacturers who are also

Status Holders will be enabled to self-certify their manufactured goods as originating from India with a view to qualify for preferential treatment under different Preferential Trading Agreements [PTAs], Free Trade Agreements [FTAs), Comprehensive Economic Cooperation Agreements [CECAs] and Comprehensive Economic Partnerships Agreements [CEPAs] which are in operation.

B) BOOST TO 'MAKE IN INDIA':

Reduced Export Obligation (EO) for domestic procurement under EPCG Scheme: Specific Export Obligation under EPCG scheme, in case capital goods are procured from indigenous manufacturers, which is currently BO% of the normal export obligation (6 times at the duty saved amount) has been reduced to 75%, in order to promote domestic capital goods manufacturing industry.

C) TRADE FACILITATION & EASE OF DOING BUSINESS:

a) Online filing of documents/ applications and Paperless trade in 24x7 environment: In order to move further towards paperless processing of reward *schemes,* the policy has decided to develop an online procedure to upload digitally signed documents by Chartered Accountant / Company Secretary / Cost

Accountant. Further, as a measure of ease of doing business, landing documents of export consignment as proofs for notified market can be digitally uploaded.

b) Online inter-ministerial consultations: The FTP proposes to have Online inter-ministerial consultations for approval of export of SCOMET items, Norms fixation, Import Authorisations, Export Authorisation, in a phased manner, with the objective to reduce time for approval. As a result, there would not be any need to submit hard copies of documents for these purposes. c)Simplification of procedures/processes, digitisation and e-govemarice:

i) Under EPCG scheme, obtaining and submitting a certificate from an independent Chartered Engineer, confirming the use of spares, tools, refractory and catalysts imported for final redemption of EPCG authorizations has been dispensed with.

ii) At present, the EPCG Authorisation holders are required to maintain records for 3 years after redemption of Authorisations. Now the EPCG Authorization Holders shall be required to maintain records for a period of two years only. Government's endeavour is to gradually phase out this requirement as the relevant records such as Shipping Bills, e-BRC are likely to be available in electronic mode.

iii) Exporter Importer Profile: Facility has been created to upload documents in Exporter/Importer Profile. There will be no need to submit copies of permanent records/ documents (e.g. IEC, Manufacturing licence RCMC, PAN etc.) repeatedly.

iv) Online message exchange with CBDT, MCA and DGFT: FTP has decided to have on line message exchange with CBDT for PAN data and with Ministry of Corporate Affairs for CIN and DIN data. For faster and paperless communication with various committees of DGFT, dedicated e-mail addresses have been provided to each Norms Committee, Import Committee and Pre-Shipment Inspection Agency for faster communication.

D) OTHER NEW INITIATIVES:

- EOUs, EHTPs, STPs have been allowed to share infrastructural facilities among themselves to enable them to utilize their infrastructural facilities in an optimum way and avoid duplication of efforts and cost to create separate infrastructural facilities.

- Inter unit transfer of goods and services have been allowed among EOUs, EHTPs, STPs, and BTPs. This will facilitate group of those units which source inputs centrally in order to obtain bulk discount. This will reduce cost of transportatien, other logistic costs and result in maintaining effective supply chain. Further, EOUs have been allowed facility to set up Warehouses near the port of export so as to reduce the lead time for delivery of goods.

- At present, in a period of 5 years EOU units have to achieve Positive Net Foreign Exchange Earning (NEE) cumulatively. Because of adverse market condition or any ground of genuine hardship, than such period of 5 years for NFE completion can be extended by one year.

- At present, EOUs/EHTP/STPI units are permitted to transfer capital goods to other EOUs,

EHTPs, STPs, SEZ units. Now a facility has been provided that if such transferred capital goods are rejected by the recipient, then the same can be returned to the supplying unit, without payment of duty.
EOUs having physical export turnover of Rs. 10 crore and above, have been allowed the facility of fast track clearances of import and domestic procurement. They will be allowed fast tract clearances of goods, for export production, on the basis of pre-authenticated procurement certificate, issued by customs / central excise authorities. They will not have to seek procurement permission for every import consignment.

- Validity of SCOMET export authorisation has been extended from the present 12 months to 24 months. It will help industry to
plan their activity in an orderly manner and obviate the need to seek revalidation or relaxation from DGFT.

• Normal export obligation period under advance authorization is 18 months. Export obligation period for export items falling in
the category of defence, military store, aerospace and nuclear energy shall be 24 months from the date of issue of authorization

• or co-terminus with contracted duration of the export order, whichever is later. This provision will help export of defence items and other high technology items.

-e-Commerce Exports: Goods falling in the category of handloom products, books / periodicals, leather footwear, toys and customized fashion garments, having FOB value up to t 25000 per consignment shall be eligible for benefits under FTP. Such naods can be exported in manual mode through Foreign Post Offices. at New Delhi, Mumbai and Channel. Export of such goods under Courier Regulations shall be allowed manually on pilot basis through Airports at Delhi, Mumbai and Chennai as per appropriate amendments in regulations to be made by Department of Revenue.

*Additional Ports allowed for Export and Import: Calicut Airport, Kerala and Arakonam ICD, Tamil Nadu have been notified as registered ports for import and export.

'9 Duty Free Tariff Preference (DFTP) Scheme: India has already extended duty free tariff preference to 33 Least Developed Countries (LDCs) across the globe. This is being notified under FTP.

FOREIGN EXCHANGE

As per Foreign Exchange Management Act 1999, foreign exchange means:
The foreign currency and includes deposits, credits and balance payable in any foreign currency, drafts, travel-Ns cheques, letter of credit or bills of exchange, expressed or drawn in Indian currency but payable in any foreign currency, drafts, travellers cheques, letter of credit or bills of exchange drawn by banks, institutions or persons outside India, but payable in Indian currency".

.1 other words, the foreign exchange stock include foreign currency assets, balances kept abroad, instruments payable in foreign currency and instruments drawn abroad but payable in Indian currency.

FOREIGN EXCHANGE MARKETS

Foreign exchange markets are composed of individuals, business organisations, banks, investors, users, arbitrageurs etc. who buy or sell foreign exchange. The features of these markets are:

These markets exist around the globe.

There are no boundaries for the markets as the markets are communication system based.
The markets are very dynamic and by an estimates, there is fluctuation every 4 second or even earlier. The markets open Monday through Friday (Saturday and Sunday being closed days).In India, the inter-bank markets open at 9 a.m. and close at 5 p.m.
The markets operate round the clock in one or other part of the globe due to different time zones. Geographically the markets extend from Tokyo & Sydney in the East to London & New York in the West. When the European markets open, there is already launch hours for Indian markets. When Indian markets close, the US Markets are about to open. Just before close of US markets, the Tokyo or Singapore markets are about to open.
Various participants taking part in these markets include (a) Central Banks (b) commercial banks (c)

investment banks or funds (d) foreign exchange brokers (e) companies and (f) individuals.

FACTORS DETERMINING EXCHANGE RATES

Exchange rates are based on the market demand and supply position for various currencies at different times. In long run, however, other factors also affect the exchange rate that include. Balance of payment position of the country. Economic growth rate of the GDP of the country Fiscal policy followed by the country. Monetary policy of the country. Interest rate structure prevalent in the country

EXCHANGE RATES MECHANISM

Exchange rate is the rate at which one currency is convened into another currency_ The price of one currency in le system, is quoted in terms of another. It is important to understand that in exchange rate system, the currencies are just like commodities having varying prices. These currencies are sold and purchased to settle transactions between various parties in various countries.

Purchase transactions & Sale Transaction

An authorised dealer makes purchases of foreign currency and also sells it. When it purchases foreign currency it ; always referred to as a purchase transaction for foreign currency- concerned. Encashment of a travellers' cheque y a bank, is a purchase transaction as in such transaction, the bank acquires foreign currency and parts with the orate currency. On the other hand, when a bank sells foreign currency it acquires home currency and parts with to foreign currency. Issuing of a travellers' cheque is a sale transaction.

Selling rate and Buying rate

o keep a margin between the rate for sale and purchase, the banks quote two different rates i.e_ selling rate (at :hick banks sell foreign currency) and buying rate (at which banks buy foreign currency.

Intervention currency

Historically, Indian Rupee (IR) used to be linked to Pound Sterling till 1970s for historical reasons but w.e.f. Sept 5. 1975, rupee was linked to a basket of currencies and these currencies are of those countries with which India is major trading partner. However Pound Sterling was an intervention currency till 1987 when US Dollar also into picture.

Aberalisation - During 1991 there was devaluation of rupee in two stages and wef March I, 1992 liberalized exchange rate management system (LERMS) was introduced. Resultantly all foreign exchange transactions are put through by Authorised Dealers at market determined rates of exchange. All FEX receipts are to be retained by ADs without surrendering to RBI and all FEX receipts and payments are regulated by Exchange Control.

Direct quotation - From 1993 dollar has been the intervention currency and the method of quotation has been changed to Direct method wef Aug 1, 1993. Accordingly RBI transacts in US dollars only for maintenance of stability in the exchange rates without the need for RBI to go the overseas markets for cover operations.

EXCHANGE RATES

FIXED RATES

It is a system under the gold standard where the rate of exchange tends to stablise around the mint par value. Now a days. the gold standard does not exist and due to this the fixed rates refer to maintenance of external value at a predetermined level. Whenever the rate differs with this level, it is corrected through official intervention. A fixed rate may help in promotion of international trade and investment and facilitates long range planning_ It prevents speculation.

FLOATING RATE

It is a system where the exchange rates are determined by the conditions of demand for and supply of the foreign exchange in the market. The rates fluctuate freely in the line with the demand and supply without any restrictions on buying, and selling. Under this rate no par value is declared.

FLEXIBLE RATE

It is a system where the exchange rate is fixed but is frequently adjusted in line with the market conditions. Under this system there is better confidence and liquidity and gains from free trade.

INTER-BANK RATES

In the inter-bank market, the rates are quoted both for the buying and selling the currency *like* (43.20/40), that indicates that for one 5, the market buying rate is Rs.43.20 and the selling rate Rs.43.40. The quoting bank indicates that it is ready to buy dollar at RsA3.20 and sell at Rs.43.40: The thumb rule for the bank is "by low and sell high". This indicates the said bank would pay lesser amount of rupees when dollars are purchased and take more rupees, while selling the same.

BID AND OFFERED RATES

The quoting bank in the above example is giving option to buy one dollar at Rs.43.20, which is called bidding for dollar. The bank is ready to sell a dollar for Rs.43.40, which is called the offered rate.

CARD RATES

Card rates are calculated at the beginning of each day, based on the current rates in the inter-bank market and cross rates in the international market. The rates are quoted by the authorized dealers to the clients for various currencies for different kinds of transactions Le: buying and selling of cheques, drafts etc From spot rates and forward margins in various currencies, the banks able to calculate the rates which are conveyed to branches.

EXCHANGE QUOTATIONS

Foreign currency in foreign exchange dealings is considered as a commodity and all transactions involve purchase and sale. Exchange quotations come under two categories i.e. direct quotation and indirect quotation. In India, wef August 2,, 1993, the system prevalent is of direct. quotation.

DIRECT QUOTATION

In a direct quotation, there is a variable unit of the home currency and fixed unit of the foreign currency. When it is quoted that I US S = Rs.49.10, it is a direct quotation. With a view to make profit, the rule followed for quotation is buy low and sell high. For instance, if the US $ is purchased at Rs.48.90 and sold at Rs.49_10, there xvill be gain to the dealer. By buying low, the dealer will be required to pay lesser units of home currency and by selling high, he would receive more units of home currency.

INDIRECT QUOTATION

In indirect quote, there is fixed unit of home currency and a variable unit of foreign currency. When Rs.100 = US 5 2.04 is quoted, it is a case of indirect quotation. The principle followed in indirect quotation to earn profit is to buy high and sell low. By buying high, the dealer will get more US $ per Rs.100 and by selling low he would have to part with lesser US 5.

TWO WAY QUOTATIONS

Banks quote two rates in foreign exchange quotation out of which one is for buying and the other for selling. For instance. when the quotation is US $ I = Rs.48.90 - 49.10, the buying rate on the basis of principle of buy low and sell high, would be Rs.48.90 and the selling rate Rs.49.10. The buying rate is also called a 'bid rate' and the selling rate as 'offer rate'.

EXCHANGE RATES SYSTEM IN INDIA

Exchange rate is the rate at which one currency is converted into another currency (price of one currency, is quoted in terms of another). It is important to understand that in exchange rate system, the currencies are just like commodities having varying prices.

SUMMARY OF CURRENCY RATES

Rate	Description
Fixed	It is a system under the gold standard where the rate of exchange tends to stablise around the mint par value. As the gold standard does not exist, the fixed rates refer tomaintenance of external value at a predetermined level. It is fixed by Central Banking authority. It prevents speculation.
Flexible	The rate is a fixed rate but is adjusted in line with the market conditions.

Floating	The rates are determined by the conditions of demand for and supply of the foreign exchange in the market. The rates fluctuate freely in the line with the demand and supplywithout any restrictions on buying and selling. Under this rate no par value is declared.
Direct	When foreign currency unit is fixed (say $) and Indian rupees are variable (1 $ = Rs.43.90 and change to Rs.44). •In India Direct rates are quoted wef 1.8.93. When FC appreciates it is beneficial to the exporter and when FC depreciates it benefits the importer.
Indirect	When foreign currency is variable and Indian rupee is kept as fixed unit (Rs.100 = 2.20 $ or 2.30 $)
Buying	When bank delivers rupees and gets foreign exchange (say in case of purchase of export bill or encashment of foreign currency travellers' cheques or receipt of remittance from abroad.
Selling	When bank delivers foreign currency and 'gets Indian rupees (say in case of payment of import bill or issue of foreign currency travellers' cheques or sending of remittance abroad.
Spot (rate for	Cash rate or ready rate or value today = Same day settlement: TOM = T+1 i.e. rate today and deal completion by next day. TT = T+2 (settlement within next 2 days) .
Forward rate	It is for deal today and delivery after spot period say 1,2,3,4,6,12 months afterwards. It can be at a premium or at a discount. If foreign currency will be available at a higher rate (i.e. for more rupees), it is premium. If available at a lower rate (say for lesser rupees), it is discount.
Rules for purchase and sale	For Direct rate : Buy low sell high For Indirect rates : Buy high sell low.

SPOT TRANSACTIONS & FORWARD TRANSACTIONS

In a contract, the actual payment in rupees and receipt-in say US $ may take place on the same day, two days later or a month later.

Value date

While quoting the rates, the banks take into account the time factor i.e. how much is going to be taken to get the purchased currency credited to the NOSTRO account abroad. This date is known as value date. There are three time frames for this i:e. cash value, torn value and spot value.

Cash Value

When the payment is rupees and receipt in US $ takes place on the same day, it is called a cash transaction or value today.

Tom value and spot value

When the payment is rupees and receipt in US $ takes place after some time (due to time involved in administration of the transaction) it may be tom rate (where deal is settled on the immediately succeeding working day) and spot transaction when it is settled within 48 hours.

Forward transaction

When the payment is rupees and receipt in US $ takes place On some pre-determined future day, it is called a forward transaction. A forward contract for delivery two months means the exchange of currencies shall be completed after two months from date of contract.

Premium or discount on forward transactions

The forward rate of a currency is normally either costlier or chpper than its spot rate. The difference between the spot rate and forward rate is called forward margin or swap points. When the forward margin is at premium the forward rate will be higher/costlier than the spot rate. Similarly, if the forward margin is at a discount, the forward rate shall be lower or cheaper than the spot rate.

Under a direct quotation, the premium is added to the spot rate for reaching the forward rate and discount is deducted from the spot rate to arrive at the forward-rate.

If US $ is quoted on a particular day as spot at US $ I = Rs.48.90/49.10, this would be interpreted as buying rate of Rs.48.90 and selling rate as Rs.49.10.

Factors such as (a) rate of interest prevailing at home centre and the concerned foreign currency centre, (b) demand and supply position of the foreign currency, (c) speculation about spot rates and (d) exchange control regulations, generally determine the premium or discount.

BUYING & SELLING RATEs

Depending upon the time taken in realisation of foreign exchange by the bank (say (a) instantaneously, in case purchase of draft issued by correspondent bank, who must have credited nostro account at the time of issue of the draft or (b) with delay of some time, in case of purchase of foreign bill, which will be collected by the foreign correspondent and then the proceeds credited to nostro account), the two types of buying rates are quoted by banks in India which are called TT buying rate and Bill Buying Rate. Similarly for sale transactions also, TT selling rate and TT buying rates are quoted.

TT BUYING RATE

When no delay is involved in realisation of the foreign exchange by the bank or Nostro account is already credited. TT Buying rate is applied which is calculated after deducting the exchange margin from the inter-bank buying rate, determined by the bank. The rate is generally applied for payment of demand drafts, mail transfers, foreign bill collected or cancellation or foreign exchange already sold earlier.

BILLS BUYING RATE

When some delay in realisation of foreign exchange by the bank is involved, say in case of purchase of bill drawn on a customer in London, when nostro account would be credited after collection of the bill by the correspondent bank in London, bill buying rate is applied. Such rates are calculated by adding the forward premium for transit and usance period, rounded off to lower month (or reducing the forward discount rounded off to the higher month) and reducing the exchange margin from the spot buying rate.

TT SELLING RATE

When handling of documents by the bank is not involved (say in case of demand drafts, mail transfers etc. or there is cancellation of foreign exchange purchased earlier), TT selling rate is to be applied which is calculated on the basis of inter bank selling rate by adding exchange margin.

BILLS SELLING RATE

When transactions involve handling of documents, such as payment for import documents, bills selling rate is applied, which is calculated by adding exchange margin to the TT selling rate.

SUMMARY OF EXCHANGE RATE APPLICATION

Rate	Transaction
TT-Selling	• All clean outward remittances such as DD, TC etc. • Cancellation of bills purchased (i.e. crystallization — transfer to collection). • Cancellation of clean inward remittances • Cancellation of forward purchase contracts • Outward remittances against import documents received directly by the importers.

Bill-selling	• Retirement of import bills even if proceeds of these bills are by way DD or TT. Crystallisation of import docy. Bills,
TCs/ currency note — selling	At the discretion of the AD
Tr-Buying	• cancellation of outward TT, MT etc. • clean inward remittances (TT,DD, MT) where cover already received abroad • Conversion of proceeds of instruments that are sent for collection • Cancellation of forward sale contract
Bills-Buying	• Purchase, discount and negotiation of bills
TCs/ currency note — Buying	Banks quote lower rates as it takes longer period for credit to NOSTRO account involve higher fluctuation risk.
Prsonal drafts, cheques encashment .	**Personal foreign currency cheques —** Bank's TT buying rate is the base rate. Drafts/MTs : Bank's TT buying rate is the base rate.

DEALING ROOM OPERATIONS IN FOREIGN EXCHANGE

The Dealers in foreign exchange are actually involved in buying and selling of various currencies *and* undertaking various other related activities. The dealing room functions as a profit centre. •

The dealer maintains two positions i.e. funds position and currency position.

The **funds position** comprise inflow and outflow of funds. A mismatch could create the interest rate risk position in the form of interest payment in Nostro account or loss of interest income for the credit balance.

The **currency position** emerges on sale or purchase of various currencies in inter-bank transactions. The open position can expose the dealer to a rate fluctuation risk. The dealer is required to operate within the positions fixed by the bank for this purpose. The foreign currency position takes into account all components of foreign exchange such as (a) mirror account of the currency (b) foreign currency notes (c) import suspense account (d) spot and forward positions.

Back-office : Back office takes care of processing of deals, reconciliation and accounts_

Mid-office : It deals with the risk management and fixation of risk parameters for dealing room operations

Management & control of dealing room and Risk Management in Foreign Exchange

As per RBI directives, the banks are required to frame their own guidelines for this purpose including fixation of suitable limits for open positions.

DIFFERENT KINDS OF RISKS LEADING TO FOREIGN EXCHANGE RISK

Market risk: It is exposure to adverse change in the price or value of something in which the borrowers deal. Such changes have serious implications for the cash flows which not only affect the cash generation capacity but the liquidity as well. That in turn create payment and related problems.

Liquidity risk: The liquidity risk is where a market does not have the capacity to handle, at least without significant adverse impact on the price, the volume of whatever the borrower buys or sells at the time he want to deal. Inability to meet debt when they fall due could be another form of such risk. The liquidity crunch leads to default in meeting the commitments and affect the credit rating, which in turn makes the availability of credit uncertain. Also the, price at which credit, if available, become higher leading to lower profits.

Counter party (credit) risk: This risk is that a counter party or a debtor of the borrower will not honour their obligations to the borrowers having adverse effect on his bank dealings. If the default occurs before the date when settlement of the underlying transaction is due, the borrower may be exposed to the replacement risk of having to beam any costs of replacing or cancelling the deal, which are often less than the full amount of the transaction. A potentially greater threat is settlement risk, which arises when the borrowers pay away

cash or deliver assets before their counter party is known to have performed their part of the deal. This exposure is normally for the full amount of the transaction.

Political and country risk: We cannot underestimate the potential impact on a business or decisions taken by national and supra-national governments, government agencies and regulatory bodies empowered to control trade or to set prices and industry standards. Their extensive armory includes taxation, quotas, tariffs and other trade barriers, currency exchange controls and inconvertibility, restriction on foreign ownership and the repatriation of profits or capital, availability of grants and subsidies, setting interest rates, granting licenses and monopolies, nationalisation, expropriation and restitution of assets to former owners. When dealing with an overseas business or with a State (sovereign risk) borrowers may also need to consider the country's social and economic stability, its trading practices, customs and ethics, its commercial law, including insolvency, and the effectiveness of its legal system.

When banks engage in granting credit internationally, they undertake, in addition to standard credit risk, risk associated with conditions in the home country of a foreign borrower or counterparty. Country or sovereign risk encompasses the entire spectrum of risks arising from the economic, political and social environments of a foreign country that may have potential consequences for foreigners debt and equity investments in that country. Transfer risk focuses more specifically on a borrower's capacity to obtain the foreign exchange necessary to service its cross-border debt and other contractual obligations. In all instances of international transactions, banks need to understand the globalisation of financial markets and the potential for spill over effects from one country to another or contagion effects for an entire region.

Currency exchange rate risk : Even the major currencies may experience substantial exchange rate movements over relatively short periods of time (as seen during August 2000, when most-of the Asian currencies suffered vis-a-vis dollar). These can alter the balance sheet of a business if the business has assets or liabilities domiciled in a currency other than that in which the business prepares its accounts. It can impact the repayment capacities for the liabilities like foreign currency loans. And they may affect business profit and loss account if the impact is on income or expenditure.

There may also be longer term strategic consequences for the value of business, if for example, rates of exchange settle at levels that fundamentally alter competitiveness in international markets.

Hedging risk: This occurs when one fails to achieve a satisfactory hedge for one's exposure, either because it could not be arranged or as the result of an error. One may also be exposed to basic risk where the available hedging instrument closely matches but does not exactly mirror or track the risk being hedged.

Funding risk: A business fails when it cannot pay its debts for whatever reasons, how certain are ones' finances. Very strong capital base of a company cannot itself ensure liquidity and raising of fresh loans.**Interest rate risk**: If one is a borrower or a lender, there will be a direct impact from changes in the rates of interest one pays or receives. This may be compounded by exchange rate risk if the amounts are in foreign currency.

Operational risk : It is a potential catch that includes human errors or defalcations, loss of documents and records, ineffective systems or controls and security breaches, how often do one consider the disaster scenario. Legal, jurisdiction, litigation and documentation risks including netting agreements and cross border insolvency. Which country's laws regulate individual contracts and the arbitration of disputes ? Could a plaintiff take action against a borrower in an overseas court where they have better prospects of success or of higher awards '? There is a growing and _widespread belief that, whatever goes wrong, someone else must pay_ The compensation culture whatever its justification or cause, is becoming a big problem for many businesses.

Aggregation risk: It is a situation where a transaction involves more than one market in which problems could be experienced.

Systemic risk : It is the supervisor's nightmare. where problems in one Financial institution or market may cross over to others and to other countries in a domino effect, potentially threatening chaos in the global financial markets.

RBI Guidelines For Foreign Exchange Exposure Limits

1. Coverage : For banks incorporated in India, the exposure limits fixed by the management should be the aggregate for all branches including their overseas branches and off-shore banking units. For

foreign banks, the limits will cover only their branches in India.

2. Capital : Capital refers to tier 1 capital as per instructions issued by Reserve Bank of India (Department of Banking Operations And Development).

3. Calculation of the net open position in a single currency

The open position must first be measured separately for each foreign currency. The open position in a currency is the sum of (a) the net spot position, (b) the net forward position and (c) the net options position.

A) Net Spot Position

The net spot position is the difference between foreign currency assets and the liabilities in the balance sheet. This should include all accrued income/expenses.

B) Net Forward Position

This represents the net of all amounts to be received less all amounts to be paid in the future as a result of foreign exchange transactions which have been concluded. These transactions, which are recorded as off-balance sheet items in the bank's books, would include:

(i) spot transactions which are not yet settled;
(ii) forward transactions;
(iii) guarantees and similar commitments denominated in foreign currencies which are certain to be called;
iv) net of amounts to be received/paid in respect or-currency ' futures, and the principal on currency futures/ swaps.

C) Options Position : The options position is the "delta-equivalent" spot currency position as reflected in the authorised dealer's options risk manal4ernent system, and includes any delta hedges in place which have not already been included under 3(a) or3(b) (i) and (ii).

4. Calculation of the overall net open position

This involves measurement of risks inherent in a bank's mix of long and short position in different currencies. It has been decided to adopt the "shorthand method" which is accepted internationally for arriving at the overall net
open position. Banks may, therefore, calculate the overall net open position as follows:

(I) Calculate the net open position in each currency (paragraph 3 above):
(Ill Calculate the net open position in gold.
(Ill) Convert the net position in various currencies and gold into rupees in terms of existing rbi I fedai guidelines. All derivative transactions including forward exchange contracts should be reported on the basis of present value (pv) adjustment.
(IV) Arrive at the sum of all the net short positions_
(V) Arrive at the sum of all the net long positions.

Overall net foreign exchange position is the higher of (iv) or (v). The overall net foreign exchange position arrived at as above must he kept within the limit approved by reserve bank.

RISK MANAGEMENT & BASICS OF DERIVATIVES

RISKS IN INTERNATIONAL TRADE

Risk stands for probability of loss arising out of uncertainty about an event. An activity may turnout to be profitable and may result into loss also. The risk in a currency transactions or commodity transaction arises due to exposure undertaken by the bank concerned. The level of risk may be higher in case of international trade because it is surrounded by a no_ of risks due to vast area of operation where the buyers and sellers are spread in different countries, the goods and value goods can more in opposite direction, there could be movement in the currency of the seller's and buyer's country. Various kinds of risk that is involved in international trade include buyer risk, seller risk and shipping risk.

Buyer risk : The risk which a seller is exposed to and arises on account of buyer's non-acceptance of the goods OR non-payment OR delayed payment etc_ The transaction is considered to be complete only when the buyer accepts the goods and seller gets the payment.

Seller risk : The risk that a buyer is exposed to and arises on account of non-shipment of goods by the seller OR delayed shipment OR shipment of poor quality of goods:

Shipping risk : The risk that buyer and seller are exposed to and arises on account of mishandling of goods, abandonment of goods, wrong delivery of goods, delivery of goods at another destination by the intermediary like. shipping company, handling agent, port authorities etc.
Other risk : The buyer and seller can face other risks also in international trade that may include the settlement risk, competition risk, price risk, legal risk etc.

DIFFERENT KINDS OF RISKS LEADING TO FOREIGN EXCHANGE RISK

Foreign exchange operations face large no. of different type of risk due to a variety of reasons such as location of forex markets without any single location, markets existing in different time zones, frequent fluctuations in the foreign currency rates, effect of policies of the government and central banks of the related country etc.

Currency exchange rate risk : Even the major currencies may experience substantial exchange rate movements over relatively short periods of time. These can alter the balance sheet of a bank if the bank has assets or liabilities domiciled in those currencies_ An adverse movement of the rate can alter the value of the foreign exchange holdings. if not covered properly. The dealers have to cover the position immediately.

- Position in a foreign currency : When the assets and the outstanding contracts to purchase that currency are more than the liabilities plus and the outstanding contracts to sell that currency.
- Long or overbought position : When the purchases (and outstanding contracts to purchase) are more than the sale (the outstanding contracts to sell).
- Short position or oversold position : When the purchases (and outstanding contracts to purchase) are less than the sale (the outstanding contracts to sell).
- Overbought or oversold position : It is called open position
- Covering of position risk : The position is covered by fixing suitable limits (such as day-light- position limit, overnight position limit, single deal limit, gap-forward mismatch limits).
- Prudent limit prescribed by RBI for open position : RBI has given discretion to bank Board to fix their own open, position limits according to their own requirement, expertise and other related considerations.

Pre-settlement risk : It is the risk of failure of the counter party, due to bankruptcy or closure or other risk, before maturity of the contract. This may force the bank to cover the contract at the ongoing market rates resulting into loss due to difference prevailing between the contracted rate and rate at which the contract covered.

Settlement risk: Payment/delivery of one currency and received of other currency by both the parties. Settlement risk is the risk of failure of the counter party during the course of settlement due to time zone differences between the two currencies which are to be exchanged. For example, if a bank in the earlier time zone (say in Australia) performs its obligation and delivers the currency and a bank in a later time zone (say USA) fails to deliver or delivers with delay, the loss may be caused to the bank in the earlier time zone_

Foreign exchange settlement risk is also called temporal risk or Herstatt risk (name after failure of Bankhaus Herstatt in Germany)-The settlement risk can be taken care of by operating the system on a single time basis and also on real lime gross settlement (RTGS) basis.

Liquidity risk: The liquidity risk is where a market does not have the capacity to handle, at least without significant adverse impact on the price, the volume of whatever the borrower buys or sells at the time he want to deal. Inability to meet debt when they fall due could be another form of such risk. For example, if there is deal of UK Pound purchase against the rupee and the party selling the UK Pound is shore of pound in its NOSTRO account, it may default in payment or it may meet its commitment by borrowing at a very high cost.
Political and country risk: We cannot underestimate the potential impact on a business or decisions

taken by national and supra-national governments, government agencies and regulatory bodies empowered to control trade or to set prices and industry standards. Their extensive armoury includes taxation, quotas, tariffs and other trade barriers, currency exchange controls and inconvertibility, restriction on foreign ownership and the repatriation of profits or capital, availability of grants and subsidies, setting interest rates, granting licenses and monopolies, nationalisation, expropriation and restitution of assets to former owners. When dealing with an overseas business or with a State (sovereign risk) borrowers may also need to consider the country's social and economic stability, its trading practices, customs and ethics, its commercial law, including insolvency, and the effectiveness of its legal system. When banks engage in granting credit internationally, they undertake, in addition to standard credit risk, risk associated with conditions in the home country of a foreign borrower or counterparty. Country or sovereign risk encompasses the entire spectrum of risks arising from the economic, political and social environments of a foreign country that may have potential consequences for foreigners debt and equity investments in that country. Transfer risk focuses more specifically on a borrower's capacity to obtain the foreign exchange necessary to service its cross-border debt and other contractual obligations. In all instances of international transactions, banks need to understand the globalisation of financial markets and the potential for spill over effects from one country to another or contagion effects for an entire region.

Interest rate risk: The potential cost of adverse movement of interest rates that the bank faces its deposits and other liabilities or currency swaps, forward contracts etc. is called interest rate risk.. This risk arises on account of adverse movement of interest rates or due to interest rate differentials. The bank may face adverse cost on its deposit or adverse earning impact on its lending and investments due to such change in interest rates.

Interest rate can be managed by determining the interest rate scenario, undertaking appropriate sensitivity exercise to estimate the potential profit or losses based on interest rate projections.

Gap risk : Banks on certain occasions are not able to match their forward purchase and sales, borrowing and lending which creates a mismatch position, which is called gap risk. The gaps are required to be filled by paying or receiving the forward differential. These differentials are the function of interest rates.

The gap risk can be managed by using derivative products such as interest rate swaps, currency swaps, forward rate agreements.

Hedging risk: This occurs when one fails to achieve a satisfactory hedge for one's exposure, either because it could not be arranged or as the result of an error. One may also be exposed to basic risk where the available hedging instrument closely matches but does not exactly mirror or track the risk being hedged.

Operational risk : It is a potential catch that includes human errors or defalcations, loss of documents and records. ineffective systems or controls and security breaches, how often do one consider the disaster scenario.

Legal, jurisdiction, litigation and documentation risks including netting agreements and cross border insolvency. Which country's laws regulate individual 'contracts and the arbitration of disputes ? Could a plaintiff take action against a borrower in an overseas court where they have, better prospects of success or of higher awards ? There is a growing and widespread belief that. whatever goes wrong, someone else must pay. The compensation culture whatever its justification or cause, is becoming a big problem for many businesses.

RISK MANAGEMENT

For management of risk, the bank concerned has to frame a details policy, fix specific limit structure for various risks and operations, a sound management information system and specified control, monitoring and reporting process.
The process of risk management begins from the Board of Directors, which approves a policy for management of various types of risk which a bank may be exposed to.

The, risk management policy of a bank should cover the goals and objectives, delegation of powers and responsibilities. activities to be undertaken, level of acceptable risk, authority to undertake such

functions and system of review_

In India, RBI issued ICG i.e. Internal Control Guidelines for foreign exchange business covering dealing room operations, code of conduct for dealers, brokers, set up of the dealing room.,¯back office and risk management structure.

- **Overnight limit** : The maximum amount a bank can keep overnight when the markets in its time zone are closed.
- **Daylight limit : It** is the maximum amount the bank can expose itself at any time during the day, for meeting the needs of the customers and also its own trading operations.
- **Cap limit** : It is the maximum inter-period exposure that a bank can take_
- **Counter party limit :** The maximum amount that a bank can expose itself to a particular party (called counterparty)
- **Dealer limit :** This is the maximum amount that a dealer can keep exposed during the operating hours.
- **Stop loss limit** : This is the maximum loss limit for adverse movement of rates_
- **Deal size limit** : This is the maximum amount of size of a deal that can be made to restrict operational risk on large size deals.

DERIVATIVES

In India, different derivatives instruments are permitted and regulated by various regulators, like Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI) and Forward Markets Commission (FMC). Broadly, RBI is empowered to regulate the interest rate derivatives, foreign currency derivatives and credit derivatives.

Definition : A derivative is a financial instrument:

(a) whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or credit index, or similar variable (sometimes called the 'underlying');

(b) that requires no initial net investment or little initial net investment relative to other types of contracts that have a similar response to changes in market conditions; and

(c) that is settled at a future date_

F0r regulatory purposes, derivatives have been defined in the 'Reserve Bank of India Act, as "an instrument, to be settled at a future date, whose value is derived from change in interest rate, foreign exchange rate, credit rating or credit index, price of securities (also called "underlying"), or a combination of more than one of them and includes interest rate swaps, forward rate agreements, foreign currency swaps, foreign currency-rupee swaps, foreign currency options, foreign currency-rupee options or such other instruments as may be specified by the Bank from time to time.

Derivatives Markets

There are two *distinct groups* of derivative contracts:

Over-the-counter (OTC) derivatives: Contracts that are traded directly between two eligible parties. with or without the use of an intermediary and without going through an exchange.

Exchange-traded derivatives: Derivative products that are traded on an exchange_

Participants : Participants of this market can broadly be classified into two functional categories, namely, (a) users (who participates in the derivatives market to manage an underlying risk) and (b) the market-maker who provides continuous bid and offer prices to users and other market-makers. A market-maker need not have an underlying risk.

Purpose : Derivatives serve a useful risk-management purpose for both financial and non-financial firms. It enables transfer of various financial risks to entities who are more willing or better suited to take or manage them.

Users can undertake derivative transactions to hedge - specifically reduce or extinguish an existing

identified risk on an ongoing basis during the life of the derivative transaction - or for transformation of risk exposure, as specifically permitted by RBI.

Permissible derivative instruments

At present, the following types of derivative instruments are permitted, subject to certain conditions:

Interest rate derivatives — Interest Rate Swap (IRS), Forward Rate Agreement (FRA), and Interest Rate Future IRF).

Foreign Currency derivatives — Foreign Currency Forward, Currency Swap and Currency Option.

Forward Rate Agreement (FRA): A Forward Rate Agreement is a financial contract between two parties to exchange interest payments for a ˉnotional principal' amount on settlement date, for a specified period from start date to maturity date_ Accordingly, on the settlement date, cash payments based on contract (fixed) and the settlement rate, are made by the parties to one another. The settlement rate is the agreed bench-mark/ reference rate prevailing on the settlement date.

Forward contract : It is a firm and binding contract entered between two parties (normally the user and bank, for sale or purchase of a specified quantity of foreign currency or a commodity), at an agreed price for delivery and paynteni on a future date or on a specified time.

Forward rate : The rate mentioned in the forward contract is called forward rate which can be quoted as premium or discount over the spot rates.

Forward premium or discount in a **forward rate contract : It** is the cost of carry of the currency price or the price of ihe commodity that include interest cost, storage cost or insurance cost etc.

Basis **of the forward rate :** The forward rate can be equal to, higher or costlier than the spot rate of the currency. The currency having lower interest rate would be at a premium in future and the currency having a higher interest rate will be at a discount. The forward rate, is the function of spot rate + or — premium / discount.

Interest Rate Swap (IRS): An Interest Rate Swap is a financial contract between two parties exchanging or swapping a stream of interest payments for a 'notional principal' amount on multiple occasions during a specified period. Such contracts generally involve exchange of a 'fixed to floating' or floating to floating' rates of interest. Accordingly, on each payment date - that occurs during the swap period - cash payments based on fixed/ floating and floating rates, are made by the parties to one another.

Interest Rate Futures (IRF): Interest Rate Future is a standardized, exchange-traded contract with an actual or notional interest-bearing instrument(s) as the underlying asset.

Foreign Exchange Forward: A foreign exchange forward is an over-the-counter contract under which a purchaser agrees to buy from the seller, and the seller agrees to sell to the purchaser, a specified amount of a specified currency on a specified date in the future - beyond the spot settlement date - at a known price denominated in another currency (known as the forward price) that is specified at the time the contract is entered into.

Currency Swaps: A currency swap is an interest rate swap where the two legs to the swap are denominated in different currencies. Additionally the parties may agree to exchange the two currencies normally at the prevailing spot exchange rate with art agreement to reverse the exchange of currencies, at the same spot exchange rate, at a fixed date in the future, generally at the maturity of the swap.

Currency Options: A currency option is a contract where the purchaser of the option has the right but not the obligation to either purchase (call option) or sell (put option) and the seller (or writer) of the option agrees to sell (call option) or purchase (put option) an agreed amount of a specified currency at a price agreed in advance and denominated in another currency (known as the strike price) on a specified date (European option) or by an agreed date (American option) in the future.

Interest Rate Caps and Floors : An interest rate cap is an interest rate option in which payments are made when the reference rate exceeds the strike rate. Analogously, an interest rate floor is an

interest rate option in which payments are made when the reference rate falls below the strike rate. Components: The derivatives have components such as Options, Futures-forwards and Swaps.

Option

It is contract that provides a *right* but does not impose any obligation to buy or sell a financial instrument, say a share or security_ It can be exercised by the owner. Options offer the buyers, profits from favourable movement of prices say of shares or foreign exchange.

Normally the buyer (called holder) exercise the option. when the market price moves adversely. If the market price moves favourable to him, he will allow the contract to lapse and forgo the premium paid.

Variants of option: There are two variants of options i.e. **European** (where the holder can exercise his right on the expiry date) and **American** (where the holder can exercise the right, anytime between purchase date and the expiry date). It is important to note that option can be exercised by the owner (the buyer, who has the right to buy or sell), who has limited liability but possibility of realization of profits from favourable movement in the rates. Option writers on the other hand have high risk and they cover their risk through counter buying.

. Components: Options have 2 components i.e. ***call option*** *and put option.* Owner's liability is restricted to the premium he is to pay.

Call option Owner (buyer), has the right to purchase and the seller has the obligation to sell, a specified no. of instruments (say shares) at a specified rate during the time prior to expiry date.

Put option *:* Owner or the buyer has the right to sell and the seller has the obligation to buy during a particular period.

Premium : The cost of the option charged upfront, from the buyer of the option is called a premium. In other words_ is the fee paid for the option contract (just like insurance premium).

Maturity date or expiration date in an option: It is the last day on which the option can be exercised.

'In ***the*** money' under an option : Where exercising the option provides gain to the buyer, it is called in the money_ It happens when the strike price is below the spot price, in case of a call option OR the strike price is above the spot price, in case of a put option.

`*At the* money' : Where exercising the option provides no gain or loss to the buyer, it is called at the money.

`Out of the money' : Where exercising the option results into loss to the buyer, it is called out of the money. It is better to let the option expire.

Futures and forwards

The futures are the contracts between *sellers and buyers* under which the sellers (termed 'short') have to deliver, a pre-fixed quantity, at a pre-fixed time in future, at a pre-fixed price, to the buyers (known as `long'). It is a legally binding obligation between two parties to give/take delivery at a certain point of time in future. The main features of a futures contract are that these are traded in organized exchanges, regulated by institutions such as SEBI. they need only margin payment on a daily basis. The 'future positions can be closed easily. Futures contract are made primarily for hedging, speculation, price determination and allocation of resources. The forward on the other hand is a contract that is *traded off-the-stock exchange,* is self regulatory and has certain flexibility unlike future which are traded at stock exchange only. do not have flexibility of quantity and quality of commodity to be delivered and these are regulated by SEB1, RBI or other agencies_

Futures

A futures is a standard contract based on ah agreement to buy or sell an assets at a certain price at a certain time in future. It is an obligation on the buyer to purchase the underlying instrument and the seller to sell

Important features of a futures contract..

- The quality of the underlying assets called contract size, is standardized.

- The minimum price movement for the contract called tick size is also standardized.
- Period of the contract is also standardized. These are exchange traded contracts i.e. contracts between the futures exchange and buyer or seller and not between the buyer and seller directly.

Delivery ***under*** a futures contract : The delivery under a futures contract is not a must. The buyers and sellers can set-off the contract by packing the different amount at the current rate / price of the underlying.

Difference between a forward contract and a futures contract :
1. Forwards is an OTC product and futures is exchange traded.
2. Forward can be for any odd amount but futures is for a standard amount.
3. Forward can be for any odd period but futures is for a standardized period say 3 months. 6 months etc.
4 Delivery is essential in forward but not a must in futures.
5 Margin on forward not essential but futures is based on margin requirement and marked to market regularly.

Initial margin in a futures contract: The margin which is paid to the Exchange (in cash or other liquid security) at beginning of a contract_

Variable margin in a futures contract: For marking to market, the margin which is calculated daily at the end of each day, is called variable margin.

Maintenance margin: It is the minimum balance stipulation for undertaking trades at the Exchange and is required to maintained by the buyer or seller in the margin account with the exchange_

Various types of futures contracts : (a) Commodity futures (b) financial futures such as interest rate futures (c) currency futures (d) index futures.

Swap

A swap in a contract that binds two counterparties to exchange the different streams of payment over the specified period at_specified rate. In the context of foreign exchange, it means simultaneous sale and purchase of one currency to another. In the context of financial or derivatives, the swap means the exchange of two streams of cash flows, over a definite period of time.

Swap in foreign exchange: Simultaneous purchase of forward currency on sale of spot currency or vice-versa.

Currency swap : When pre-determined streams of payments in different currencies are exchanged on a pre-fixed period kit pre-fixed rate_

Interest rate swap: It is exchange of different streams of interest structures (and not the principal amount).

Coupon swap, under interest rate swaps: The interest rate swaps may be Coupon swaps (Le. exchange of fixed interest rates with floating rate)

Index or basis swap under the interest rate swaps: The index/basis swaps (where floating rate based on a benchmark is exchanged with floating rates based on another benchmark.

EXPORTS FROM INDIA

Export trade is regulated by DGFT under Govt. of India, which announces policies and procedures for exports from India. AD-I banks conduct export transactions in conformity with the Foreign Trade Policy, the Rules framed by the Govt. of India and the directions issued by RBI. Manner of receipt of export proceeds: (i) The amount can be received through AD Banks in the form of (a) Bank draft, pay order, banker's or personal cheques (b) Foreign currency notes/travellers' cheques from the buyer during his visit to India. (c) Payment out of funds held in the FCNR/NRE account maintained by the buyer (d) International Credit Cards of the buyer (e) Wef Jan 01, 2009, Asian Clearing Union participants can

settle their transactions in ACU Dollar or in ACU Euro (equivalent in value to one US Dollar and one Euro, respectively). Payment can be received from 3rd parties named by exporters in EGF, subject to compliance of certain conditions (RBI-Nov 08, 2013).
Time limits for realisation and repatriation of export proceeds:
(a) Units in SEZs, Status Holders, 100% Export Oriented Units and Units in EHTPs/STPsIBTPs: max 9 months
(b) Exported to a warehouse established outside India : Max 15 months from the date of shipment of goods; and
(c) Other cases: Max 9 months.
Offices and Immovable Property for Overseas Offices: For setting up of the office, AD-I banks may allow remittances towards initial expenses up to 15% of the average annual sales/income or turnover during the last 2 financial years or up to 25% of the net worth, whichever is higher. For recurring expenses, remittances up to 10% of the average annual sales/income or turnover during the last 2 financial years may be sent.
Advance Payments against Exports: The exporter shall ensure that -

i. the shipment of goods is made within one year (ADs can allow period above one year also w.e.f. 21.2.12 subject to the condition that refund during the last 3 years is not more than 10% of advance payments received);
ii. the rate of interest payable on the advance payment does not exceed London Inter-Bank Offered Rate (LIBOR) + 100 basis points.

(ADs to sent quarterly report to RBI, within 21 days, for delay in utilization of advance payments — 09.02.15)
LONG TERM EXPORT ADVANCE : RBI allowed (May 21, 2014) AD banks to permit exporters, having a minimum of 3 years' satisfactory track record, to receive long term export advance up to a maximum tenor of 10 years for execution of long term supply contracts for export of goods. The rate of interest should not exceed LIBOR plus 200 basis points. Receipt of advance of USD 100 million or more should be immediately reported RBI. Where AD banks issue bank guarantee (BG) / Stand by Letter of Credit (SBLC) for export performance, BG / SBLC may be issued for a term not exceeding 2 years at a time and further rollover of not more than 2 years at a time may be allowed subject to satisfaction with relative export performance as per the contract.
Part Drawings /Undrawn Balances: Where it is the practice to leave a small part of the invoice value (maximum of 10% of the full export value) undrawn for payment after adjustment due to differences in weight, quality, etc. to be ascertained after arrival AD-I banks may negotiate the bills.
Opening / Hiring of Ware houses abroad: Banks may grant permission for opening / hiring warehouses abroad if export outstanding does not exceed 5% of exports made during the previous financial year and applicant has a minimum export turnover of USD 100,000/- during the last financial year.

Operational Guidelines for banks

Delay *in* submission of shipping documents : If documents are presented after the prescribed period of 21 days, banks may handle them without approval of RBI if satisfied with the reasons.
Export Bills Register : Banks should maintain Export Bills Register. Details of EDF /SDF /PP /SOFTEX form number, due date of payment, the fortnightly period of R Supplementary Return with which the ENC statement covering the transaction was sent to RBI, should be available. Bill numbers are given on a financial year basis. **Follow-up of Overdue Bills :** Where bills remain outstanding, beyond the due date and the exporter - fails to arrange proceeds within 12 months or seek extension of time, matter should be reported to RBI. The copies of GR Forms should, be held by banks until the full proceeds are realised.
Report to RBI: Banks should furnish a statement in Form XOS, to the RBI (end of June and Dec), giving details of all export bills outstanding beyond 6 months from the date of export, in triplicate, within 15 days from the close of the relative half-year.
Reduction in Invoice Value due to Prepayment of Usance Bills: Banks may allow cash discount to the extent of amount of proportionate interest on the unexpired period of usance.
Reduction in Invoice Value in other cases :

(i) In case of a bill negotiated or sent for collection, if amount is to be reduced, banks may allow reduction, if it does not exceed 25% of invoice value.
(ii) For exporters in the export business for more than 3 years, reduction can be without any percentage ceiling (subject to the conditions that the export outstandings do not exceed 5% of the average annual export realisation during the preceding 3 financial years).
Change of buyer/consignee: Prior RBI approval is not required if goods are to be transferred to a different buyer due to default by original buyer if reduction in value, if any, does not exceed 25% of the invoice value and realisation of export proceeds is not delayed beyond 12 months.
Extension of time and Self write-off by the exporters: For export proceeds due within the prescribed period during a financial year, exporters can write off (including reduction in invoice value) outstanding export dues and extend • the prescribed period of realisation beyond 12 months or further, if the aggregate value of such export bills written-off (including value reduction) and bills extended for realisation does not exceed 5% (10% in case Of Status holder Exporters) of the export proceeds realised during the previous calendar year. Within a month from the close of the financial year, exporters should submit a statement of export proceeds due, realised and not realised to the AD-I banks concerned.
Extension of Time: AD- I banks can extend the period of realisation of export proceeds beyond 12 months from the date of export, up to a period of 6 months, at a time. For extension beyond one year, the total outstanding of the exporter does not exceed USD one million or 10% of the average export realisations during the preceding 3 financial years, whichever is higher.
Write off by AD Category I banks: Banks can allow write off if the amount has remained outstanding for one year or more and the aggregate amount of write off allowed during a financial year does not exceed 10% of the total export proceeds realised by the concerned exporter during the previous financial year.
AD-I banks are to send a statement in form EBW to RBI, indicating details of write offs etc., every half year ended 31st March and 30th September within 15 days from the date of completion of the relevant half year.
Exporters' Caution List: Banks are advised by RBI whenever exporters are cautioned. Banks should obtain prior approval of RBI for issuing guarantees for caution-listed exporters.

WHOLE-TURNOVER PACKING CREDIT (Export Credit Insurance-Bank WTPC (ECIB-WTPC)
Eligibility: A bank or a financial institution dealing in foreign exchange is eligible to obtain the Whole-turnover Cover for all its accounts.
Minimum criteria: No. of Accounts: 25; Minimum assured Premium: Rs. 5 lass.
Period of cover: 12 months
Eligible advances : All packing credit advances as per RBI guidelines.
Protection Offered: Against losses that may be incurred in extending packing credit advances due to protracted default or insolvency of the exporter-client. **Percentage of cover :** For banks taking the cover for the first time it is 75% up to Grade Percentage Limit fixed and 65% beyond that. (For others, varies from 55% to 75% depending on claim premium ratio of the bank). For MSE units, it is 90%.
Premium : For a fresh cover it is 8 paise. (For others, varies from 6 to 9.5 paise per Rs. 100 p.m. depending on claim premium ratio.)
Maximum liability : Overall limit up to which claims can be paid by the Corporation in respect of advances granted in any ECIB year and will be determined on the
basis of aggregate outstanding.
Important obligations of banks: Monthly declaration of advances granted and payment of premium before the end of the month. Approval of the Corporation for extension of due date beyond 360 days from due date to be obtained. Default to be reported within 4 months from due date or extended due date of advances, if not recovered, filing of claim within 6 months of the Report of Default. Recovery action after payment of claim and sharing of recovery.
Other highlights: Premium is payable on average outstanding for the month. Declaration to be submitted by the end of the succeeding month.

EXPORT CREDIT INSURANCE PACKING CREDIT (ECIB-PC)

Eligibility: A bank or a financial institution authorized to deal in foreign exchange can obtain the Individual Packing Credit Cover for each of its exporter clients who has been classified as a standard asset and whose CR is acceptable to ECGC.

Period of cover: 12 months

Eligible advances : All packing credit advances as per RBI guidelines.

Protection Offered: Against losses that may be incurred in extending packing credit advances due • to protracted default or insolvency of the exporter-client. **Percentage of cover :** 66-2/3%

Premium : 12 paise per Rs.100 p.m. on the highest amount outstanding on any day during the month. **Maximum liability :** 66-2/3% of the Packing Credit Limit sanctioned to the account being covered. **Important obligations of the bank:** Monthly deda ration of advances granted and payment of premium before 10th of the succeeding month. Approval of the Corporation for extension of due date beyond 360 days from due date to be obtained. Default to be reported within 4 months from due date or extended due date of advances, if not recovered, filing of claim within 6 months of the Report of Default. Recovery action after payment of claim and sharing of recovery.

VARIOUS KINDS OF BILL OF LADING

- Received for shipment Bill of lading: It is an acknowledgment that the goods have been received by the ship owners for shipment. It is not considered safe document for negotiation.
- **On-board Bill of lading :** It acknowledges that the goods have been put on board of the shipment, This is considered safe for negotiation purpose.
- Short **form bill of lading :** Where the terms and conditions of carriage are not printed on the bill of lading and a reference to another document containing terms and conditions is made on the bill.
- **Long form bill of lading : Where all** terms and conditions of carriage are given on **the document itself.**
- **Clean bill of lading : Which** bears no superimposed **clause or notation** that expressly declares the defective condition of goods or packaging. This is considered safe for negotiation purpose.
- **Claused bill of lading : Which** bears superimposed clause or notation that expressly declares the defective condition of goods or packaging. Ship owner can disclaim his liability on loss to goods in **case** of such BL. Hence it is not considered safe.
- Thorough Bill of lading : That covers the entire voyage covering several modes of transport. There is no guarantee of the carriers for safe carriage of goods.
- Straight bill of lading BL that is issued directly in the name of the consignee, where the goods will be delivered to the consignee.
- Chartered party bill of lading : Issued to a Chartered party who has hired the space in the vessel.

Liability of Issuing Bank

As per Article 9, an irrevocable Credit constitutes an definite undertaking of the Issuing Bank. Hence:

i. if the Credit provides for sight payment — to pay at sight,

ii. if the Credit provides for deferred payment — to pay on the maturity date(s) determinable in accordance with the stipulations of the Credit,

iii. if the Credit provides for acceptance to accept Draft(s) drawn by the Beneficiary on the Issuing Bank and pay at maturity, or

iv. if the Credit provides for negotiation — to pay without recourse to drawers and/or bona fide holders, Draft(s) drawn.by the Beneficiary and/or document(s) presented under the Credit, A Credit should not be issued available by Draft(s) on the Applicant. The Credit nevertheless calls for Draft(s) on the Applicant, banks will consider such Draft(s) as an additional document(s).

Advising Bank's Liability

As per Article 7 of UCPDC, as credit may be advised to a Beneficiary through -another bank (the 'Advising Bank') without engagement on the part of the Advising Bank, but that bank, if it elects to advise the Credit, shall take reasonable care to check the apparent authenticity of the Credit which it advises_ If the bank elects not to advise the Credit, it must so inform the Issuing Bank without delay. If the Advising Bank cannot establish such apparent authenticity it must inform, without delay, the bank from which the instructions appear to have been received that it has been unable to establish the authenticity of the Credit and if it elects nonetheless to advise the Credit it must inform the Beneficiary that it has not been able to establish the authenticity of the Credit

Liability of the Confirming Bank

A confirmation of an Irrevocable Credit by another bank (the 'Confirming Bank') upon the authorisation or request of the Issuing Bank, constitutes a definite undertaking of the Confirming Bank, in addition to that of the Issuing Bank. Hence:

I if the Credit provides for sight payment — to pay at sight,

ii. if the Credit provides for deferred payment — to pay on the maturity date(s) determinable in accordance with stipulations of the Credit. .

iii. if the Credit provides for acceptance to accept Draft(s) drawn by the Beneficiary on the Confirming Bank and pay them at maturity,

iv. if the Credit provides for negotiation — to negotiate without recourse to drawers and/or bona fide holders, Draft(s) drawn by the Beneficiary and/or document(s) presented under the Credit. A Credit should not be issued available by Draft(s) on the Applicant. if the Credit nevertheless calls for Draft(s on the Applicant, banks will Consider such Draft(s) as an additional document(s).

Examination of Documents

As per Article 13, a Banks must examine all documents stipulated in the Credit with reasonable care to ascertain whether or not they appear, on their face, to be in compliance with the terms and conditions of the Credit. Documents, which appear on their face to be inconsistent with one another, will be considered as not appearing on heir face to be in compliance with the terms and conditions of the Credit. Documents not stipulated in the Credit will not be examined by banks. If they receive such documents, they shall return them to the presenter or pass them on without responsibility.

The Issuing Bank, the Confirming Bank, if any, or a Nominated Bank acting on their behalf, shall each have a reasonable time, *not to exceed seven banking days* following the day of receipt of the documents, to examine the documents and determine whether to take up or refuse the documents and to inform the party from which it received the documents accordingly.

INSURANCE DOCUMENTS

As per Article 34, the:

'A Insurance documents must appear on their face to be issued and signed by insurance companies or underwriters or their agents.

B If the insurance document indicates that it has been issued in more than one original, all the originals must be presented unless otherwise authorised in the Credit.

C Cover notes issued by brokers will not be accepted, unless specifically authorised in the Credit_

D Unless otherwise stipulated in the Credit, banks will accept an insurance certificate or a declaration under an open cover pre-signed by insurance companies or underwriters or their agents. If a Credit specifically calls for an insurance certificate or a declaration under an open cover, banks will accept, in lieu of thereof, an insurance policy.

E. Unless otherwise stipulated in the Credit, or unless it appears from the insurance document that the cover is effective at the latest from the date of loading on board or dispatch or taking in charge of the goods, banks will not accept an insurance document which bears a date of issuance later than the date of loading on board or dispatch or taking in charge as indicated in such transport document.

F: i. Unless otherwise stipulated in the Credit, the insurance document must be expressed in the same currency as the Credit

ii. Unless otherwise stipulated in the Credit, the minimum amount for which the insurance document must indicate the insurance cover to have been effected is the CIF (Cost insurance and freight ('named port of destination')) or **CIP** (carriage and insurance paid to (...'named place of destination')) value of the goods, as the case may be, plus 10%. but only when the CIF or CIP value can be determined from the documents on their face. Otherwise, banks till accept as such minimum amount I10% of the amount for which payment, acceptance or negotiation is requested under the Credit, or 110% of the gross amount of the invoice, whichever is the greater.

Commercial Invoices

As per Article 37:

A Unless otherwise stipulated in the Credit, commercial invoices

i, must appear on their face to be issued by the Beneficiary named in the Credit (except as proitided in Article 48), and

ii. must be made out in the name of the Applicant (except as provided in sub- Article 48 (h)), and

iii. need not be signed.

B Unless otherwise stipulated in the Credit, banks may refuse commercial invoices issued or amounts in excess of the amount permitted by the Credit. Nevertheless, if a bank authorised to pay, incur a deferred payment undertaking, accept Draft(s), or negotiate under a Credit accepts such invoices, its decision will be binding upon all parties, provided that such bank has not paid, incurred a deferred payment undertaking, accepted Draft(s) or negotiated for an amount in excess of that permitted by the Credit.

C The description of the goods in the commercial invoice must correspond with the description in the Credit. In all other documents, the goods may be described in-general terms not inconsistent with the description of the goods in the Credit.

Bank-to-Bank Reimbursement Arrangements as per UCPDC

As per Article 19:
A It an Issuing Bank intends that the reimbursement to which a paying, accepting or negotiating bank is entitled.,shall be obtained by such bank (the 'Claiming Bank'), claiming on another parry (the 'Reimbursing Bank'), it shall provide such Reimbursing Bank in good time with the proper instructions or authorisation to honour such reimbursement claims.

B Issuing Banks shall not require a Claiming Bank 'to supply a certificate of compliance with the terms and conditions of the Credit to the Reimbursing Bank.

C An Issuing Bank shall not be relieved from any of its obligations to provide reimbursement if and when reimbursement is not received by the Claiming Bank from the Reimbursing Bank.
D The Issuing Bank shall be responsible to the Claiming Bank for any loss of interest if reimbursement is not provided by the Reimbursement Bank on first demand, or as otherwise specified in the Credit, or mutually agreed, as the case may be

E The Reimbursing Bank's charges should be for the account of the Issuing Bank. However, in cases where the charges are for the account of another party, it is the responsibility of the Issuing Bank to so indicate in the Original Credit and in the reimbursement authorisation. In

cases where the Reimbursing Bank's charges are for the account of another party they shall be collected from the Claiming Bank when the Credit is drawn under. In cases where the Credit is not drawn under, the Reimbursing Bank's charges remain the obligation of the Issuing Bank.

LETTER OF CREDIT

A letter of credit is a commercial instrument of assured payment and widely used by the business community for its various advantages. It is an instrument by which a bank undertakes to make payment to a seller on production of documents stipulated in the credit *(refer to Article 2 of UCPDC).* The credit specifies as to when payment is to be made which may be either when the documents are presented to the paying bank or at some future date, depending upon the terms stipulated in the credit.

Parties to LCs

a: **Applicant-** The buyer / importer of the goods (generally borrower of the issuing bank). The applicant has to make payment if documents as per LC are delivered, whether the goods are as per contract between the buyer and beneficiary or not.

b: **Issuing bank** - Importer's or buyer's bank who lends its name or credit. It is liable for payment once the documents under LC are received by it from nominated (negotiating) bank, irrespective of the fact whether it is able to recover the payment from applicant or not. It gets 5 banking days to check the documents.

c: **Advising bank** - Issuing bank's branch (or correspondent in exporter's country) to whom the letter of credit is sent for onward transmission to the seller or beneficiary,-after authentication of genuineness of the credit. Where it is unable to verify the authenticity, it can seek instructions from the opening bank or can advise the LC to beneficiary, without any liability on its part. This bank has no obligation to negotiate the documents.

d. Beneficiary - The party to whom the credit is addressed i.e. seller or supplier or exporter. It gets payment against documents as per LC from the nominated bank within validity period for negotiation, maximum 21 days from date of shipment.

e: Negotiating bank - The bank to whom the beneficiary presents the documents for negotiation. It claims payment from the reimbursing bank or opening bank and gets 5 banking days to check the documents.

f: Reimbursing bank- 3rd bank which repays, settles or funds the negotiating bank at the request of its principal, the issuing bank.

g: Confirming bank - The bank adding confirmation to the credit, which undertakes the responsibility of payment by the issuing bank and on his failure to pay. The confirmation is added on request of the opening bank.

TYPES OF LETTERS OF CREDITS

DA (Usance) or DP LCs: DA LCs are those, where the payment is to be made on the maturity date in terms of the credit. The documents of title to goods are delivered to applicant merely on acceptance of documents for payment. He makes the payment on due date. To that extent these are unsecured.
DP LCs are those where the payment is made against documents on presentation.

Irrevocable & Revocable LCs: An irrevocable LC is one, which can be cancelled or amended with consent of beneficiary, applicant bank and confirming bank, if any.
A revocable credit is one that can be cancelled or amended at any time without the prior knowledge of the beneficiary. If the negotiating bank makes a payment to the seller prior to receiving notice of cancellation or amendment, the issuing bank must honour the liability. If nothing is stated, the LC is irrevocable.
With or without recourse LCs: Where the beneficiary holds himself liable to the holder Of the bill if dishonoured, it is considered **with-recourse LC.** Where he does not hold himself liable,the credit is said to be without-recourse.

As per RBI directive (Jan 23, 2003), banks should not open such LCs. Under LC, the Banks can negotiate bills bearing the 'without recourse' clause.
A restricted LC is one wherein a specified bank is designated to pay, accept or negotiate. payment will be made. The confirming bank's liability is similar to the issuing bank. The confirming bank has to negotiate documents if tendered by the beneficiary.
Transferable LCs: It is an LC, where the beneficiary is entitled to transfer the LC, in whole or in part, to the 2nd beneficiary/s (supplier of beneficiary). The 2'd beneficiary, however, cannot transfer it further, but can transfer the unused portion, back to the originalbeneficiary. It is transferable only once.
A back to back credit is the 2'1 LC opened by the original beneficiary in favour of the rd beneficiary who is *his* local supplier. He tenders the original LC to the bank in his country as a cover for opening the 2'1 LC. The terms of such credit would be identical except that the price may be lower and validity earlier.
A red clause credit also referred to a packing or anticipatory credit, has a clause permitting the correspondent bank in the exporter's country to grant advance to beneficiary at issuing bank's responsibility. These advances are adjusted from proceeds of the bills negotiated.
A green clause LC permits the advances for storage of goods in a warehouse in addition to pre-shipment advance. It is an extension of the red clause LC.
Standby credits is similar to performance bond or guarantee, but issued in the form of LC. The beneficiary can submit his claim by means of a draft accompanied by the requisite documentary evidence of performance, as stipulated in the credit.

Documentary Credits:

When LC specifies that the bills drawn under LC must - accompany documents of title to goods such as RRs or MIRs or Bills of lading etc. it is termed as Documentary Credit. If any such documents are not called, the credit is said to be Clean Credit.

Revolving Credits:

These LCs provide that the amount of drawings made there under would be reinstated and made available to the beneficiary again and again for further drawings during the currency of credit provided the applicant makes the payment of documents earlier negotiated. At times, an overall turnover cap is also stipulated.

Instalment Credit:

It is a letter of credit for the full value of goods but requires shipments of specific quantities of goods within nominated period and allows for part-shipment. In case any one instalment of shipment is missed, credit will not be available for that and subsequent instalment unless LC permits it.

DOCUMENTS UNDER LETTER OF CREDIT

Liability of an opening bank in a letter of credit arises, when the beneficiary delivers the documents strictly drawn as per terms of the letter of credit. These documents include the following:

Bill of exchange: This is the basic document which requires to oe discharged by making the payment. It is defined u/s 5 of NI Act. The right to draw this document is available to beneficiary and the amount, tenor etc. has to be in terms of the credit.
Invoice : This document provides relevant details of the sale transaction, which is made in the name of the applicant, by the beneficiary. The details regarding, quantity, price, specification etc. should be same as mentioned in the letter of credit.
Transport documents: It evidences the despatch of the goods by the beneficiary, by handing over the goods to the agent of the applicant, which may *be* a ship, railways or a transport operator, who issues documents such as such as bill of lading, railway receipt, transport receipt. Other documents could be Airway Bill or Postal or courier receipt.
Insurance : The despatched goods are required to be insured for transit. Insurance policy or insurance certificate should be signed by the company or underwriter or their agent. Amount, kinds of risk etc. should be same as mentioned in the letter of credit.
Other documents: The letter of credit may also specify other documents to be presented along with the above documents which may include certificate of origin, certificate from health authorities etc.

UNIFORM CUSTOMS AND PRACTICES FOR DOCUMENTARY CREDITS (UCPDC-600)
Uniform Customs and Practices for Documentary Credits - 600 (referred to as UCP-600), prepared by ICC, Paris (by revising the UCPDC-500), has been implemented wef July 01, 2007. It is 6th revision of the Rules since first promulgation in 1933. The new document has 39 Articles (against 49 of UCPDC-500) with supplement for Electronic • Presentation covering 12 eArticles. UCPDC-600, shall be applicable to LCs that expressly indicate that these are subject to UCPDC-600.
ARTICLES OF UCPDC-600
Article-I : UCPDC-600 apply to any LC when its text expressly indicates that it is subject to these rules. The rules are binding on all parties thereto unless expressly modified or excluded by the credit.
Article-3 Interpretations:
A **credit is irrevocable** even if there is no indication to that effect.
On or about — Such expression will be interpreted as a stipulation that an event is to occur during a period of 5 calendar days before until 5 calendar days after the specified date, both start and end dates included.
The words **`to', 'until', 'from' and 'between'** when used to determine a period of shipment include the date mentioned and the words 'before' and 'after' exclude the date mentioned.
The words **'from' and 'after'** when used to determine a maturity date exclude the date mentioned.
The terms **'first half' and 'second half'** of a month shall be construed respectively as the 1st to the 15th and the 16th to the last day of the month, all dates inclusive.
The terms **'beginning', 'middle' and 'end'** of a month shall be construed respectively as the 1st to 10th, the 11th to the 20th and the 21st to the last day of the month, all dates inclusive.
Branches in different countries are considered to be separate banks.
The **date of issuance** of the transport documents will be deemed to date of despatch, taking in charge or shipped on board and the date of shipment. If the transport document indicates, by stamp or notation, a date of despatch taking in charge or shipped on board, this date will be deemed to the date of shipment.
Trans-shipment means unloading from one means of conveyance and reloading to another means of conveyance (whether or not in different modes of transport) during the carriage, 'from the place of dispatch taking in charge or shipment to the place of final destination stated in the credit.
A clean transport documents is one bearing no clause of notation expressly declaring a defective condition of the goods or their packaging.
If there is no indication in the credit about **insurance coverage,** amount of insurance coverage must be at least 110% of CIF or CIP value of the goods.
Documents v. Goods: Banks deal with documents and not with goods, services or performance to which documents relate (Article-5)
Advising of Credits and Amendments: A credit and any amendment may be advised to a beneficiary through an advising bank. An advising bank advises the credit and any amendment without any undertaking to negotiate. By advising the credit, the advising bank signifies that it has satisfied itself as to the apparent authenticity of the credit and the advice accurately reflects the terms and conditions of the credit or amendment received.
Amendment: A credit can neither be amended nor cancelled without the agreement of the issuing bank, the confirming bank and the beneficiary. Partial acceptance is not allowed and will be deemed to be notification of rejection of the amendment.
Standard for Examination of Documents (Art-14)
A nominated bank and issuing bank shall each have a maximum of **5 banking days** following the day of presentation to determine if documents are in order.
A presentation must be made by or on behalf of the beneficiary not later than **21 calendar days** after the date of shipment as described in these rules, but in any event not later than the expiry date of the credit.
(c) A document may be dated prior to the issuance date of the credit, but must not be dated later than its date of presentation.
Tolerance in Credit Amount, Quantity and Unit Prices (Article-30):
The words "about" or "appne used in connection with the amount of LC or the quantity or the unit

price stated in the LC are to be construed as allowing a tolerance not to exceed 10% more or 10% less than the amount, the quantity or the unit price to which they refer.
A maximum tolerance of 5% more or 5% less than the quantity of the goods is allowed, where the credit does not state quantity in terms of a stipulated no. of packing units or individual items and the total amount of the drawings does not exceed the amount of LC.
Even when partial shipments are not allowed, a tolerance not to exceed 5% less than the amount of the credit is allowed, provided that the quantity of the goods, if stated in the credit, is shipped in full and a unit price, if stated in the credit, is not reduced or that sub-article 30 (b) is not applicable.

DEFINITIONS USED IN UCPDC-600

Advising Bank : The bank that advises the credit at the request of issuing bank.
Applicant : The party on whose request the credit is issued.
Banking day : A day when bank is regularly open at the place at which an act, subject to UCPDC rules, is to be performed.
Beneficiary : The party in whose favour a credit is issued.
Complying presentation : A presentation that is in accordance with the terms and conditions of the credit, the applicable provisions of UCPDC rules and international standard banking practices.
Confirmation : A definite undertaking of the confirming bank, in addition to that of the issuing bank, to honour or negotiate a complying presentation.
Confirming bank : The bank that adds its confirmation to a credit upon the issuing bank's authorization or request.
Credit (or LC) : Any arrangement, however named or described, that is irrevocable and thereby constitutes a definite undertaking of the issuing bank to honour a complying presentation.
Honour : (a) to pay at sight if the credit is available
by sight payment. (b) to incur a deferred payment undertaking and pay at maturity if the credit is available by deferred payment (c) to accept a bill of exchange (draft) drawn by the beneficiary and pay at maturity if the credit is available by acceptance.
Issuing bank : Bank issuing LC at request of an applicant or on its own behalf.
Negotiation Purchase by the nominated bank of drafts (drawn on a bank other than the nominated bank) and/or documents under a complying presentation, by advancing or agreeing to advance funds to the beneficiary on or before banking day on which reimbursement is due to the nominated bank.
Nominated bank : The bank with which the credit is available or any bank in case of a credit available with any bank.
Presentation : Either the delivery of documents under a credit to the issuing bank or nominated bank or the documents so delivered.
Presenter : A beneficiary, bank or other party that makes a presentation.
Discounting of Bills by Banks under LC As per extant guidelines of RBI (Master Cir dated July 02, 2010) the banks are required to purchase / discount / negotiate bills under Letter of Credit (LC) only in respect of genuine commercial and trade transactions of their borrower constituents who have been sanctioned regular credit facilities by the banks. RBI has reviewed the above instructions (Aug 03, 2007) and decided as under:
In cases where negotiation of bills drawn under LC is restricted to a particular bank, and the beneficiary of the LC is not a constituent of that bank, the bank concerned may negotiate such an LC, subject to the condition that the proceeds will be remitted to the regular banker of the beneficiary. However, the prohibition regarding negotiation of unrestricted LCs of non-constituents will continue to be in force. The banks may negotiate bills drawn under LCs, on 'with recourse' or 'without recourse' basis, as per their discretion and based on their perception about the credit worthiness of the LC issuing bank. However, the restriction on purchase/discount of other bills (the bills drawn otherwise than under LC) on 'without recourse' basis will continue to be in force.

B Form and notification of LCs

6 In absence of any indication on LC, it will be *deemed to be irrevocable.*

7 While advising a credit the advising bank would do so without engagement on his part, but it shall exercise reasonable care to check the apparent authenticity of the credit which is advised_

8 A revocable credit may be amended or cancelled by the issuing bank at any moment without prior notice to the beneficiary but it shall reimburse for which is accepted or negotiated prior to receipt by it, of notice.

9 An irrevocable credit constitutes a definite undertaking of the issuing bank provided that stipulated documents are presented and terms and conditions are complied with.

10 All credits must clearly indicate whether they are available *by „light payment, by deferred payment, by acceptance or by negotiation.*

11 When instructions are received by *authenticated tele-transmission,* these will be deemed to be operative credit instrument or the operative amendment and no mail confirmation should be sent. If it is sent, the advising bank will have no obligation to check it. If the tele-transmission states that full details are to follow. then the operative credit instrument would be the details or the confirmation which is to follow.

12 Action on receipt of incomplete and unclear instructions_

C Liabilities and responsibilities

13 Banks are to examine all documents stipulated in credit (ignoring the non-stipulated even if enclosed) to ascertain whether or not they appear on their face to be in compliance with the terms of the credit. For this purpose the issuing/confirming/nominated bank would have a *reasonable time not to exceed 7 banking days* following the day of receipt of the documents for examination of documents.

14 Treatment of discrepant documents and notice thereof.

15 Banks assume no liability or responsibility for the form, sufficiency, accuracy, genuineness, falsification or legal effect of any document/s, or for the general and/or particular conditions stipulated in the documents or superimposed thereon_ Nor they assume any liability or responsibility for the description, quantity, weight, quality, condition, packing, delivery, value or existence of the goods represented by any documents or for the good faith or acts and or omissions, solvency, performance or standing of the consignors, the carriers, the forwarders, the consignees or the insurers of the goods or any other person whomsoever.

16 Disclaimer on transmission of messages.

17 Force majeure consequences i.e. Banks assume no liability or responsibility for consequences arising out of dela) or loss in transit of any communication or interruption of their business by acts of God, riots, civil commotion, insurrections, wars or any other causes beyond their control.

18 Disclaimer for acts of an instructed party.

19 Bank to bank reimbursement arrangements.

D Documents

20 Terms such as first class, well known, qualified, independent, official, competent, local and the like shall not be used to describe the issuers of any documents.

21 Specified issuers or contents of documents

22 Banks will accept a document bearing a date of issuance prior to that of the credit provided such document is presented within the time limits set out in the credit.

23 Marine/ocean bill of lading

24 Non-negotiable sea way bill

25 Charter party bill of lading

26 Multi modal transport documents

28 Road_ rail or inland water-way transport documents

29 Courier and post receipts

30 Transport documents issued by freight forwarders

31 On deck shippers load and count.

32 A clean transport document is one which bears no clause or notation which expressly declares a defective condition of the goods and/or the packaging.
33 Unless otherwise stipulated banks will accept transport documents stating that freight or transportation charges have still to be paid.
34. Insurance documents' must appear on their face to be issued and signed by insurance companies or underwriters or their agents. Credits should not use imprecise terms such as usual risks or customary risk. If used, banks would accept insurance documents, as presented.
35 Type of insurance cover
36 All risk insurance cover
37 Commercial invokes must appear on their face to be issued by the beneficiary named in the credit unless otherwise stated.
38 Other documents

E Miscellaneous provisions
39 If amount is staled to be about or approximate, difference should not exceed *10% more or less.* If quantity is not specified to be exceeded or reduced, it should not exceed the tolerance level of *5% more or less* and if
partial shipment is not prohibited a tolerance of *5% less* in the amount of the drawing will be permissible.
40 Partial shipments/drawings
41 Installment shipments and drawings.
42 All credits are to stipulate expiry date and a place of presentation of documents for payment, acceptance. An expiry date for payment, acceptance or negotiation will be construed to express an expiry date of presentation of documents. If the issuing bank states the credit to be available for one or two months or the like, the date of issuance of the credit by the bank will be deemed to be first day from which such time is to run, if date to run, is not given.
43 In addition to expiry date for presentation of documents, credits should stipulate a specified period of time after date of shipment for presentation, failing which the documents would be presented not later than 21 days after date of shipment_ if the last day of the period happens to be a closed day, the date would be taken as the next day on which bank is open.
44 The latest date for shipment shall not be extended by reason of extension of expiry date.
45 Hours of presentation
46 Shipment is to be made within 5 days (earlier or after) if the expression about date is, on or about.
47 The words *to, until. till, fi-oin* will be understood to include the date mentioned. The word after, would exclude the date mentioned. The terms first or second half of a month shall mean as 1st to 15th and 16th to last day of the month. The term beginning, middle or end of the month would mean 1st to 10th, 11th to 20th and 21st to last day of the month.

F Transferable letter of credit
48 A transferable credit is a credit under which the beneficiary may request the bank authorised to pay, incur a deferred payment undertaking, accept or negotiate or in the case of a freely negotiable credit, the bank specifically authorised in the credit as a transferring bank, to make the credit available in whole or in part to one or more other beneficiary. It can be transferred if expressly designated as such.
G Assignment of proceeds
49 Rights of beneficiary to assign any proceeds
Supplier's Credit
Under supplier credit contracts the exporter supplier extends a credit to the buyer importer of capital goods. The terms can be down payment with the balance payable in instalments. The interest on such deferred payments will have to be paid on the rates determined at the time of entering Into such arrangement. The deferred payments are supported by the promissory notes or bills of exchange often carrying the guarantee of importer's bank. To finance the credit given to the Importer under such arrangement, the exporter raises a loan from his banker under the export credit schemes in force. In general, the export credit insurance will be an inherent part of

the mechanism.

Buyer's credit

In a buyer credit transaction, the buyer importer raises a loan from a bank in the exporter's country under the export credit scheme in force on the terms conforming to the OECD consensus. The loan Is drawn to pay the exporter in full and thus for the exporter, the transaction is a cash sale. Another form of the buyer credit arrangement is, for a bank in the exporter's country, to establish a line of credit in favour of a bank or financial institutions, in the importing country. The later makes available, loans under the line of credit to its importer clients for the purchase of capital goods from the credit giving country. In India BUM Bank makes available supplier/buyer credits and also extends line of credit to foreign financial institutions to promote exports of capital goods from India.

TEST YOUR SELF : MCQ ON INTERNATIONAL BANKING

1.Foreign Exchange Management Act (FEMA) is administered by:
(a) RBI (b) Govt. of India (c) SEBI (d) Both (a) & (b) (d) All of these
2.A license to deal in foreign exchange to authorized dealers is issued by :
(a) DGFT (b) FEDAI (c) RBI (d) EXIM Bank(e) both (a) & (c)
3.All foreign exchange transactions in India are governed by :
(a) Foreign Exchange Regulation Act, 1973 (b) Reserve Bank of India Act, 1934
(d) Foreign Exchange Management Act, 1999 (e) Banking Regulation Act,1949
4.Restricted money changers are the firms/ organizations authorized to undertake :
(a) sale of foreign currency notes, coins and travellers' cheques to the public
(b) purchase of foreign currency notes, coins and travellers' cheques from the public
(c) issue of letters of credit for their importer customers
(d) both safe and purchase of foreign currency notes, coins, travellers' cheques to / from the public
(e) either (a) or (b) above
5_ Full fledged money changers are the firms/ organizations authorized to undertake :
(a) sale of foreign currency notes, coins and travellers' cheques to the public
(b) purchase of foreign currency notes, coins and travellers' cheques from the public
(c) issue of letters of credit for their importer customers
(d) both sale and purchase of foreign currency notes, coins, travellers' cheques to I from the public
(e) either (a) or (b) above
6. Forward transaction in foreign exchange means a transaction :
(a) that is to be settled on the same day
(b) in which delivery of foreign exchange takes place on the second working day of the contract
(c) in which delivery of foreign exchange takes place on the next working day of the contract
(d) in which delivery of foreign exchange takes place beyond second working day of the contract
(e) in which delivery of foreign exchange takes place after at least 90 days beyond the day of the contract
7. Forex transactions are classified according to date of-deal and date of delivery. Which of the following is not correct regarding type of exchange transaction?
(a) cash: which is to be settled on the same day
(b) spot: delivery of foreign exchange takes place on the second working day of the contract
(c) TOM: delivery of foreign exchange takes place on the next working day of the contract
(d) Forward: delivery of foreign exchange takes place beyond second working day of the contract
(e) None of these
8. For the purpose of foreign exchange transactions, foreign banks maintain accounts with ADs in India in Indian rupees. In their mutual communications, Ads in India refer to such accounts as accounts.
(a) Loro (b) FCNR (c) Vostro (d) Nostro (e) Escrow
9. Account of a bank in India with a foreign correspondent bank abroad in foreign currency is called:
(a) Loro (b) FCNR (c) Vostro (d) Nostro (e) Escrow
10. Which of the following is not correct regarding classification of correspondent accounts?
(a) Nostro: Our account with you (b) Vostro: Your account with us

(c) Lore: Their account with them (d) None of these

11. Bank of India maintains Nostro account with Citibank in New York. Bank of Baroda also maintains Nostro account with Citibank New York. If Bank of India wants to transfer funds from its Nostro a/c to Nostro a/c of BoB, then account of BoB is called as :

(a) Nostro (b) Vostro (c) Loro (d) Kerb (e) None of these

EXCHANGE RATES

12. When Foreign currency is fixed and value of home currency is variable, it is called:

(a) Direct Rate (b) Indirect Rate (c) Cross Rate (d) Variable Rate (e) None of these

13_ When home currency is fixed and value of foreign currency is variable, it is is called:

(a) Direct Rate (b) Indirect Rate (c) Cross Rate (d) Variable Rate (e) None of these

14_ In India, which type of rate is applied?

(a) Direct Rate (b) Indirect Rate (c) fixed rate (d) Variable Rate (e) None of these

15. In India, exchange rates are decided by whom?

(a) RBI (b) FEDAI (c) IBA (d) market forces (e) None of these

16. The quotation US $ 1 = Rs. 44.40 - Rs. 44.50 is:

(a) average rate (b) indirect rate (c) direct rate (d) cross rate (e) none of these

17. When Nostro account of the bank is credited before the payment to the tenderer of foreign exchange, which of the following rates will be applied?

(a) TT Buying Rate (b) Bills Buying Rate (c) TT Selling Rate (d) Bills Selling Rate

18. When Nostro account of the bank is credited later than the payment to the tenderer of foreign exchange, which of the following rates will be applied?

(a) TT Buying Rate (b) Bills Buying Rate (c) TT Selling Rate (d) Bills Selling Rate

19. When there is outward remittance and handling of import bills is involved, which of the following rates will be applied?

(a) TT Buying Rate (b) Bills Buying Rate (c) TT Selling Rate (d) Bills Selling Rate

20. When there is sale of foreign exchange, but import bills are not handled, which rate will be applied?

(a) Clean Selling Rate (b) Cheque Selling Rate (c) TT Selling Rate (d) Bills Selling Rate

21. Why exchange rate for purchase or sale of foreign currency are most unfavourable?

(a) Holding cost of currency is high (b) Bank does not get any exchange commission
(c) Bank runs the risk of counterfeit currency (d) Both (a) & (c) (e) All of these

22. The difference between buying and selling rate quoted by an Authorised Dealer is called:

(a) Dealer's Margin (b) Dealer's spread (c) Dealer's commission (d) None of these

23. A customer wants to subscribe to a magazine published in Paris. The exchange rate for draft will be :

(a) TT buying (b) TT selling (c) Bills selling (d) Bills buying (e) none of these

24. Your non-resident customer presents a draft in foreign currency for which cover has already been provided in Nostro account. The rate of exchange to be applied to the transaction will be :

(a) TT buying *(b)* Bills selling (c) Bills buying (d) TT selling (e) none of these

25. Your importer customer has to retire his import bill. The rate of exchange to be applied will be:

(a) Bills buying (b) TT selling (c) Bills selling (d) TT buying (e) none of these

26. You had negotiated an export bill of your customer in May,2009. This bill has been returned by the overseas buyer for some reasons and the AD has to debit his customer's account with Indian rupees. The rate to be applied will be :

(a) Bills buying (b) TT selling (c) TT buying (d) Bills selling (e) none of these

27. On which of the following TT buying rate will not be applied?

(a) Payment of DD drawn on the paying bank (b) cancellation of outward TT, MT
(c) Conversion of proceeds of instruments sent for collection (d) purchase of foreign DD drawn abroad

28. On which of the following TT Selling rate will not be applied?

(a) crystallization of overdue export bills (b) crystallization of over¯dile import bills
(c) Issue of foreign DD/MT (d) cancellation of outward TT/MT (e) Both (b) & (d)

LETTER OF CREDIT

29. Letters of credit transactions subject to provisions of :

(a) exchange control manual of RBI (b) UCPDC, 600 (c) UCPDC,500

(d) Foreign Trade Policy, 2009 (e) 1NCOTERMS

30. Full form of UCPDC is:
(a) Uniform Contract & Practices for Documentary Credit
(b) Universal Customs & Practices for Documentary Credit
(c) Uniform Customs & Practices for Documentary Credits
(d) Universal Customs & Provisions for Documentary Credits

31. For letter of credit transactions in international trade, under UCPDC (ICC publication 600) branches of a bank in different countries are considered :
(a) another bank (b) units of the same bank (c) associate banks
(d) either (a) or (b) as per choice of beneficiary (e) either (a) or (c) as per choice of negotiating bank

32. If a credit does not indicate whether it is revocable or irrevocable, as per UCPDC, 600, it will be treated as :
(a) irrevocable (b) revocable (c) either revocable or irrevocable as per choice of beneficiary
(d) either revocable or irrevocable as per choice of applicant of the credit
(e) either (a) or (b) as per mutual consent of beneficiary and advising bank

33. If a letter of credit and UCPDC have contradictory provisions which of the following statements will be true ' in this regard:
(a) Provisions of UCPDC will prevail over those of Credit
(b) Provisions of Credit will prevail over those of UCPDC
(c) Better of the provisions of UCPDC or Credit as applicable to beneficiary will prevail
(d) Better of the provisions of UCPDC or Credit as applicable to applicant of Credit will prevail
(e) It being a disputed matter the matter will have to be referred to ICC,Paris

34. Which of the following feature(s) do/does not apply to a 'Transferable Credit'?
(a) Transferable L/C is one which is expressly written to be 'Transferable'.
(b) Transferable VC can be transferred only once but can be transferred to more than one parties.
(c) In a 'Transferable Credit' the first beneficiary has the right to substitute his own invoice(s) and draft for those of the second beneficiary.
(d) Transfer of such Credit by second beneficiary back to first beneficiary is not permitted

35. A 'Revolving Credit' means a letter of credit :
(a) which is available for use in any country
(b) covering many shipments up to a particular period of time or a particular amount or both
(c) which can be easily transferred by the beneficiary to his suppliers
(d) which allows the beneficiary packing credit in foreign currency

36. A 'Red Clause' LC is one in which :
(a) the beneficiary can avail pre-shipment finance up to the amount specified in LC.
(b) negotiation is restricted to a particular bank (c) all clauses are compulsorily printed in red
(d) there are certain restrictive clauses as to period of shipment / negotiation of bills etc

37. A 'Back to Back' letter of credit is :
(a) one on the strength of which another bank's guarantee is obtained
(b) a second set of fresh LC opened in favour of second beneficiary on the strength of original LC
(c) one backed by the government guarantee
(d) a set of two LCs printed on the back of each other (e) none of these

38. A 'Green Clause' letter of credit is an extension of:
(a) transferable credit (b) confirmed irrevocable credit (c) red clause credit
(d) revolving credit (e) all of the above

39. A 'Claused bill of lading' means bill of lading :
(a) containing special clauses as required under letter of credit
(b) with a clause that shipping company has a right to increase freight
(c) giving the importer right to refuse payment of freight if goods are damaged on board
(d) indicating defective condition / packing of goods (e) any one or more of the above

40. The expiry of a letter of credit is 15.07.2009. The last date of shipment mentioned in the LC is 30.06.2009. The shipment was actually made on 17.06.2009 and documents were presented on 15.07.2009. Choose the best option out of the following as per provisions of UCPDC, 600.

(a) The documents should have been presented within 7 days from date of shipment
(b) The documents can be accepted as they are presented within the validity of the letter of credit
(c) The documents should have been presented within 15 days from date of shipment
(d) The documents should have been presented within 21 days from date of shipment
(e) none of the above

41. PNB received a letter of credit Opened by a bank in Germany. It is not in a position to verify the apparent authenticity of L/C. Which of the following is true with reference to the L/C as per UCPDC,600 ?
(a) PNB must advise the credit to the beneficiary without disclosing the facts
(b) PNB may elect not to advise the credit and must so inform the issuing bank without delay
(c) PNB may elect to advise the credit to the beneficiary without recourse
(d) either (b) or (c) (e) either (a) or (b)

42. A letter of credit was issued on 1.8.2009. The bill of lading presented on 10.8.2009 under LIC was dated 25.07.2009. The LIC is silent on this aspect. AD should :
(a) accept the bill of lading, if otherwise in order (b) not accept a document dated prior to date of L/C
(c) refer the matter to the applicant of UC (d) refer the matter to issuing bank (e) none of these

43. A manufacturer exporter will prefer:
a) Transferable LC b) Irrevocable LC c) Irrevocable Confirmed LC d) Revocable LC

44. As per UCPDC 600, the words "about" or "approximately" used in connection with the amount of the credit or the quantity or the unit price stated in the credit are to be construed as allowing a tolerance not to exceed ____ % more or less than the amount, the quantity or the unit price to which they refer.
(a) 10% (b) 5% (c) 1% (d) No variation is allowed

45. In a set of documents submitted under letter of credit the date of shipment is 30. 3.2009 whereas the insurance policy is dated 3.4.2009. In this case :
(a) we may accept the documents provided necessary cover has been provided in the policy effective from date of shipment.
(b) we must refuse the documents as it is a discrepancy
(c) the date of insurance policy must be changed to be prior to the date of shipment
(d) either (b) or (c) (e) none of the above

46. The beneficiary of an irrevocable letter of credit which was advised by us requests us to add our confirmation. Under the circumstances :
(a) confirmation is added at the request of opening bank and will be done only as per the arrangement.
(b) we may do so as confirmation is usual course of business only and there is no commitment of the bank which adds the confirmation.
(c) we must add our confirmation as it was advised by us
(d) we should decline it as no confirmation is necessary on the irrevocable letter of credit and only a revocable letter of credit needs confirmation.
(e) we may do so only after obtaining indemnity from the issuing bank.

47. Our bank opened an irrevocable letter of credit and our correspondent bank abroad negotiated the bills under this LC and got the reimbursement. When the documents were presented to our importer customer, he refused to pay on the plea that goods were not as per the contract. In this case :
(a) we will verify the goods and take them into our possession
(b) we cannot recover the money from the negotiating bank because as per UCPDC we deal in documents and not in goods and will proceed to recover the amount from the importer.
(c) we will request the correspondent bank to pay back the money.
(d) either (a) or (b) (e) none of the above.

48. A letter of credit was opened by us stipulating for 'clean on board bill of lading'. While scrutinizing documents under the UC we find that the notation 'some packages torn' appears on the bill of lading. We should :
(a) accept the bill of lading as it is as per terms of UC
(b) try to rectify the irregularity with the shipping agent
(c) wait until the ship arrives and verify the goods
(d) immediately on receipt of documents, inform the negotiating bank by telex that documents are discrepant and they are held at the risk and responsibility of the negotiating bank

(e) either (b) or (c)

49. A letter of credit is opened in US dollars. The insurance document can be in :
(a) US dollars only if not otherwise stipulated in the Credit. (b) in any freely convertible currency
(c) in Indian rupees only (d) in US dollars only (e) either (b) or (c)

50. As per UCPDC 600, if there is no indication in the credit of the insurance coverage required, the amount of insurance coverage must be at least _____ value of the goods.
(a) 110% of CIF value (b)110% of FOB value (c)100% of FOB value (d) 100% of CIF value (e) None

51. An UC calls for commercial invoice not exceeding US $ 2,00,000. As per UCPDC, 600, the invoice can be for :
(a) US $ 2,00,000 (b) Upto US $ 2,20,000 (c) Upto US $ 2,10,000
(d) Upto $ 2,02,000 (e) none of the above.

52. Bank of Tokyo advised an UC to the beneficiary in India through BOB. It intends to advise an amendment through SBI. Under UCPDC :
(a) it is choice of issuing bank to select any bank for advising amendment.
(b) it has to advise amendment only through BOB
(c) it has to advise amendment through RBI only. (d) either (a) or (c) (e) none of these.

53. If a credit contains conditions without stating document(s) to be presented in compliance therewith, what should the bank do?
(a) have to seek clarification from opening bank (b) disregard the conditions as not stated
(c) obtain documents in their discretion which appear to satisfy these conditions.
(d) either (a) or (c) (e) none of the above

54. An L/C was available for shipment by monthly instalments of ready made garments from India. The shipment for March,2009 was not effected within the time available for that instalment. In this case, as per UCPDC:
(a) beneficiary of L/C can ship two instalments together in Apri1,2009
(b) the credit ceases to be available for that and subsequent insalment unless otherwise stipulated in the credit
(c) even earlier instalments will not be covered under L/C
(d) either (a) or (c) (e) the matter be referred to RBI

55. Under UCPDC 600, what is maximum number of days allowed for examination of documents by issuing bank and negotiating bank?:
(a) 5 banking days each (b) 5 days each (c) 7 banking days in total (d) 7 banking days

56. As per Article 36 of UCPDC 600, (Force Majeure clause) a bank assumes no liability or responsibility for the consequences arising out of the interruption of its business by Acts of God, riots, civil commotions, insurrections, wars, acts of terrorism, or by any strikes or lockouts or any other causes beyond its control. Which of these items has been added in UCPDC 600?:
(a) acts of terrorism (b) wars (c) riots (d) Both (a) & (b) (e) None of these

57. If 'about' or 'approximately' is not written with the quantity of, goods, a tolerance of more or less than the quantity of the goods is allowed, provided the credit does not state the quantity in terms of a stipulated number of packing units or individual items and the total amount of the drawings does not exceed the amount of the credit
(a) 1% (b) 5% (c)10% (d) Nil (e) None of these

58. If in a letter of credit, word about is written with the date for the submission of documents for negotiation, then up to which date documents can be submitted for negotiation?
(a) 5 days before (b) 5 days after (c) 5 days before or 5 days after (d) None of these

59. As per UCPDC 600, if on a LC date of expiry is written as by the end of June, it means
(a) 21st to 30th June (b) 30th June(c) 21st June to 29th June if 30th June is holiday (d) None

60. Unless otherwise stated in Letter of Credit, banks will accept which type of bill of lading?
a) Charter party bill of lading b) Straight bill of lading c) Received for shipment bill of lading
d) On Board bill of lading (e) None of these

61. Under Letter of Credit part amount paid to beneficiary. While paying balance amount, Importer complains against quality of goods and request the bank not to pay the amount for bills drawn under LC. What should be done by bank?:

(a) Bank should not pay as it is a case of fraud
(b) Bank should not pay as recovery will be difficult in such circumstances
(c) Bank can suspend payment, seek clarification from exporter and make payment after being satisfied. ,M
(d) Bank has to make payment as in LC transactions, banks deal in documents and not in goods.

62. In a letter of credit, it is written that documents can be negotiated on 30th June. In this case, the documents can be negotiated up to which date?
(a) on 30th June only (b) between 25th June to 30th June (c) between 26th June to 30th June
(d) between 25th June to 5th July (e) None of these

63. A letter of credit issued on the strength of another LC is called:
(a) Back to Back Credit (b) Transferable LC (c) Red Clause LC (d) Anticipatory LC

64. A Letter of credit that carries a provision (traditionally written or typed in red ink) which allows exporter to raise pre shipment credit up to a fixed sum from the advising or paying-bank at the request of issuing bank is called:
(a) Back to Back Credit (b) Transferable LC (c) Red Clause LC (d) Anticipatory LC

NON RESIDENT ACCOUNTS

65. Who of the following can open a Non-Resident Account ?
(a) An Indian national working with a foreign shipping company with his base office in Hongkong
(b) An Indian who has gone abroad to pursue higher studies
(c) An Indian who has gone abroad for medical treatment (d) all of these (e) only (a) & (b)

66. Who is called as Resident as per FEMA 1999?:
(a) A person who stayed in India for more than 182 days in the previous financial year.
(b) A person who stayed in India for minimum 182 days in the previous financial year
(c) A person who stayed in India for more than 182 days in the previous calendar year
(d) A person who stayed in India for minimum 182 days in the previous calendar year
(e) None of these

67. An NRE term deposit account can be opened for a minimum period of :
(a) 3 years (b) 5 years (c) 10 years (d) 6 months (e) 1 year

68. As per RBI guidelines FCNR (Bank) Account can be opened in :
(a) three currencies, namely Pound sterling., US dollar & Euro
(b) only two foreign currencies namely Pound sterling or US dollars
(c) four currencies, namely Pound sterling., US dollar, Euro, Japanese Yen
(d) six currencies, namely Pound sterling., US dollar, Euro, Japanese Yen, Canadian dollar & Aus dollar
(e) None of these

69. At present rate of interest on NRE term deposit for 5 years maturity as per RBI guidelines is :
(a) not exceeding 6% (b) not exceeding 250 basis points below BPLR of the bank
(c) not exceeding 250 basis points above LIBOR for USD for 3 years maturity
(d) not exceeding LIBOR for USD for 3 years maturity plus 175 basis points
(e) not exceeding 50 basis points above LIBOR for USD for 5 years maturity

70. At present rate of interest on NRE savings bank account as per RBI guidelines is :
(a) As applicable in domestic deposits
(b) not exceeding rate applicable to NRE term deposit of one year
(c) not exceeding 50 basis points above LIBOR for USD for 6 months maturity
(d) not exceeding 50 basis points above LIBOR for USD for one year maturity
(e) not exceeding 6 months LIBOR for USD

71. When an NRE FD is made for more than 5 years, interest rate will be:
(a) as applicable for 5 years (b) as applicable for 3 years
(c) Nil as NRE FD can not be for more than 3 years. (d) 3 year or 5 year as per bank discretion

72. Minimum and maximum period for which FCNR (B) term deposits can be opened is year and _ year.
a)1,5 (b) 1,3 (c) 1,7 (d) 3, 5 (e) none of these

73. Which type of account can be opened as NRE account?
(a) Saving (b)current (c) fixed deposit (d) Both (a) & (b) only (e) All of these

74. For converting NRE Deposit to FCNR Deposit which rate would be applicable?

a) TT Buying Rate b) TT Selling Rate c)Bill Buying Rate d) Bill Selling Rate

75. NRI is defined in which of the following Acts

a)RBI Act b)Income Tax Act c)FEMA d)PML Act (e) None of these

76. A NRI can remit up to US$in a financial year from his NRO account on account of Sale proceeds of immovable property provided it is held for at least years.

(a) 1 million, 10 years (b) 1 lakh, 5 year (c) llakh, 5 year (d) 1 million, no restriction

77. In NRO A/c, Minimum period of term deposit is :

(a) 1 year (b) 6 months (c) 7 days (d) 15 days (e) None of these

78. Which type of account can be opened as NRO account?

(a) Saving (b)current (c) fixed deposit (d) Both (a) & (b) only (e) All of these

79. In which of the following type of deposit accounts, exchange risk is borne by bank?

(a) NRO account (b) NRE account (c) FCNR account (d) Both NRE & FCNR (e) None of these

80. If FCNR deposit is for more than 1 year, interest will be compounded at what interval?

(a) monthly (b) quarterly (c) half yearly (d) after every 180 days (e) None of these

81. In which type of accounts of NRI, joint account can be opened with resident?

(a) NRO account (b) NRE account (c) FCNR account (d) RFC (e) RFC (Domestic)

82. Which of the following type of accounts can be opened only as Fixed Deposit?

(a) NRO account (b) NRE account (c) FCNR account (d) Both NRE & FCNR (e) None of these

83. Maximum loans against NRE / FCNR deposit that can be allowed by a bank is:

(a) Rs 20 lac (b) Rs 30 lac (c) Rs 50 lac (d) Rs 100 lac (e) None of these

84. What type of exchange rate is applied when foreign currency funds from FCNR(B) account are converted to NRE Saving account:

(a) Bills Buying (b) TT Buying (c) TT Selling (d) Bills Selling (e) None of these

85. In a NRE account, which of the following can not be done by Power of attorney holder?

(a) all local payments in rupees including payments for eligible investments & Remittance outside India of current income in India of the non-resident individual account holder, net of applicable taxes to the account holder himself.

(b) repatriate outside India funds in the account other than to the non-resident individual account holder

(c) make payment by way of gift to a resident on behalf of the non-resident account holder & transfer funds from the account to another NRO account.

(d) Both (b) & (c) only (e) None of these

86. For which type of accounts, STAT 5, STAT8 returns are prepared respectively?

(a) NRE, FCNR (b) FCNR & NRE (C) NRE & NRO (d) FCNR & NRO

87. A FCNR(B) deposit has been made for one year. Interest compounding will be done at the interval of (a) monthly (b) quarterly (c) half yearly (d) after 180 days (e) No compounding

88. FCNR-B, account can not be opened in which of the following currency?

(a) Singapore Dollar (b) Hongkong Dollar (c) Canadian Dollar (d) Both (a) & (b) (e) None

89. The balance along with interest is fully repatriable in which type of accounts?:

(a) NRO account (b) NRE account (c) FCNR account (d) Both NRE & FCNR (e) None of these

90. NRE account cannot be opened in which of the following currencies?

(a) Indian Rupees (b) USD (c) Euro (d) Both (b) & (c) (e) None of these

FOREIGN CURRENCY ACCOUNTS OF RESIDENTS

91. A Non-resident account holder returned to India for permanent settlement on 1.7.2009 after spending about 2 years abroad. His Non-Resident (External) account can be converted into :

(a) Non-Resident (Ordinary) account (b) Resident account (c)Resident Foreign Currency account (d) -(b) or (c) as per his choice (e) - (a) or (c) as per his choice

92. RFC account can be opened in which type of following accounts?

(a) Saving (b)current (c) fixed deposit (d) Both (a) & (b) only (e) Any of these

93. Who can open RFC account:

(a) NRI returning to India after staying abroad for a minimum period of 1 year.
(b) Any NRI who had opened NRE or FCNR(B) account with the bank.
(c) Any resident individual (d) All of these (e) None of these

94. My uncle gave me gift of USD 20000. In which type of following accounts it can be credited?
(a) RFC (b) RFC(Domestic) (c) EEFC (d) NRE (e) None of these 100%

95. Exporters other than 100% Export Oriented Unit can deposit % of export proceeds to Exchange Earners Foreign Currency account:
(a) 25% (b) 50% (c) 75% (d) 100% (e) None of these

96. What type of account can be opened under EEFC scheme?:
(a) Only fixed deposit (b) Only non interest bearing current account (c) Either (a) or (b)
(d) None of these as scheme has been discontinued w.e.f. 1.11.08

EXPORT CREDIT

97. Presently rate of interest on pre-shipment credit in forex (PCFC) up to 180 days is not exceeding:
(a) 200 basis points above LIBOR (b) 100 basis points above LIBOR
(c) 150 basis points above LIBOR (d) 50 points above LIBOR (e) 350 basis points below LIBOR

98. As per current guidelines of RBI, for loans sanctioned up to 30.6.2010, rate of interest on pre-shipment credit in rupees up to 270 days should not exceed :
(a) Bank Rate plus 2.5% (b) BPLR plus 1.5% (c) BPLR minus 2.5%
(d) Bank Rate minus 2.5% (e) lower of (a) and (b)

99. As per the exchange control regulations, the payment for exports should in general be realized within a period of:
(a) 12 months from date of shipment (b) 360 days from date of packing of goods
(c) 180 days from the date of shipment (d) 270 days from date of shipment
(e) 180 days from the date of receipt of consignment by the buyer in foreign country

100. Which of the following is/are not true with regard to features of Gold Card Scheme for exporters:
(a) Only exporters whose accounts have been 'Standard' continuously for 3 years are eligible
(b) Gold Card holders will be given preference is granting packing credit in foreign currency (PCFC)
(c) Time norm for disposal of fresh applications for credit under the scheme will be 25 days
(d) Gold Card for exporters will be issued for a period of 5 years (e) none of these

101. Minimum and maximum amount up to which the Gold Credit card can be issued to exporter is Rs _____ lac and Rs lac.
(a) 100,1000 (b) 50, 500 (c) 100, 5000
(d) 20,200 (e) None of these as it is based on anticipated turnover.

102. As per the exchange control regulations, the payment for exports should in general be realized within a period of :
(a) 12 months from date of shipment (b) 3 months from date of shipment
(c) 6 months from the date of shipment (d) 1 month from date of shipment
(e) 45 days form date of shipment

103.Units in a special economic zone are permitted to realise and repatriate to India the full export value of goods or software within a period of................. from the date of shipment.
(a) 3 months (b) 6 months (c) 180 days (d) 360 days (e) none of these as there is no time limit

104. In respect of shipments made to Indian owned warehouses abroad established with permission of RBI, export proceeds should be realized within :
(a) 6 months (b)3 months (c) 9 months (d)15 months (e) 150 days

105. RBI monitors overdue export bills-not realized within the stipulated time by calling for a half yearly statement from ADs referred to as : (a) BEF (b)XOS (c) GTE-1 (d) ST-9 (e) ENC

106.Packing credit advances mean :
advances granted to industrial units for packing of manufactured goods for sale in India
advances granted to eligible exporters for purchase/manufacture/processing/transporting/packing etc. of goods meant for export
(c) advances granted to importers to enable them to store and subsequently sell imported goods locally

(d) any one or more of the above (e) none of the above.

107. To be eligible for packing credit advances the customer :

(a) should not be in the caution list of RBI or specific approval list of ECGC

(b) must be holding importer/exporter code number allotted by DGFT

(c) should be recognised export house (d) all above (e) both (a) and (b)

108. Packing credit advances is normally allowed for :

(a) 90 days (b) 60 days (c) 360 days (d) 180 days (e) as per requirement of the exporter

109. `Normal Transit Period ' in the context of export finance means:

(a) the number of days the documents take to reach destination

(b) the gap between period taken by the ship and the documents to reach destination

(c) the number of days taken by a ship to complete a voyage

(d) the number of days fixed by FEDAI and is the average period normally involved from date of negotiation to credit to NOSTRO account.

(e) either (a)or (b)

110. For facilities granted up to 30.6.2010, rate of interest on post shipment credit in rupees upto 180 days in respect of usance bills is :

(a) 12% (b) 15% (c) not exceeding BPLR

(d) not exceeding BPLR minus 2.5% (e) not exceeding BPLR plus 1.5%

111. Refinance for export credit from RBI is available for how many days?

(a) 90 days . (b) 180 days (c) 360 days (d) 270 days (e) None of these

112. Refinance against eligible export finance is available from :

(a) RBI (b) IDBI (c) ECGC (d) Exim Bank (e) None of these

113. On PCFC refinance is available to the extent of % of outstanding PCFC.

(a) 15% (b) 50% (c) 25% (d) Nil (e) None of these

114. For facilities granted up to 30.6.2010Concessional interest rate on Post shipment credit in rupees is permitted up to:

(a) 180 days (b) 90 days (c) 270 days (d) 360 days (e) None of these

REMITTANCES

115. Which of the following is not correct regarding Liberalised Remittance Scheme?

(a) Amount can be remitted for capital as well as current account transactions

(b) Maximum amount that can be remitted in a financial year is restricted to USD 200,000

(c) Remittance for gift and donation will be within USD 200,000 permitted under LRS

(d) Bank can allow advance to a resident individual for making remittance under this scheme

(e) None of these

116_ For outward remittance for medical expenses, estimate from the doctor or hospital is required if the remittance is more than USD .

(a) 1 lac (b) 5 lac (c) 10 Lac (d) none of these as it is required in all cases

117. What is the maximum amount of inward remittance that can be done by a resident individual?

(a) USD 1 Lac (b) USD 5 lac (c) USD 10 Lac (d) None as there is no limit

118. How much amount can be released for remittance abroad for education on declaration basis and withou estimate from educational institution?

(a) USD 1 Lac (b) USD 5 lac (c) USD 10 Lac (d) None as there is no limit

119. Which of the following is true?

(a) If a bank has oversold position, Bank will gain if the rate of foreign currency rises.

(b) If a bank has oversold position, Bank will gain if the rate of foreign currency declines

(c) If a bank has oversold position, Bank will lose if the rate of foreign currency declines

(d) If a bank has overbought position, Bank will gain if the rate of foreign currency declines

(e) None of these

IMPORTS

120. ADs may allow advance remittance for import of goods without any ceiling. However, if the

amount of
advance remittance exceeds USD50,00,000 or its equivalent it is mandatory to obtain-
(a) unconditional irrevocable stand by UC of an international bank of repute situated outside India
(b) guarantee from an international bank of repute situated outside India
(c) guarantee of an AD in India, if such guarantee is issued against counter
guarantee of an international bank of repute situated outside India
(d) any one of the above (e) either (a) or (b) only
121. BEF statement containing details of remittance exceeding USD1,00,000 where
evidence of import is
not furnished within 6 months from date of remittance is submitted by ADs to RBI on:
(a) monthly basis by 10th of the following month
(b) quarterly basis by 15th of the month following close of quarter
(c) half yearly basis for March/ September by 15th of succeeding month
(d) half yearly basis as of June/ December by 15th of succeeding month (e) none of these
122. Crystallisation of import bill under UC means:
(a) bill is scrutinised whether it is as per UC terms or not
(b) it is ensured that currency of IJC and insurance is the same or not
(c) converting bill amount into Indian rupees and deciding customer's liability on due
date in case of usance bill and on 10th day from date of receipt in case of demand bills.
(d) none of the above as the concept is gone with the termination of PSCFC
123. Application for making payment towards imports into India has to be made to authorised dealers
by
importers in :
(a) ENC (b) R-3 (c) Form A-1 (d) Form A-4 (e) none of the above
124. Advance remittance for import of goods into India is to be allowed after obtaining guarantee from
an
international bank of repute situated outside India or guarantee of an AD in India against
counter-guarantee of an international bank when amount of advance remittance exceeds:
(a) US $ 10,000 (b) US $ 25,000 (c) US $5,000 (d) US $ 15,000 (e) US $ 50,00,000
125. How much advance remittance is allowed for import of services without guarantee
of a reputed
international bank?
(a) USD 1 Lac (b) USD 5 lac (c) USD 10 Lac (d) None as there is no limit

MISCELLANEOUS
126. Which of the following types of Bill of Lading is not acceptable by a bank under LC?
(a) On Board (b) Clean (c) Charter Party (d) AN of these (e) None of these
127. Interest Subvention is available on rupee export credit at the rate of 2% for loan up
to Rs but
interest rate after subvention should not be less than 7%.
(a) Rs 3 lac (b) Rs 5 lakh (c) Rs 10 lakh (d) Rs 100 lakh (e) None of these
- 128. Interest rate charged by RBI on export refinance to banks is at the rate of :
(a) Bank Rate (b) Repo Rate (c) Reverse Repo Rate (d) Base Rate (e) None of these
129. Export Refinance is provided by RBI at the rate of _ % of eligible outstanding export credit?
(a) 15% *(b)* 25% (c) 50% (d) 100% (e) None of these
130. R Return is submitted to RBI on which of the following dates of the month?
(a) 7th and 2151 (b) 15th & last day (c) 10th, 20th and last day (d) None of these
131.Overdue import demand bills and usance bills are crystalised on which dates?

(a) 10th day & due date (b) 15th day and 30th day (c) 30th day and 60th *day* **(d)** 10th day and 60th day (e) None of these
132. Which of the following is incorrect regarding export declaration forms?
(a) GR form is used for declaration of exports other than by post where custom office not linked to EDI
(b) Export Declaration form is not required to be submitted for exports up to USD 25000.

(c) Softex form is used for declaration of export of software in physical or electronic form.
(d) None of these (e) All of these

ANSWER TO TEST YOUR SELF

1	D	2	C	3	D	4	B	5	D	6	D	7	E	8	C	9	D	10	D
11	C	12	A	13	B	14	A	15	D	16	C	17	A	18	B	19	D	20	C
21	A	22	B	23	B	24	A	25	C	26	B	27	D	28	E	29	B	30	C
31	A	32	A	33	B	34	D	35	B	36	A	37	B	38	C	39	D	40	D
41	D	42	A	43	C	44	A	45	A	46	A	47	B	48	D	49	A	50	A
51	A	52	B	53	B	54	B	55	A	56	A	57	B	58	C	59	A	60	D
61	D	62	D	63	A	64	C	65	E	66	A	67	E	68	D	69	D	70	A
71	B	72	A	73	E	74	B	75	B	76	D	77	C	78	E	79	C	80	D
81	A	82	C	83	D	84	B	85	D	86	B	87	E	88	D	89	D	90	D
91	D	92	E	93	A	94	B	95	D	96	B	97	A	98	C	99	A	100	D
101	E	102	A	103	E	104	D	105	B	106	B	107	E	108	E	109	D	110	D
111	B	112	A	113	D	114	A	115	D	116	A	117	D	118	A	119	B	120	D
121	D	122	C	123	C	124	E	125	B	126	C	127	E	128	B	129	A	130	B
131	A	132	C																

(Some Question -Answer may have old data but reading materials are latest updated up to 31.07.2015)

CASE STUDIES / CASELETS ON INTERNATIONAL BANKING

EXCHANGE RATES

Basic Concepts

Negotiation of ,Export Bills is a purchase transaction and Retirement of Import Bills is a sale transaction for the Authorised Dealer.

In purchase lower rate will be applied and in Sale higher rate will be applied. Same will be the case for forward premium

In sale transaction exchange margin will be added but in purchase transaction exchange margin will be deducted.

Case 1

On Jan 10, 2012, the Mumbai branch of popular bank entered into following foreign currency sale and purchase transactions:

(1) With Mr. A for sale of USD 2000 to be delivered on the Jan 10.
(2) With Mr. B for purchase of USD 2000 to be delivered on Jan **11.**
(3) With Mr. C for purchase of USD 2000 to be delivered on Jan 14 (Jan 12 and 13 being bank holidays)
(4) With Mr. D for sale of USD 2000 to be delivered on Feb 11.

The inter-bank foreign currency rates on Jan 10, 2012 are as under: Cash rate or ready rate USD = Rs.45.50/60, Tom rate Rs.45.55/65, Spot rate Rs.45.60/70 and one month forward rate Rs.45.80185.

On the basis of above, answer the following questions.

0 What rate will be used for the transaction with A and what amount in Rupees will be involved:
a) Rs.45.50, Rs.91000
b) Rs.45.55, Rs.9110
c) Rs.45.60, Rs.9120
d) Rs.45.65, Rs.91300

0 What rate will be used for the transaction with B and what amount in Rupees will be involved:

a) Rs.45.50, Rs:91000 --
b) Rs.45.55, Rs.91100
c) Rs.45.60, Rs.91200
d) Rs.45.65, Rs.91300

03 What rate will be used for the transaction with C and what amount in Rupees will be involved:

a) Rs.45.5 Rs.9100
b) Rs.45.5 Rs.9110
c) Rs.45.6 Rs.9120
d) Rs.45.65, Rs.91300

02 What rate will be used for the transaction with A and what amount in Rupees will be involved:

a) Rs.45.5 Rs.9100
b) Rs.45.5 Rs.9110
c) Rs.45.6 R
d) Rs.45.65, Rs.91300

Ans. 1-c 2-b 3-c 4-d

Explanations:

1. It is a sale transaction. Hence, same day rate i.e. cash rate of Rs.45.60 will be used. The amount = 45.60 x 2000 = Rs.91200
2. It is a purchase transaction. Hence, next day rate (TOM Rate) of Rs.45.55 will be used. The amount = 45.55 x 2000 = Rs.91100
3. It is **a** purchase transaction. Hence, 3rd day rate (Spot Rate) of Rs.45.60 will be used. The holidays period will be excluded from counting. The amount = 45.60 x 2000 = Rs.91200
4. It is a forward sale transaction. Hence forward sale rate or Rs.45.85 will be used. The amount = 45.85 x 2000 = Rs.91700

Case 2

An exporter submitted an export bill of USD 100000 drawn on 120 days usance basis from date of shipment, which took place on Aug 03, 2012. The following further information is provided:

(1) The due date is Dec 01, 2012.
(2) The exchange margin is 0.20%.
(3) Spot inter-bank USD rate is Rs.45.00/05.
(4) Premium spot Nov 0.40/45
(5) Rate is quoted to nearest 0.25 paise and rupee amount to be rounded off
(6) Interest rate is 8% for period up to 180 days.
(7) Commission on bill purchase is 0.50%

Answer the following questions.

01 What is the rate at which the bill will-be purchased if it is a demand bill after adjustment of bank margin, without taking into account, the premium?

a) Rs.44.91 *b)* Rs.45.09 c) Rs.45.31 d) Rs.45.51

02 What is the rate at which the bill will-be purchased if it is a demand bill after adjustment of bank margin and the premium? -

a) Rs.44.91 b) Rs.45.09 c) Rs.45.31 d) Rs.45.51

03 What is the gross amount before application of interest and commission:

a) R5.4531000 b) Rs.4410174 c) Rs.4407908.50 d) Rs.4507909

04 What is the amount of the bill without bank commission

a) Rs.4531000 b) Rs.4410174 c) Rs.4407908.50 d) Rs.4407909

05 What amount will be credited to exporter's account:

a) Rs.4531000 b) Rs.4410174 c) Rs.4407922.50 d) Rs.4407909

Ans. 1-a 2-c 3-a 4-b 5-d Explanation :

1. Calculation of buying rate will be as under:

Spot rate Rs.45.00 (buying rate will be applied as it is purchase)
Less 0.20% margin Rs.00.09 Rate Rs.44.91

2. Calculation of rate will be as under:

Spot rate Rs.45.00 (buying rate will be applied as it is purchase)

Less 0.20% margin Rs.00.09 Rate Rs.44.91
Add premium Rs.00.40 (premium will be added as that benefit will be of the customer) Rate Rs.45.31
3. Calculation of rate will be as under:
Spot rate Rs.45.00 (buying rate will be applied as it is purchase) Less 0.20% margin Rs.00.09
Rate Rs.44.91 Add premium Rs.00.40 (premium will be added as that benefit will be of the customer)
Rate Rs.45.31 Amount in Rs. 45.31 x 100000 = 4531000
4. Calculation of rate will *be* as under:
Spot rate Rs.45.00 Less 0.20% margin Rs.00.09 Rate Rs.44.91
Add premium Rs.00.40 Rate Rs.45.31-- Gross Amount in Rs. 45.31 x 100000 = 4531000
Interest 120 days @ 8% Rs.120826 Amount 4531000 — 120826 = 4410174
5. Calculation of rate will be as under:
Spot rate Rs.45.00 Less 0.20% margin Rs.00.09
Rate Rs.44.91 Add premium Rs.00.40
Rate Rs.45.31 Amount in Rs. 45.31 x 100000 = 4531000
Interest 120 days @ 8% Rs.120826 Commission at 0.05% Rs.2265.50
Amount to be credited 4531000-120826 - 2265.50 = 4407908.50 (rounded to Rs.4407909).

Case 3

Your export customer has received an advance of US 10000 against export to UK, which the importer in UK has got credited to NOSTRO account of the bank in London. The current inter-bank market rate USD = 45.10/15. Bank retains a margin of 0.15% on purchase and 0.16% on sale. What amount will be credited to customers account:
a. Rs.451676.50 b. Rs.450323.50 c. Rs.451721.60 d. Rs.450278.40 Ans.1-b
Explanations:
1: It is a purchase transaction for the bank. Hence inter-bank purchase rate of Rs.45.10 will be used. Bank will deduct the purchase margin of 0.15%. Gross amount = 45.10 x 10000 = 451000:
Net amount which will be credited to customer's account = 451000 - 676.50 (0.15% margin) = 450323.50

Case 4

A customer wants to book the following forward contracts:
(1) Forward purchase of USD 50000 for delivery 3^1.d^ month(2) Forward sale of USD 50000 for delivery 2nd month.
Given spot rate = 45.1000/45.1200. Premium = 1 m - 0800/0900, 2m - 1700/1900 and 3 m - 2800/2900.
Exchange margin = for purchase - 0.20% and for sale - 0.25%.
01 What is the rate for forward purchase transaction:
a) 45.4233 b) 45.2705 c) 45.1795 d) 45.1700
02 What is the rate for forward sale transaction:
a) 45.4233 b) 45.3243 c) 45.4882 d) 45.3456
Ans. 1-c 2-a
Explanations:
1. For purchase the spot rate = 45.1000
Add 2 m premium = 00.1700 (premium for 2 months only to be added in purchase as bill may be given on any day of 3rd month including on 1st day) Total = 45.2700
Less margin of 0.20% = 00.0905 Rate = 45.1795
2. For sale the spot rate = 45.1200 Add 2 m premium = 00.1900 (premium for full period of 2 months only to be added in sale) Total = 45.3100 Add margin of 0.25% = 00.1133 Rate = 45.4233

Case 5

Following are the Inter bank quotes on a certain date: Spot USD 1NR 44.60/65
1 month 8/10 2 month 18/20 3 month 28/30
Spot GBP USD 1.7500/7510 1 month 30/20 2-month 50/40 3 month 70/60
All the above differences are for the month and fixed dates and the bank margin is 3 paise.
01 An exporter has presented an export demand bill (sight document) for USD 300000 under irrevocable letter of credit. What will be the rate at which the documents will be negotiated?
a) 44.5700 b) 44.6000 c) 44.6500 d) 44.6800
02 An Exporter has submitted 60 days usance bill for USD 25000 for purchase. At what rate the

document will be purchased?
a) 44.7500 b) 44.7800 c) 44.8400 ' d) 44.8700
03 Your bank has opened a letter of credit for import at the end of 2 months for GBP 30000. At what rate, the forward exchange will be booked?
a) 78,4700 b) 78,4725 c) 78,6300 d) 78,6325
04 If the exchange margin is 3 Paise for buying as well as selling, what is the bank's spread in % on customer transaction?
a) 0.2465 b) 0.3000 c) 0.6000 d) 0.6275
05 A customer tenders export bill for GBP 10,00,000 payable 45 days from sight. The transit period is 15 days he wants to retain 10% of bill value in the foreign currency. Bank's margin is 10 paise. What will be credited to customer's account?
a) 71310030 b) 70317630 c) 70110270 d) 70018510
Ans. 1-a 2-a 3-b 4-a 5-b
Explanations:
1. It is a demand bill which means the payment is immediate upon negotiation. So, spot rate will be applied, which is USD/INR SPOT 44.60/44.65.
Being an export bill, from bank's point of view, it is a buying transaction. Hence Buying (Bid) Rate of 44.60 (and an inter-bank rate) will be applied. To arrive at the customer rate, the margin will be deducted.
inter Bank Rate 44.6000 Less : Margin 00.0300 Customer Rate 44.5700
2. The payment terms in this case are 60 days usance. Hence, 2 months forward rate will be applied, which will be calculated as under:
Spot USDIINR 44.6000/44.6500 Forward 2 Months 00.1800100.2000 (small/Big> Premium >Add)
Total 2 Months 44.7800/44.8500 Being an export bill, from bank's point of view, it is buying of FC. Hence Buying (Bid) Rate will be applied, which is 44.78. To arrive at the customer rate, exchange margin will *be* deducted. Inter Bank Rate 44.7800 Less: Margin 00.0300
Customer Rate 44.7500
3. The fetter of credit is for 2 months. Hence, 2 months forward rate will be a applied which will be calculated on the basis of 2 Months GBP/INR rate through a cross rate (GBP/USD and USD/INR rates).
USD/INR SPOT 44.6000/44.6500 Forward 2 Months 00.1800/00.2000 (Small/Big-> Premium->Add)
Total 2 Months 44.7800/44.8500 GBP/USD SPOT 1.7500/1.7510
Forward 2 Months 0.0030/0.0020 (Big/Small-> Discount ->Less) Total 2 Months 1.7470/1.7490
It is an import transaction and from bank's point of view, it is selling. Hence selling (offer) Rate will be applied.
GBP/INR = GBPIUSD x USD /INR = 44.8500 X 1.7490 = 78.44265
This *is* an inter-bank rate. To arrive at the customer rate, exchange margin will be added.
Inter Bank Rate 78.4427 Add: Margin 00.0300 Customer Rate 78.4727 rounded to 78.4725
4. USDANIR Spot 44.6000/44.6500 inter Bank Buying Rate 44.6000
Less: Exchange Margin 00.0300 Merchant Buying Rate 44.5700
Inter bank Selling Rate 44.6500 Add: Exchange Margin 00.0300
Merchant Selling Rate 44.6800
% Spread = ((Selling Rate-Buying Rate) X 100)1 /{(Selling Rate + Buying Rate)/2}
=((44.68-44.57)X100))/{44.68+44.57)/21 = 00.11 X 100/44.625 = 0.2465 %
5. The Bill period is 45 Days. The transit period is 15 Days.
Total period is 2 months. Hence, 2 months forward rate will be applied. 2 Months GBP/INIR rate is required for which cross-rate will be calculated.
USD/INR SPOT 44.6000/44.6500 Forward Points 2 Months 00.1800/00.2000 (Small/Big-> Premium -> Add)
Spot 2 Months 44.7800/44.8500 GBP/USD SPOT 1.7500/1.7510
Swap Points 2 months 0.0030/0.0020 (Big/Small-> Discount->Less) Outright 2 Months 1.7470/1.7490
Being an export from bank's point of view, it is Buying. Hence Buying (Bid) Rate will be applied).
GBP/INRBID = GBP/USDBID X USD/INRSID = 44.7800 X 1.7470 = 78.2307
This is an inter-bank rate. To arrive at the Customer Rate, Exchange margin will be deducted.
Inter Bank Rate 78.2307 Less: Margin 00.1000 Customer Rate 78.1307

The bill is for 10,00,000 GBP. Of this, the customer wants to retain 10% in EEFC account. Hence he would be converting 9,00,000 GBP.For 9,00,000 GBP, his account would be credit with = 78.1307 X 900000 = Rs.70317630

Case 6

An importer customer, wants to retire an import bill of Pound Sterling 100000 drawn under letter of credit opened by you, and payable on demand on Oct, 12.2012. The TT margin is 0.10%. The inter-bank rates are GBP/USD = 1.5975/1.6000 and USD/1NR = Rs.44.90/45.00. On the basis of given information, answer the following questions.

01 What rate will be quoted by the bank for this transaction in terms of GBP/INR without taking into account the TT margin:

a) Rs.71.7276 *b)* Rs.71.9085 c) Rs.72.0000 d) Rs.72.0720

02 What rate will be-quoted by the bank for this transaction in terms of GBP/1NR after taking into account the TT margin:

a) Rs.71.7276 b) Rs.71.9085 c) Rs.72.0000 d) Rs.72.0720

03 What amount will be debited to cash credit or overdraft or current account of the customer for retirement of this bill:

a) Rs.7000000 b) Rs.7207200 c) Rs.7218300 d) Rs.7222070

04 If this bill is not retired by the importer customer, the crystallization of this import bill will be on which of the following dates:

a) Oct 12, 2012 b) Oct 21, 2012 c) Oct 22, 2012 d) Nov 12, 2012

Ans. 1-c 2-d 3-b 4-c

Explanations:

1. This is a sale transaction for the bank. Bank will purchase pounds (GBP) at market selling rate and will sell the USD to the customer to purchase pounds. The rate taken will be 1.6000 and 45.00. Hence the GBP/INR = 1.6000 x 45.00 = 72.00. Further bank will add margin of 0.10% which will be 0.0720. The total rate = 72.00 + 0.720. The customer would pay = 72.072 *x* 100000 = Rs.7207200
2. This is a sale transaction for the bank. Bank will purchase pounds (GBP) at market selling rate and will sell the USD to the customer to purchase pounds. The rate taken will be 1.6000 and 45.00. Hence the GBP/INR = 1.6000 x 45.00 = 72.00. Further bank will add margin of 0.10% which will be 0.0720. The total rate = 72.00 + 0.720= 72.072.
3. This is a sale transaction for the bank. Bank will purchase pounds (GBP) at market selling rate and will sell the USD to the customer to purchase pounds. The rate taken will be 1.6000 and 45.00. Hence the GBP/1NR = 1.6000 x 45.00 = 72.00. Further bank will add margin of 0.10% which will be 0.0720. The total rate = 72.00 + 0.720. The customer would pay = 72.072 x 100000 = Rs.7207200
4. The bill is to be paid on demand Le. Oct 12, 2012. As per FEDAI rule, where the demand import bills drawn under LC are not retired on demand, these are required to be crystallized within 10 days from the date of demand. Hence the latest date by which it should be crystallized is Oct 22, 2012. (For usance import bills the crystallisation will be done on due date.

Case 7

On Apr 15, 2012, XYZ Ltd expects to receive USD 20000 within July 2012. The company wants to book a forward contract for July 2012. The USD/1NR inter-bank spot rate is Rs.45.10/20. The forward premium is 18/20 paise for May, 31/33 for June and 45/47 for July. The margin to be retained by the bank is 0.10 paise per USD.

01 What is the FC rate at which the forward contract will be booked if the margin is not taken into account:

a) Rs.45.31 *b)* Rs45.41 c) Rs.45.55 d) Rs.45.57

02 What is the FC rate at which the forward contract will be booked if the margin is taken into account

a) Rs.45.31 b) Rs45.41 c) Rs.45.55d) Rs.45.57

Ans. 1-b 2-a

Explanations:

1. For calculating the forward, the bank will take into account the forward premium for June as amount can be *received* on any day in July including f[t] July. Thus the premium amount *is* 31 paise. The rate would be:
Spot rate = 45.10 Forward premium for June = 00.31 (premium for July will not be paid as delivery is during July) Total = 45.41
2. For calculating the forward, the bank will take into account the forward premium for June as amount can be

received on any day in July including 1st July. Thus the premium amount is 31 paise. The rate would be:

Spot rate = 45.10
Forward pr = 00.31
Total = 45.41
Less = 00.10
Rate to be = 45.31

Case 8

The importer requests on Sep 01, 2012 to book a forward contract for payment of an import bill of USD 50000 due for *Dec* 15, 2012. Spot rate USD/INR = 45.10/20. Forward premium for Sep 10/14 paise, Oct 22/24 paise, Nov 33/35 paise, Nov to Dec 15-12/14 paise. Bank is to charge margin of 0.20%.

01 Without taking into account the margin, the rate that will be quoted by the bank is :

a) Rs.45.2000 b) Rs.45.5500

c) Rs.45.6900 d) Rs.45.7814

01 By taking into account the margin, the rate that will be quoted by the bank is :

a) Rs.45.2000 b) Rs.45.5500

c) Rs.45.6900 d) Rs.45.7814-

Ans. 1-c 2-d

Explanations:

1. This is FC sale transaction. Hence bank will use the Spot rate = 45.20. and premium up to Dec 15, will be added. The rate would be:45.20 margin of 0.20% i.e. 0.09138 is added, the rate would be = 45.7814.

To calculate the rate Nov premium + 0.35 + 0.14 = 45.69. When the

2. This is FC safe transaction. Hence bank will use the Spot rate = 45.20. and premium up to Dec 15, will be added. The rate would be:45.20 margin of 0.20% i.e. 0.09138 is added, the rate would be = 45.7814.

To calculate the rate Nov premium + 0.35 + 0.14 = 45.69. When the

Case 9

Your correspondent bank in UK wants to credit Rs.50 million in its NOSTRO account maintained by you in New Delhi. The bank is ready to credit the equivalent USD in you NOSTRO account in London. The inter-bank rate is USD rate is Rs.45.10/15. If exchange margin is ignored, how much amount, the correspondent bank will credit to the NOSTRO account in London and at what rate.

a 1108647.45 b. 1107419.71 c 1107022.13 d. inadequate information to make the calculation.

Ans. 1-a

Explanations:

For the bank, it is a purchase transaction as bank is purchasing dollar and giving rupee. Hence the rate that will be applicable is Rs.45.10. The FC value of Rs.50 million = 50000000/45.10 = 1108647.45.

Case 10

M/s XYZ imported goods worth Japanese Yen (JPY) 50 million. They request to remit the amount. The USDANR rate is Rs.45.1500/1700 and USD/JPU is 91.30/50. The bank will load a margin of 0.20%.

01 What rate will be quoted (per 100 yen)?

a) Rs.49.0456 b) Rs.49.4743 c) Rs.49.5730 d) Rs.49.8712

02 What amount the importer has to pay in Indian currency?

a) Rs.2472100 b) Rs.2478500 c) Rs.2428400 d) Rs.2408300

Ans. 1-c 2-b

Explanations:

1. JPY is to be sold against rupees for which no direct rate is available. It will be calculated as a cross rate. Bank need to buy JPY against USD *and* USD against rupees. Hence the following rate will be used for USD/INR 45.1700 (the market selling rate) and for USD/JPY 91.30 (the market selling rate being lower in this case).

Rate = 45.1700/91.30 = 0.494743 and for JPY 100 the same will be Rs 49.4743 (As per FEDAI Rules, JPY is quoted as per 100 yen)

2. JPY is to be sold against rupees for which no direct rate is available. It will be calculated as a cross rate. Bank need to buy JPY against USD and USD against rupees. Hence the following rate will be used for USD/INR 45.1700 (the market selling rate) and for USD/JPY 91.30 (the market selling rate being lower in this case).
Rate = 45.1700/91.30 = 0.494743 and for JPY 100 the same will be Rs 49.4743 (As per FEDAI Rulet, JPY is quoted as per 100 *yen).*
To this margin of 0.20% will be added which works out to 0.0989.
Hence the rate will be 49.4743 + .0989 = 49.5732 rounded of to 49.5730
Total Rupee payment = 5,00,00,000 x 49.573/100= 24786500

Case 11
Bank had booked a forward purchase contract 3 months back at Rs.45.60, for delivery 3 days later for USD 10000. Due to delay in realization of export bill, the customer has requested-for cancellation of the contract and re-book it for one month fixed date or option contract beginning one month from spot date. The inter-bank spot rate is 45.2000/2200. One month forward premium is 0800/1000 paise. The TT selling and buying margin 0.20%
01 What will be the rate at which the contract will be cancelled:
a) 45.2200 b) 45.2000 c) 45.3104 d) 45.3908
02 What amount will be debited or credited to customer account being difference:
a) Rs.3202 debited b) Rs.3202 credited c) Rs.2996 credited d) Rs.2996 debited
03 At what rate, the contract would be re-booked:
a) 45.2200 b) 45.2000 c) 45.3104 d) 45.3908
Ans. 1-c 2-c 3-c Explanations:
1. The contract will be cancelled at TT selling rate i.e. 45.2200+0.20% margin i.e 0.0904 = 45.3104
The amount at contracted rate of 45.60 = 45.60 x 10000 = 456000 The
amount at cancelled rate of 45.3104=453104
Difference = Rs.2996, which would *be* credited to customer account.
2. The contract will be cancelled at TT selling rate i.e. 45.2200+0.20% margin = 0.0904 = 45.3104
The amount at contracted rate of 45.60 = 45.60 x10000 = 456000 The
amount at cancelled rate of 45.3104=453104
Difference = Rs.2996, which would be credited to customer account.
3. For booking of contract, the spot rate = 45.2000
Add one month premium = 00.0800
Total = 45.2800
Less inter-bank margin at 0.20% = 00.0905
Rate = 45.1895

FOREX RISK MANAGEMENT
Case- 12
international Bank successfully contracted an FCNR (B) deposit of 10 million USD for a period of 5 years. Out of these funds, the bank retains USD 4 million as deposit with a high rated US bank in its NOSTRO account and converts the remaining amount to Indian currency at prevailing USD rate = Rs.46. On the basis of the given information, answer the following questions:
01 f the foreign currency rate moves to Rs.46.50:
a) the bank.will gain Rs. 3 mio (million) b) the bank will lose Rs. 3 mio (million)
c) the bank will gain Rs.6 mio (million) d) the bank will lose Rs.6 mio (million)
02 What type of position the bank is having presently after this transaction?
a) an oversold position of USD 4 million b) an oversold position of USD 6 million c) an overbought position of USD 6 million d) an overbought position of USD 6 million
03 If the foreign currency rate moves to Rs.45.00:
a) the bank will gain Rs. 3 mio (million) b) the bank will loss Rs. 3 mio (million) c) the bank will gain Rs.6 mio (million) d) the bank will loose Rs.6 mio (million)

04 The square its position, the bank will have to undertake which of the following transaction?
a) Acquire USD assets of at least USD 6 million b) Acquire USD assets of at least USD 4 million
c) Acquire USD liabilities of at least USD 4 million d) Acquire USD liabilities of at least USD 6 million
05 If the bank decides to invest the amount received as FCNR deposit in a 3-year US govt. security at 6 months LIBOR related rate of interest, the bank faces the following type of risk?
a) foreign exchange risk b) liquidity risk c) basis risk d) no risk
Ans. 1-b 2-b 3-c 4-a 5-c

CASE STUDIES ON LETTER OF CREDIT

Case 1
M/s Exports Private Limited have received a letter of credit for export-of textile items for an amount of $ 50000 approximately. The company manufactured the goods, made the shipment and presented the documents for negotiation to the negotiating bank for a total invoice value of $ 52356. The negotiating bank refused to negotiate the document as the amount exceeded the amount of letter for credit. What is the position of exporter in the given situation:

a) Negotiating bank has all discretion to point out any discrepancy. Hence, it need not pay.
b) The discrepancy pointed out by the negotiating bank is not correct. Hence it should pay.
c) The negotiating bank should seek advice of the opening bank in such matters
d) The information given is incomplete to take a decision.

Answer:
Solution : The decision of the negotiating bank in refusing to negotiate. the documents on the basis of variation in the amount is not correct. As per Article 30 of Uniform Customs and Practices for Documentary Credits 600, the words "about" or "approximately" used in connection with the amount of the credit or the quantity or the unit price stated in the credit, are to be construed as allowing a tolerance not to exceed 10% more or 10% less, than the amount, the quantity or the unit price to which they refer.
Hence the amount stated in the invoice is well within the tolerance of 10% and objection raised by the bank is not correct.

Case 2
M/s Exports Private Limited received a letter of credit for export of certain products but the letter of credit does not state the quantity in terms of a stipulated number of packing units or individual items. The exporter manufactured the goods and presented the documents for negotiation which have been negotiated by the negotiating bank. However, the opening bank refused to honour the documents on the premise that there is variation of around 3 percent in the quantity of goods supplied. The negotiating bank demands the return of money from the exporter. What is the exporter's position in this case:

a) Once the documents have been found correct, the negotiating bank cannot ask for refunds of the money from the beneficiary
b) If the applicant refuses to pay, the beneficiary will have to return the money
c) The objection raised by the opening bank is justified and this should have been seen by the negotiating bank before hand
d) The opening bank's objection is not justified and it has to pay the documents

Answer:
Solution: The demand of the negotiating bank for refund of the money from the exporter is not justified. As per provisions of Artide 30 of Uniform Customs and Practices for documentary Credits (UCPDC-600), a tolerance not to exceed 5% more or 5% less than the quantity of the goods is allowed, provided the credit does not state the quantity in terms of a stipulated number of packing units or individual items and the total amount of the drawings does not exceed the amount of the, credit. In the given case, the quantity variation falls within the tolerance level. The negotiating bank, instead of seeking refund from the exporter should take up the matter with the issuing bank for payment.

Case 3
International Bank, New Delhi received a letter of credit issued by a bank in UK in favour of M/s Exports Private Limited, a customer of International Bank. The negotiation is restricted to International Bank. On the date of receipt of LC, riots took place in the locality Where the branch of the bank is located. As a result the LC could not be

advised by the bank to the exporter immediately. Later on when the situation became normal the bank advised the LC to the exporter but by that time the expiry date for negotiation of documents had expired. The exporter insists on negotiation of documents by the International Bank, as delay is not on the part of the exporter but on the part of International Bank. What is the position of the International Bank vis-à-vis the exporter in the given situation:

a) International Bank is liable due to which it should negotiate the documents
b) Exporters Pvt Limited has the right to get the payment of the documents
c) International Bank is not liable
d) Given information is not enough to take any decision

Answer: c

Solution: The insistence of the exporter to negotiate the documents is not correct when the date of negotiation of the LC has expired. As per Article 36 of Uniform Customs and Practices for Documentary Credits (UCPDC 600), a bank assumes no liability or responsibility for the consequences arising out of the interruption of its business by acts of God, riots, civil commotions, insurrections, wars, acts of terrorism, or by any strikes.or lockouts or any other causes beyond its control. A bank will not, upon resumption of its business, honour or negotiate under a credit that expired during such interruption of its business. Under the given circumstances, the bank has no obligation to negotiate the documents and make the payment since the credit has-expired. The beneficiary has to get the negotiation date extended by amendment of the LC.

Case 4

M/s Exports Private Limited have received a letter of credit in their favour for export of certain goods to UK. The date of expiry of the credit is around 31st December 2011. Since the process involved in manufacturing of goods was little longer, the exporter could present the documents for negotiation on 3rd January 2012. The documents were negotiated by the negotiating bank under reserve to which the exporter objected. In the opinion of the exporter, there is no deficiency in the documents and in the opinion of the bank, the documents have not been presented for negotiation in time. What is the position of the bank and the exporter:

a) Bank has to negotiate the documents as it gets 5 banking days to check the documents and the documents have been presented during that period.
b) The beneficiary has the right to present the documents within 5 calendar days since date is written as around Dec 31. Hence, the negotiating bank cannot refuse payment
c) The bank is not under obligation to negotiate the document as the last date for negotiation is over
d) The bank should seek instruction of the opening bank and applicant and move accordingly.

Answer:

Solution: The stand taken by the bank that the documents have been presented after expiry date, is not correct. As per Article 3 (Interpretations) of Uniform Customs and Practices for Documentary Credits (UCPDC 600), the expression 'ton or about" or similar, will *be* interpreted as a stipulation that an event is to occur during a period of five calendar days before until five calendar days after the specified date, both start and end dates included. The documents have been presented by the exporter within 3 calendar days after the specified date i.e. Dec 31, 2011. Hence, the bank should negotiate the documents if otherwise in order.

Case 5

Popular Bank issued an LC of USD 50000 on Jan 05, 2012, in favors of John and John of London. The last date for shipment is Jan 15 and last date for negotiation is Jan 31, 2012. The goods were shipped on Jan 02, 2012 and documents were presented for shipment by the beneficiary for negotiation to South Hall Bank on Jan 14, 2012, which were negotiated on Jan 16, 2012. When the documents were sent to Popular Bank for reimbursement by the South Hall Bank, the opening bank found the following discrepancies:

1. The date of shipment as Jan 02, 2012 while the date of LC was Jan 05, 2012.
2. The date of invoice was Jan 03, 2012 and date of packing list and inspection certificate was Dec 31, 2011. The opening bank returned the documents to the negotiating bank.

a) The return is not justified due to which the negotiating bank should send the documents back to opening bank for payment
b) The return is justified, as the date of LC is subsequent to date of documents
c) The return is justified, as the date of different documents is different

d) The opening bank should seek opinion of the applicant and then take decision

Answer: a

Solution: The discrepancies pointed out by the opening bank are not justified. As per Article 14 of UCPDC 600, *the* documents under an LC can be dated prior to the date of LC but these should not be dated later than the date of presentation. Further, Data in **a** document, when read in context with the credit, the document itself and international standard banking practice, need not be identical to, **but** must not conflict with, data in that document, any other stipulated document or the credit. Therefore, if the documents do not carry any other discrepancy, the opening bank or the applicant cannot refuse payment, on this basis.

Case 6

An LC provides for shipment of 500 pieces of trousers in 200 cartons. It also provides that partial shipment is not allowed. The beneficiary hands over 100 cartons to the shipping company on Jul 10 *and* another 100 cartons on Jul 16. Two bills of fading with dates Jul 10 and Jul 16, are issued. The cartons are to be carried in a single vessel to sail on Jul 20.

The documents are negotiated by the negotiating bank but these are returned back by the opening bank, stating that the LC did not permit partial shipment:

a) Opening bank cannot be forced to pay because the part shipment is not permitted

.b) Opening bank should pay, as it is not partial shipment, since vessel is one

c) By negotiating defective documents, the negotiating bank has made mistake, hence it cannot force the

- opening bank to reimburse

d) Negotiating bank has made mistake. It should recover the payment from the beneficiary

Answer:

Solution: As per Article 31 of UCPDC 600, documents with 2 or more sets of transport documents covering shipment of goods on the same means of transport and same journey, are not considered partial shipment. Hence, the stand taken by the opening bank is not correct.

Case 7

Universal Bank (the issuing bank) received the documents under LC from Popular Bank (the negotiating bank) on Dec 22 (Tuesday). **It** took one day to check the documents and forwarded the documents for acceptance by the applicant. On Dec 29, the applicant pointed out that the insurance policy was in a currency different from the one as mentioned in LC. (Dec 25 was a holiday due to Xmas and Dec 27 was Sunday). The opening bank immediately informed the negotiating bank about this discrepancy by way of an Email and sought directions for disposal of the documents. The negotiating bank pointed out that the opening bank could convey the objection if any, within 5 days and not later, due to which it should make the payment:

¯a) Observation made by the negotiating bank is not correct. It has received the objection in time.

b) Observation made by the negotiating bank is correct. Opening bank has conveyed the objection 2 days late.

c) Observation made by the negotiating bank is not correct. It should convey this to the beneficiary and recover the amount

d) Loss would be to the account of applicant, as he took more than 5 days.

Answer: a

Solution: As per Article 16 of UCPDC, the issuing bank gets 5 banking days to determine whether the documents carry discrepancy or not. Dec 25 being Xmas holiday and Dec 27 being Sunday (which are to be excluded from counting), the issuing bank conveyed the discrepancy within 5 banking days. Hence negotiating bank cannot refute the claim of the opening bank.

EXPORT FINANCE

Case- 8

An exporter approaches the popular bank for pre-shipment loan with estimated sales of Rs.100 lakh. The bank sanctions a limit of Rs.50 lakh, with following margins: Pre-shipment loan on FOB value — 25%; Foreign Demand Bill -10%; Foreign usance bilis —20%.

The firm gets an order for **USD 50,000** (CIF) to Australia. On 1.1.2011 when the USD/INR rate was Rs.43.50 per **USD,** the firm approached the Bank for releasing pre-shipment loan (PCL), which is released.

On 31.3.2011, the firm submitted export documents, drawn on sight basis for USD 45,000 as full and final shipment. The bank purchased the documents at Rs.43.85, adjusted the PCL outstanding and credited the balance amount to the firm's account, after recovering interest for Normal Transit Period (NTP). The documents were realized on 30.4.2011 after deduction of foreign bank charges of USD 450. The bank adjusted the outstanding post shipment advance. against the bill. Bank charged interest for pre-shipment loan @ 7% up to 90 days and, @ 8% over 90 days up to 180 days. For Post shipment credit, the Bank charged interest @ 7% for demand bills and @7.5% for usance (D/A) documents up to 90 days and @ 8.50% thereafter and on all over dues, interest @ 10%.

01 What is the amount that the Bank can allow as PCL to the exporter against the given export order, considering the profit margin of **10% and** insurance and freight cost of 12%?
a) Rs.2200000 b) Rs.1650000 c) R6.1485000 d) Rs.1291950
02 What is the amount of post shipment advance that can be allowed by the Bank under foreign bills purchased, for the bill submitted by the exporter?
a) Rs.19,80,000 b) Rs.17,75,925 c) Rs.19,73,250 d) Rs.21,92,500
03 What will be the period for which the Bank charges concessional interest on DP bills, from date of purchase of the bill?
a) 90 days b) 25 days c) 31 days d) Up to date of realization
04 in the above case, when should the bill be crystallized (latest date), if the bill remains unrealized for over two months, from the date of purchase (ignore holidays)?
a) On 30.4.2011 b) On 24.4.2011 c) On 24.5.2011 d) On 31.5.2011
05 What rate of interest will be applicable for charging interest on the export bill at the time of realization, for *the* days beyond Normal Due Date (NDD)?
a) 8% *b) 7%* c) 7.5% d) 10%
Ans. 1-d 2-c 3-b 4-c 5-d Explanations:

1. FOB value =

CIF Value i.e. 50000x43.5 =		2175000
Deduct Insurance & freight 12% of 2175000	=	261000
Balance	=	1914000
Deduct profit margin 10% of 1914000	=	191400
Balance	=	1722600
Less Margin 25%	=	430650
PCL	=	1291950

2. 45000 x 43.85 = 1973250
3. Concessional• rate will be charged for normal transit period of 25 days and there after overdue interest will be charged.
4. Crystallisation will be done when the bill becomes overdue after 25 days of normal transit period. Date of overdue will be 25.4.2011. if bill remains overdue, it will be crystalised within 30 days i.e. up to 24.5.2011.
5. Rate of interest will be 10% as the overdue interest is stated as 10% in the question.

Module: B

Risk Management

Risk-Concept - Risk in Banks - Risk Management Framework - Organisational Structure - Risk Identification - Risk Measurement / - Sensitivity - Basis Point Value (BPV) - Duration -Downside Potential - Value at Risk, Back Testing - Stress Testing - Risk Monitoring and Control - Risk Reporting -
Market Risk identification, Measurement and management / credit risk - rating methodology, risk weights, eligible collateral for mitigation, guarantees; credit ratings, transition matrices, default probabilities, Credit risk spreads, risk migration and credit metrics , Counterparty risk. Credit exposures, recovery rates, risk mitigation techniques, - / Operational and integrated Risk Management - Risk management and capital Management - Basel-II - Current guidelines on risk management

Risk Management

What Is risk: Risk is the possibility of loss that may arise due to uncertainties. In a banking situation, the uncertainties in banking operations may result in variation in net cash flow which may affect profits of a bank adversely. example, the bank has open position (over-bought position) in a foreign currency and the rates of that currency start falling. The bank is likely to suffer toss. Hence the foreign currency rates being uncertain cause loss to the bank. Such risk may be called Forex Risk.

It should be remembered that:

1. Uncertainties that are associated with various components of risk, affect the cash flows from that activity. These Uncertainties may be favourable or unfavourable. If these are unfavourable these may cause loss. The possible unfavourable event that can cause loss, is called the risk.
2. When variation in net cash flow is lower it means there-is lower risk and when the variation in net flow is high, it means higher risk.
3. When there is no variation in the net cash flow, it means there is Zero risk.

Risk & Capital: There is basic relationship between the capital and risk i.e. higher the risk higher will have to be the capital. Banking business, like any other business, requires capital to take care of the risk situations, so that, if need arises, the bank should be able to meet that loss from the available capital. For that purpose, banks maintain capital adequacy in the form of capital fund as a percentage to risk weighted assets.

A business organization having wide variations in net cash flows is business having higher risk.. In order to take care of the loss arising on account such risk, that organization would be required to have higher capital. On the other hand, a business organization with smaller variation in net cash flows, is the business with lower risk and it would need lower capital.

Similarly, in case of a bank, if it creating assets having lower risk weight (say investment in Govt securities or advances against deposits), it will have to provide lower capital for the risk_ On the other hand a bank exposing itself to capital market, where variations are very wide, will have to maintain a higher capital fund.

Risk adjusted return on capital: Gross return from an investment may not be the proper criteria to make comparison between two investments. Let us assume that a person makes investment of Rs. I lac each in two securities which give him return in the following manner:

Cash flow from / in	1st	2nd	3nd	4th year	Total
Investment-I (in govt. securities)	10000	10000	10000	10000	40000
Scenario 1 for Investment-2 (in shares of a blue chip	4000	13000	5000	18000	40000
Scenario — 2 for Investment-2 (in shares of a blue chip	6000	16000	6000	20000	48000

The total return in the investments is RsA0000 and 48000 over a period of 4 years. If we ignore the time value of money, the return is 10% for investment-1 and 10% for investment-2 in Scenario 1 and 12% in Scenario -2. In normal course, the investor may Mae to invest in Investment-1 and would not like to invest in investment-2 because there is wide volatility in cash flows from investment-2, which means it is more risk prone. However if return is higher (say 12% in case of 2"4 Scenario) in investment-2, the investor may look to invest in investment-2 also_ This 2% additional return is risk premium or cost of risk.

Hence, the return net of risk premium is 10% (12% - 2%) for investment 2 after adjusting the return premium, which is risk adjusted return on capital (RAROC).

Risk in Banking Business : Banks undertake different types of business that involves a large no. of activities which can be sub-grouped as under (*as pe*r Basel II guidelines):

Line of Business	Sub-groups	Activities
Corporate Finance .	Corporate Finance,Govt finance,Merchant Banking, advisory services	Mergers & acquisitions, underwriting, securitization, debt syndication, IPO,

Tradng	Sales, marketing, treasury	Fixed income securities,equity, foreign exchange, commodity market
Retail Banking	Retail banking, private *bank,*card services	Retail lending and deposits, retail banking services, credit cards
Commercial banking	Commercial banking .	Project financing, export financing, working capital financing, factoring,
Payments *I settlement*	External clients	Payment and collection, funds transfers, clearing and settlement
Agency services	CusIndy, corporate agency, corporate trust	Depository receipts, escrow Security lending, Paring agents
Asset management	Discretionary and non-discretionary fund management	Fund managers, portfolio management
Retail brokerage	Retail brokerage	Execution and full service

Important features of these business lines and activities are:

1. Business lines and activities are of wide variety.
2. Banks' clients vary from retail to corporate, from consumer markets to large corporates.
3. Banking activity differs for each segment.
4. Banks offer stand alone products and also package products.
5. Product lines differ from customer to customer.
6. Management **practices** differ from bank to bank.
7. The key driver to manage all business lines is the enhanced risk adjusted return.

Regrouping of the business lines: To understand the risk associated with these, the above business lines can be regrouped as under.

1. Banking Book
2. Trading book (trading portfolio)
3. Off balance sheet exposures.

Banking book:

The banking book for the purpose of risk management include all types of loans and deposits & borrowings, that emerge from commercial and retail banking transactions. These assets and liabilities have following features:

- These assets or liabilities are normally held till maturity. At times, the residual maturity of these assets and liabilities does not match due to which there is mismatch and results in Liquidity risk. Further, interest rate changes taking place during their holding period affects net interest margin. Hence, there is interest rate risk also.
- In the asset side, there is possibility of default by the borrowing parties, that gives rise to credit risk.
- Certain loss possibilities also arise on account of human failures of omission and commission, information deficiency etc. that leads to operational risk.
- The banks apply accrual system of accounting i.e. income is booked when due and recovery is done subsequently, if not received already. For non-performing assets, instead of accrual system, cash ***I*** realization system is followed. Hence, it will be observed that the banking book is exposed to liquidity risk, interest rate risk, operational risk and credit risk.

Trading book:

The banking, book for the purpose of risk management, includes marketable assets i.e. investments

both for SLR and non-SLIt purpose in govt. securities and other securities. These are generally held as fixed income securities, equities, foreign exchange assets etc. The important features of these assets include:

- These assets are generally not held till maturity (except a small portion called HTM-held till maturity in Govt. securities) . These are disposed of before maturity after holding for some time.
- In order to ensure that their valuation is in line with current market value (vis-a-vis book value) of such securities, they are marked to market, which affects the profit and loss position, since provisions are required to be made where market value is lower than book value.
- Trading book is exposed to adverse movement in market prices of the securities which leads to Market risk.
- Investments having lower demand in the market also face liquidation problem leading to liquidation risk.
- In addition, there may be problem with redemption by the issuer (may be, by the time these securities mature, the financial position of the issuer may not be as sound as at the time of issue), which leads to credit risk._Hence trading book is exposed to market risk including liquidation risk, credit risk and default risk.

Off-balance sheet exposures:

These exposures include bank guarantees, letters of credit, lines of credit etc. and derivative instruments such as swaps, "(Wires, forward contracts, foreign exchange contracts, options etc. These are in the nature of contingent exposures. Banks may also have contingent revenue generations called contingent receivables. These exposures can turnout to be fimd based exposure, in case of the counter parties fails to settle their obligations.Hence, the off-balance sheet exposures are exposed to liquidity risk, interest rate risk, market risk, default or credit risk and operational risk.

Definition of Banking Risk

The banks are exposed to following types
of risks: I. Liquidity risk

2. Interest rate risk
3. Market risk
4. Credit risk (default risk)
5. Operational risk

These risks can be further broken up in various other types of risk as under:

1. Liquidity risk : This is the risk arising from funding of long term assets by short term, liabilities or funding short term assets by long term liabilities.

- Funding liquidity risk: It is the inability to obtain funds to meet cash flow obligation when these arise.(Payment of a term deposit which was used to fund a term loan and a TL which has not matured as yet, fully).
- Funding risk : The risk arises from need to replace net outflows due to unanticipated withdrawal or non-renewal of deposits.
- Time risk : This risk arises from need to compensate for non-receipts of expected inflows of funds i.e. performing assets turning into non-performing assets deu to which recovery has not come and deposit that funded tbAt loan is to be returned.
- Call risk : This risk arises due to crystallization of contingent liabilities.

2. Interest rate risk : This is the risk arising from adverse movement of interest rates during the period when the asset or liability was held by the bank. This risk affects the net interest margin or market value of equity.

- Gap or mismatch risk: It arises from mismatch from holding assets and liabilities and off balance sheet items with different maturities. For example, an assets maturing in 4 years, funded from a liabilities maturing in 2 years' period.
- Yield curve risk : In a floating interest rate situation, banks may adopt two or more benchmark rates for different instruments. Different assets based on these different benchmark rates, may not yield a

parallel return (as there may be variations in the yield of the benchmark). Hence their yield curve would be different. For example, if a deposit is raised on a floating rate linked to 91 days treasury bill and another deposit is raised on a floating rate linked to 382 days, the cost to the bank may be different for these two deposits.

- Basis risk : The interest rates on different assets or liabilities may change in different magnitude which is called basis risk. For example in a declining interest rate scenario, the rate of interest on assets may be declining in a different magnitude than the interest rate on the corresponding liability, which may create variation in net interest income.
- Embedded option risk : When a liabilities or assets is contacted i.e. a deposit is obtained or a loan is given) with a call option for a customer (i.e. option to obtain payment of deposit before maturity or make payment of the loan before becoming due), it may give risk to embedded option risk. It may affect the net interest margin.

Reinvestment risk: When bank gets back the repayment of a loan or an investment, there is uncertainty about the interest rate at which the cash inflow can be reinvested. Hence, any mismatch in cash flows exposed. the bank to variation in net interest income.

- Net interest position risk: When market interest decline and a bank has more earning assets than paying liabilities, the bank is exposed to reduction in NIT, which is called net interest position risk.

3. Market risk or price risk : It is the risk that arises due to adverse movement of value of the investments I trading portfolio, during the period when the securities are held by a bank. The price risk arises when an investment is sold before maturity.

- Foreign Exchange risk : When rate of different currencies fluctuate and lead to possible loss to the bank, this is called a forex risk.
- Market liquidity risk: When bank is not able to conclude a large transaction in a particular instrument around the current market price (say bank could not sell a share at a higher price which could have been done but for poor market liquidity this could not be done), this is called, market liquidity risk

4. Default risk or credit risk : The risk to a bank when there is possibility of default by the counter party (say a borrower) to meet its obligation. Credit risk is prevalent in case of loans.

Counter-party risk : Counter party risk is a variant of credit risk. It arises due to non-performance of the trading partners due to counterparty's refusal or inability to perform. It is basically related to trading activity rather than credit activity.

Country Risk: -When non-performance by the counter party due to restrictions imposed by the country of the counter party (non-performance due to external factors).

5. Operational risk : It is the risk that arises due to failed internal processes, people or systems or from external events. It includes a no. of risk such as fraud risk, communication risk, documentation risk, competence risk, model risk, cultural risk, external events risk, legal risk, regulatory risk, compliance risk, system risk etc. It however does not include strategic risk or reputation risk.

- Transaction risk : It arises from fraud or failed business processes or inability to maintain business continuity and manage information.
- Compliance risk: It is the risk of legal or regulatory sanction or financial loss or reputation loss that a bank may suffer as a result of bank's failure to comply with applicable laws or regulations.

6. **Other risks :** These may include strategic risk or reputation risk.

- Strategic risk : It arises on account of adverse business decision, improper implementation of decisions etc.
- Reputation risk: It is the risk that arises from negative public opinion. It can expose an institution to litigation, financial loss or decline in customer base.

Risk diversification & Portfolio Risk:

Risk diversification stands for opting for different lines of business with varying degree of risk, so that the overall risk should be minimum. For a banking business, a bank creates assets in the form of loans, and investments besides off-balance sheet positions. In the investment portfolio, the bank goes in for investment in Govt. securities (carrying lower yield but with virtually nil default risk) and

corporate bonds (having relatively higher risk). Similarly in case of loans, the hanks grant different types of loans (such as loans to high rated corporates, loans to medium and small enterprises, retail loans, loans against different types of securities), which yield different type of return and carry different degree of risk.As a result of diversification, the portfolio risk is normally less than the weighted average of individual risk in the portfolio.

RISK MANAGEMENT

As a result of the liberalisation, deregulation and globalisation process initiated in India during the 90s, our financial services system has been exposed to a large number of changes taking place in the overseas markets, economies and political and social changes abroad. Not only this, many a new dimensions have also been added, so for domestic economy is concerned. The compulsions to survive, for commercial institutions have forced the Indian banking system including financial institutions, to adopt proper approach towards risk management.

Why risk management The basic objective of risk management is to enhance the stake holders' value by maximizing the profit and optimizing the capital funds for ensuring long term solvency of the banking **organisation. The approach to manage risk** may be at Transaction level (i.e. at the branch level, where business transaction takes place) and at aggregated level (sum total of all transactions at all branches of the bank). At aggregate level, the risk diversification take place. Aggregated risk at the bank level, is also called the Portfolio risk

For example, the no. of loan accounts in a bank may be in lacs. From these loan accounts, the bank earns interest and commission income which become cash inflow for the bank. It differs from account to account. Hence, the net cash flow for the bank is aggregate of lacs of individual transactions.
The risk is banking business would depend on the variability of its net cash flow at aggregated level_ Hence management of risk at aggregated level i.e. portfolio levet is as important as at the transaction level.

Process of risk management

The process of risk management, broadly comprise the following functions:

-Risk identification,
-Risk measurement or quantification,
-Risk mitigation,
-Risk control and monitoring.
-Risk pricing

Risk identification:

Risk identification involves identifying various risks associated with a transaction, the bank has take at transaction level and then assessing the impact on :the :portfolio and capital *return.* All transactions in a bank have 'one or more of the major risk such as liquidity risk, interest *rate* risk, market risk, :credit or default risk and operational risk (see example Below).
Certain risks are contracted at transaction level (credit risk) and others happen and managed at the aggregated level such as liquidity risk or interest risk.

Let.us take an example :

A bank branch sanctioned a term loan of Rs.10 cr to a company, as per its corporate policy, for 8 years in addition to one year moratorium period. Rate of interest is 1% above BPLR of the bank (which is presently, say 10%). The funding of the loan has been made from a term deposit of 5 years of the same amount taken at 7% rate of interest. What risks are associated with this transaction. Ignore the effect of CRR and SLR.

The transaction is exposed to following risk:

Funding risk — Deposit will have to be returned after 5 years while by that time only a part of the TL would be recovered. For the remaining period of term loan repayment, source to fund the balance has to be arranged.

Liquidity risk : There is maturity mismatch in the transaction. Hence liquidity risk.

Time risk : if the term loan repayment is not made regularly in time by the company, there will be time risk also as bank has to make arrangement to repay the term deposit by raising funds from other source.

Basis risk : The term loan is linked to BPLR which may change during this period but the term deposit is at a fixed rate. If BPLR is reduced during this period, there would be loss on account of basis risk.

Gap or Mismatch risk : After 5 years when funding of balance amount of term loan will be made, the deposit rates may not remain same.

Reinvestment risk : When bank gets loan repayment during 1[5`] 5 years, it may have to invest the funds somewhere, where the interest rate may be different at that time.

Embedded risk : If deposit is withdrawn by the customer before 5 years by getting it cancelled, embedded risk arises. Credit or default risk : If the borrower defaults to make the payment regularly, there would be credit risk.

Operational risk : If there is any fraud on the part of the borrower, or there is some documentation problem with the loan, there would be operational risk also

Determinants of capital fund : Capital of the bank is determined by the aggregated risk_ The risk adjusted return on capital determines the corporate policy of the bank.

Risk Measurement:

Measurement of risk is done with the objective of making an assessment about variations in earnings, market value, losses due to default etc because of the uncertainties associated with various risk elements. The risk measurement may be based on <u>(a) sensitivity (b) volatility and (c) downside potential.</u>

(a) Sensitivity : Under this measurement, the deviation in the target variable (say the market value) is measured on the basis of variation in one variable component For example, measurement of the change in market value of a security (say Treasury Bills) as a result of change in interest rate say by 0.5%.

Sensitivity suffers from the drawback that it takes into account variation in only one variable and not all the variables at a time.

(b) Volatility : The volatility reflects the stability or instability of any random variable. Volatility is the standard deviation (SD which is square root of the variance of the random variable) of the values of different variables. In volatility, it is possible to combine the sensitivity of target variables with the variation of the underlying parameters. Volatility captures upside and downside deviations.

(c) Downside potential: Downside potential captures the possible loss and ignores the possible profit. Hence it is adverse deviation of a target variable. It has two components i.e. potential losses and probability of occurrence. The Value at Risk (VaR) is the downside risk measure.

Risk pricing:

Risk pricing means, while fixing the price of a product, to take into account the risk. This cost of risk is in addition to the normal actual cost incurred on the transaction (may be in the form of infrastructure, employees cost etc). The pricing of a transaction must take into account the cost of risk to that transaction, which may be on two counts.

a) Banks maintain minimum capital (regulatory capital) with reference to risk weighted assets. There is cost to capital in the form ofdividend payments made to the shareholders / investors.

b) Similarly, there is possibility of other type of risk associated with that transaction. Say default **in** loans and making provision for loans etc.

Hence the pricing of a product should take into accounts (a) cost of funds to be deployed (b) operating expenses (c) loss probability (d) capital cost.

Risk Monitoring and Control:

Risk monitoring is essential to understand the change in risk profiles and taking corrective steps. For the purpose of risl control, the banks take following actions:

1 have an appropriate organizational structure
2 adopt a comprehensive risk measurement approach
3 set up a comprehensive risk rating system

4 adopt risk management policies consistent with the broader business strategy, capital strength, risk appetite of the bank
5 place limits on different types of exposures, including the inter-bank borrowings which include call funding purchased funds, core deposits to core assets, off balance sheet commitments, swapped funds etc.
6 take periodical review to ensure its integrity, accuracy and reasonableness.
7 Identification of risk concentration, large exposures etc.

Risk Mitigation:
The objective of risk mitigation is to reduce the downward variation in net cash flows_ Risk mitigation stands for tak steps to cover, reduce or eliminate the risk, whatever possible. In banking, the risk mitigation techniques and tools di I from case to case.
(a) Credit operation : To mitigate risk, traditionally, the loans are secured by collateral or 3'[1] party guarantees margins are obtained_ In the present day context, prescription of exposure for individual borrowers, borrowing and industry exposure, capital market exposure etc., regular credit rating of borrowers etc. are the risk mitigants measures.
(b) Interest rate : To mitigate interest rate risk, banks enter in to interest rate swaps, forward rate agreements etc.
(c) Forex transactions : To mitigate forex risk banks used forward agreements, .forex options or forex futures.

Risk Regulation in Banking industry

A strong banking system is the basic requirement of a healthy economy. The monetary authorities in different countries regulate the banking system and in India, RBI carries the Central Banking functions and regulates the Indian banks under RBI Act 1934 and Banking Regulation Act 1949. The objectives of such regulation and supervisions are:

- Improving the health of banking system by prescribing prudent guidelines on capital requirement, assets quality etc.
- promoting sound business and supervisory practices
- Controlling and monitoring the systemic risk
- protecting the interest of various stakeholders including depositors, public, govt. etc.

Basel II Guidelines

The Basel Committee on Banking Supervision (BCBS) is a committee of banking supervisory authorities that was established by the central banks' governors of the Group of Ten countries (G-10) in 1975 under Bard(for International Settlements (131S). It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. It usually meets at the Bank for International Settlements in Basel, where its permanent Secretariat is located.

1988 Basel Accord (Basel-I) : Basle Committee on Banking Supervision (BCBS) gave its recommendations in the year 1988 for putting in place the minimum capital requirements for banks all over the world, to improve their financial health.

Implementation of Basel I in India: With a view to adopting the framework on capital adequacy which takes into account the elements of credit risk in various types of assets in the balance sheet as well as off-balance sheet business and also to strengthen the capital base of banks, Reserve Bank of India decided in April 1992 to introduce a risk asset ratio system for banks (including foreign banks) in India as a capital adequacy measure. Essentially, under the above system the balance sheet assets, non-funded items and other off-balance sheet exposures are assigned prescribed risk weights and banks have to maintain unimpaired minimum capital funds equivalent to the prescribed ratio (minimum 9% in India) on the aggregate of the risk weighted assets and other exposures on an ongoing basis.

Implementation of guidelines on Market Risk: Reserve Bank has issued guidelines to banks in June

2004 on maintenance of capital charge for market risks on the lines of 'Amendment to the Capital Accord to incorporate market risks' issued by the BCBS in 1996.

2006 *Basel* Accord (Basel—II) : The BCBS released the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" on June 26, 2004. The Revised Framework was updated in November 2005 to include trading activities and the treatment of double default effects and a comprehensive version of the framework was issued in June 2006 incorporating the constituents of capital and the 1996 amendment to the Capital Accord to incorporate Market Risk.

The Revised Framework seeks to arrive at significantly more risk-sensitive approaches to capital requirements. The Revised Framework provides a range of options for determining the capital requirements for credit risk and operational risk to allow banks and supervisors to select approaches that are most appropriate for their operations and financial markets.

Fundamental objective of Basel II : The fundamental objective of the CoMmittee's work to revise the 1988 Accord has been :

- to develop a framework that would further strengthen the soundness and stability of the international banking system while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of competitive inequality among internationally active banks.
- to promote the adoption of stronger risk management practices by the banking industry. The key elements of the 1988 capital adequacy framework, including

(a) the general requirement for *banks* to hold total capital equivalent to at least 8% of their risk-weighted assets;

(b) the basic structure of *the* 1996 Market Risk Amendment regarding the treatment of market risk; and

(c) the definition of eligible capital have been retained in the Basel II.

Major features of Basel II Accord

- more risk sensitive capital requirement
- take into account operational risk in addition to credit and market risk for capital purpose
- provide range of options for determining the capital needs for credit risk and operational risk
- to promote stronger risk management practices.

BASEL II - Three pillars

The revised framework is based on 3 important aspects, called three pillars which include :

(a) minimum capital requirement,
(b) supervisory review and
(c) market discipline.

Pillar— t : Different Types of approaches for Minimum Capital Standard

Pillar — I : Type **of risk for which capital to be maintained**	**Approach to be followed**
Credit risk	Standard Approach Internal Rating based Foundation approach Internal Rating based Advance Approach
Market risk	Standard Approach — Maturity Method Standard Approach — Duration Method Internal Models Method
Operational risk	Basic Indicator Approach Standard Approach Advance measurement approach

Tier-I : Capital Standards- Minimum CAR or CRAR

As per BCBS, the banks shall maintain minimum CgAR of ***S%*** but as per R131 directives on CAR, the bank in India shall maintain Total CRAP. of 9% and also Tier I capital of 6% (to be achieved by

31.03.2010). Further, the minimum capital would be subjected to a prudential floor, which shall be higher of minimum capital required to be maintained OR a specified percentage of minimum capital required for credit & market risk as per Basel I.
The ratio is to be calculated both for Tier I and for Capital Fund as under:

$$\text{Tier I CRAR} = \frac{\text{Eligible Tier I Capital Funds}}{\text{Credit Risk RWA + Market Risk RWA + Operational Risk RWA}} \times 100$$

$$\text{Total CRAR} = \frac{\text{Eligible Totall Capital Funds}}{\text{Credit Risk RWA + Market Risk RWA + Operational Risk RWA}} \times 100$$

Capital fund under Basel II

Capital Fund has two tiers - Tier I and Tier II. Tier I has major items such as paid-up capital, statutory reserves & other disclosed free reserves, Innovative Perpetual Debt Instruments etc. Tier II includes revaluation reserves, general provisions ***and*** Loss Reserves hybrid debt capital Instruments and subordinated debt (long term unsecured loans.

Tier I Capital should at no point of time be less than 50% of the total capital.

Risk weighted assets

Fund based assets include cash, loans, investments and other assets. Degrees of credit risk expressed as %age weights is assigned by RBI to each such asset As regards the non-fund based (called off-balance sheet) items, the exposure is first calculated by multiplying the face amount of each of the off-balance sheet items by the credit conversion factor_ This is then multiplied by the relevant weightage.

Capital standard for Credit Risk

For this, there are 2 approaches for providing capital which include (a) Standardised Approach and (b) Internal Rating Based Approach (IRB). IRE approach could be either (a) foundation IRB approach or (b)
advanced IRB approach.

Standardized Approach for Credit Risk : Under this, the risk weightages would be prescribed by the Central Banks (RBI in India) and would be adopted by the banks without any discretion to modify. This approach is based on ratings from External Credit Rating Institutions (ECRA) for sovereigns, banks and corporates. This approach is more suitable, for the time being, in view of lack of historical data in India and other such factors. The nature of the risk assets and the risk weights would be as under:

Asset Category (called claimed)	Risk %
Govt./central banks (based on credit rating) on a scale of 1 to 8 (0 to 150%), as under:	
. Risk score 0-1 0%	0%
. Risk score 2 20%	20%
Risk score 3 50%	50%
Risk score 4 to 6	100%
. Risk score 7 & above	150%
Official entities such as BIS, ECB,EC, World Bank group)	0%
Banks and Securities Firms (based on ECA risk scoring)	20-150%
Unrated Corporates (including insurance companies)	100%
Rated corporates: (20% to 150%)	
AAA to AA- 20%	20%
. A+ to A-	50%
. BBB+ to BB	100%
. Below BB	150%

Retail portfolio, not past due for more than 90 days (small loans/ credit card exposure to individuals with proper diversification)	75%
Loans secured by mortgage of residential property	50% to 75%
¯Loans secured by commercial real estate	150%
Past due loans (100% to 150):(Can be up to 50% with RBI permission if provision is not less than 50%) . where provisions are less than 20% : .. where provision is not less than 20% . Higher risk categories (as decided by Central Bank) : -	 150% 100% 150%
Other assets	100%
Off-balance sheet items (after conversion by applying conversion factor) (0 to 50%) .-for cancelable commitment, -for up to 1 year maturity -for more than one year maturity)	 0% 20% 50%

Ratings Agencies: RBI has identified 4 external domestic rating agencies namely CRISIL, ICRA, CARE & Fitch for use of their rating. The international agencies are Fitch, Moody's and Standard & Poor's.

Internal Ratings-Based Approach

As an alternative to standardised approach, the banks can adopt the IRB approach (having two variants i.e. foundation or advanced), with approval from the Reservel Bank.

Risk components for [RBA: The risk components include measures of the probability of default (PD), loss given default (LGD), the exposure at default (EAD), and effective maturity (M). In some cases, banks may be required to use a supervisory value as opposed to an internal estimate for one or more of the risk components.

The IRB approach is based on measures of unexpected losses (UL) and expected losses (EL). The risk-weight functions produce capital requirements for the UL portion.Expected losses are treated separately.

The asset classes are defined first. Adoption of the IRB approach across all asset classes transitional arrangements_ The risk components, serve as inputs to the risk-weight functions that have been developed for separate asset classes. For example, there is a risk-weight flu¯teflon for corporate exposures and another one for qualifying revolving retail exposures. The treatment of each asset class begins with a presentation of the relevant risk-weight function(s) followed by the risk components and other relevant factors, such as the treatment of credit risk mitigants. The legal certainty standards for recognising CRM apply for both the foundation and advanced IRB approaches.

Foundation approach : Under the foundation approach, as a general rule, banks provide their own estimates of Probability of Default (PD) and rely on supervisory estimates for other risk components.

Advance approach : Under the advanced approach, banks provide more of their own estimates of PD, Loss given default (LGD) and exposure at default (EAD), and their own calculation of effective maturity (M), subject to meeting minimum standards.

For both the foundation and advanced approaches, banks must always use the risk-weight functions provided in this Framework for the purpose of deriving capital requirements..

Subject to certain minimum conditions and disclosure requirements, banks that have received supervisory approval to use the IRB approach may rely on their own internal estimates of risk components in determining the capital requirement for a given exposure.

Foundation and advanced approaches : For each of the asset classes covered under the IRB framework, there are three key elements:

Risk components — estimates of risk parameters provided by banks some of which are supervisory estimates.

Risk-weight functions — the means by which risk components are transformed into risk-weighted assets and therefore capital requirements.

Minimum requirements — the minimum standards that must be met in order for a bank to use the IRB approach for a given asset class

Difference between the foundation and advanced approach

Parameter / Who will determine	Foundation IRB	Advanced IRB
Probability of Default (PD)	Bank	Bank
Loss given default (LGD)	Supervisor	Bank
Exposure at Default (EAD)	Supervisor	Bank
Effective Maturity (M)	Bank or supervisor	Bank
Risk weight	Function provided by Committee	Function provided by committee
Data Requirement	Historical data to estimated PD — 5 years	Historical loss data to estimated LGD 7 years and historical exposure data to estimate EAD — 7 years plus that for Pt) estimation.

Capital standard for Market Risk

Market risk is the risk of possible losses in, on-balance sheet and off-balance sheet positions, due to movements in market prices. The market risk positions, subject to capital charge requirement, are (a) the risks pertaining to interest rate related instruments and equities in the trading book and (b) Foreign exchange risk throughout the bank.

The Basle Committee has suggested two broad methodologies for computation of capital charge for market risks (a) standardized method and (b) batiks' internal risk management models method RBI has decided that, to start with, banks may adopt the standardised method.

Under the standardised method there are two principal methods of measuring market risk, a "maturity" method and a "duration" method. Banks are required to measure the general market risk charge by calculating the price sensitivity (modified duration) of each position separately.

Capital standard for Operational Risk

Operational risk is defined as the probability of loss resulting from inadequate or failed internal processes, people and systems or external events. Some factors for operational risk could be lack of competent management and/or proper planning and controls, incompetent staff, indiscipline, involvement of staff in frauds, outdated systems, non-compliance, programming errors, failure of computer systems, increased competition, deficiency in loan documentation etc. Approach : The risk can be measured by adopting one of the 3 approaches i.e. Basic Indicator Approach (BIA), Standardised Approach and Advinced Measurement Approach.

Banks which move to Standardised approach or AMA, will not be allowed to move back to BIA.

(1) Basic Indicator Approach : As per this, a bank will have to hold capital, equal to average of previous 3 years' positive annual gross *income (i.e. net init. income + net non-intt. income),* as a fixed %age (denoted alpha i.e. 15%). If there is negative gross income for any year, it will be excluded both from numerator and denominator.

Capital requirement = Annual positive gross income for three years x 15% / no. of years for which gross income is positive.

(2) Standardized Approach : As per this, average gross income will be segregated into 8 business lines i.e. (1) retail banking (2) retail brokerage (3) asset management (4) commercial banking (5) agency services (6) corporate rmance (7) trading and sales (8) payment and settlements. These elements carry varying degree of capital.

Total capital charge is the sum of capital charges across the business lines.

(3) Advance Measurement Approach : As per this, the capital charge will be equal to the internally generated measure based on (a) internal loss data (b) external loss data (c) scenario analysis (d) business environment and internal control factors.

The risk mitigation will be allowed up to 20%.

2nd Pillar: SUPERVISORY REVIEW PROCESS

Supervisory review process is intended to ensure that banks have adequate capital to support all the risk in their business and encourage them to develop and use better risk management techniques in

monitoring and managing their risk Central banks are to evaluate as to how well banks are assessing their capital needs considering their risk profile. There are **4 key** principles of supervisory review:

a) Principle-I: Banks should have a process for assessing their overall capital 'adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

b) **Principle-2:** Supervisors should review and evaluate banks' internal capital adequacy assessment **and** strategies, and ability to monitor/ ensure their compliance with regulatory capital ratios.

c) **Principle-3:** Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.

Principle-4: Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of the bank. It should require remedial action if capital is not maintained or restored.

3rd Pillar — Market Discipline

The objective of 3rd pillar is to complement the minimum capital requirement and supervisory review process through various kinds of disclosures such as

1. capital structure (Tier I and its components on a quarterly basis),
2. total amount of Tier 2 capital,
3. bank's approach to assess the capital adequacy to support its current and future activities i.e. capital required for credit risk, market risk or operational risk,
4. interest rate risk in the banking book.

BASEL- III

The Basel Committee on Banking Supervision (BCBS) has issued comprehensive reform packages entitled "Basel III: A global regulatory framework for more resilient banks and banking systems" and "Basel III: International framework for liquidity risk measurement, standard and monitoring" in December 2010. A summary of Basel III capital requirements is given below:

Improving the Quality, Consistency and Transparency of the Capital Base: Presently, a bank's capital comprises Tier 1 and Tier 2 capital with a restriction that Tier 2 capital cannot be more than 100% of Tier 1 capital. Within Tier 1 capital, innovative instruments are limited to 15% of Tier 1 capital. Further, Perpetual Non-Cumulative Preference Shares along with Innovative Ter 1 instruments should not exceed 40% of total Tier 1. capital at any point of lime. Within Tier 2 capital, subordinated debt is limited to a maximum of 50% of Tier 1 capital. However, under Basel III, with a view to improving the quality of capital, the Tier 1 capital will predominantly consist of Common Equity. At present, the regulatory adjustments (i.e. deductions and prudential filters) to capital vary across jurisdictions. These adjustments are currently generally applied to total Tier 1 capital or to a combination of Tier 1 and Tier 2 capital. They are not generally applied to the Common Equity component of Ter 1 capital. Most of the adjustments under Basel III will be made from Common Equity. The important modifications include the following:

(I) deduction from capital in respect of shortfall in provisions to expected losses under Internal Ratings Based (IRB) approach for computing capital for credit risk should be made from Common Equity component of Tier 1 capital;

cumulative unrealized gains or losses due to change in own credit risk on fair valued financial liabilities, if recognized, should be filtered out from Common Equity;

shortfall in defined benefit pension fund should be deducted from Common Equity;

certain regulatory adjustments which are currently required to be deducted 50% from Tier 1 and 50% from Tier 2 capital, instead will receive 1250% risk weight; and

limited recognition will be granted in regard to minority interest in banking subsidiaries and investments in capital of certain other financial entities.

The transparency. of capital base will be improved, with all elements of capital required to be disclosed along with a detailed reconciliation to the published accounts.

Enhancing Risk Coverage: At present, the counterparty credit risk in the trading book covers only the

risk of default of the counterparty. The reform package includes an additional capital charge for Credit Value Adjustment (CVA) risk which captures risk of mark-to-market losses due to deterioration in the credit worthiness of a counterparty. The risk of interconnectedness among larger financial firms (defined as having total assets greater than or equal to $100 billion) will be better captured through a prescription of 25% adjustment to the asset value correlation (AVC) under IRB approaches to credit risk. In addition, the guidelines on counterparty credit risk management with regard to collateral, margin period of risk and central counterparties and counterparty credit risk management requirements have been strengthened.

Enhancing the Total Capital Requirement and Phase-in Period: The minimum Common Equity, Tier 1 and Total Capital requirement will be phased in between Jan 1, 2013 and Jan 1, 2015 as indicated below:

	April 1, 2013	Jan 1, 2014	Jan 1, 2015
Min Common Equity	3.50%	4.00%	4.50%
Min Tier I	4.50%	5.50%	6.00%
Min Total Capital	8.00%	8.00%	8.00%

Capital Conservation Buffer: The capital conservation buffer (CCB) is designed to ensure that banks build up capital buffers during normal times (i.e. outside periods of stress) which can be drawn down as fosses are incurred during a stressed period. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements. Therefore; in addition to the minimum total of 8% as indicated above, banks will be required to hold a capital conservation buffer of 2.5% of RWAs in the form of Common Equity to withstand future periods of stress bringing the total Common Equity requirement of 7% of RWAs and total capital to RWAs to 10.5%. The capital conservation buffer in the form of Common Equity will be phased-in over a period of four years in a uniform manner of 0.625% per year, commencing from January 1, 2016.

Countercyclical Capital Buffer: further, a counter cyclical buffer within a range of 0 - 2.5% of Common Equity or other fully loss absorbing capital will be implemented according to national circumstances. The purpose of counter cyclical capital buffer is to achieve the broader macro-prudential goal of protecting the banking sector from periods of excess aggregate credit growth. For any given country, this buffer will only be in effect when there is excess credit growth that results in a system-wide build up of risk. The countercyclical capital buffer, when in effect, would be introduced as an extension of the capital conservation buffer range.

Supplementing the Risk-based Capital Requirement with a Leverage Ratio: One of the underlying features of the crisis was the build-up of excessive on and off-balance sheet leverage in the banking system. Subsequently, the banking sector was forced to reduce its leverage in a manner that not only amplified downward pressure on asset prices, but also exacerbated the positive feedback loop between losses, declines in bank capital and contraction in credit availability. Therefore, under Basel III, a simple, transparent, non-risk based regulatory leverage ratio has been introduced. Thus, the capital requirements will be supplemented by a non-risk based leverage ratio which is proposed to be calibrated with a Tier 1 leverage ratio of 3% (the Basel Committee will further explore to track a leverage ratio using total capital and tangible common equity). The ratio will be captured with all assets and off balance'sheet (OBS) items at their credit conversion factors and derivatives with Basel II netting rules and a simple measure of potential future exposure (using Current Exposure Method under Basel II framework).

Guidelines on Implementation of Basel III Capital Regulations in India: RBI has rescheduled the start date of implementation of Basel II capital regulations to April 1, 2013 from January 1, 2013. In view of the shift in the start date of Basel III implementation, all instructions applicable as on January 1, 2013, except those relating to Credit Valuation Adjustment (CVA) risk capital charge for OTC derivatives, would become effective from April 1, 2013 with banks disclosing Basel III capital ratios from the quarter ending June 30, 2013. As the introduction of mandatory forex forward guaranteed settlement through a central counterparty has been deferred pending resolution of certain issues such as exposure norms, etc., the CVA risk capital charges would become effective as on April 1st , 2014. The other transitional

arrangements would remain unchanged and Basel III will be fully implemented as on March 31, 2019.

Market Risk

Market Risk may be defined as the possibility of loss to a bank caused by changes in the market variables. The Bank for International Settlements (BIS) defines market risk as 'the risk that the value of `on' or 'off' balance sheet positions will be adversely affected by movements in equity and interest rate markets, currency exchange rates and commodity prices'. Thus, Market Risk is the risk to the bank's earnings and capital, due to *changes in* the interest rates or prices of securities, foreign exchange and equities, as well as the volatilities of those changes.
Example of market risk : Mr. A invests his capital of Rs.10000 in shares of a reputed company Info Systems Limited at a price of Rs.I00 per share in the month of February 2008. On the last day of this month, the share price of the company, comes down to Rs.90 (i.e. reduction of 10%) due to which Mr. A, suffers a loss of Rs.1000,,which reduces his capital to that extent. If Mr. A had invested Rs.1,00,000 by borrowing Rs.90000 and his own capital Rs.10000 and share value had come down by 10%, his loss would have been Rs.10000 and his entire capital would have wiped out. He is also required to repay the amount borrowed by him by selling his investment. Due to reduction in price of the share, he is not finding many buyers due to which he is finding it difficult to sell his shares at Rs.90 even. This has created liquidity problem for him. In addition, there is interest cost also on the funds borrowed by him. Hence Mr.
A has been facing 3 types of risk in this case i.e. (a) price risk — adverse movement in the price of the share (b) asset liquidation risk — risk of reduced liquidity in the market for a specific security (c) market liquidation risk — risk of poor market liquidity.
Market Risk & Banks
Banks are exposed to market risk on account of a no. of transactions, they undertake. These transactions are reflected in their trading book which consist of a particular bank's investment *in* financial instruments such as (a) debt securities (b) equity instruments (c) foreign exchange positions (d) commodities (e) derivatives held for trading etc. In additions, the banks could have positions in financial instruments to match their principal brokering and market making activities. Hence, banks are exposed to following types of risk as a result of adverse change in market variables such as interest rates, currency exchange rates, commodity prices, market liquidity etc.:

- Market risk
- Liquidation risk (asset liquidation risk and market liquidation risk)
- Credit and counter-party risk

Market Risk : It is the risk of adverse variation in the market value (called marked to market) of the trading

Portfolio of a bank at current prices (investments in various securities & instruments), as a result in market movements during the period, when these investments are held by the bank (i.e. till the time required for liquidation).The longer this period, larger the possibility of these variations. If the variation is favourable, there is possibility of earning profits and if these are un-favourable, that would result into loss to the bank. For example, Bank-X had invested Rs.10 cr in Govt. securities (at 8% coupon rate) in the month of March. Due to increase in current market interest rates, the value of these securities has depleted by 1%. Bank

will be required to make provision against this depreciation in value.

Liquidation risk : It is the risk that arises on account of lack of trading liquidity in the market and involves the asset liquidity risk and market liquidity risk.

Asset liquidation risk is the risk when a specific asset (a security) faces liquidation problem due to poor liquidity in that security.
Market liquidation risk refers to a position when there is general liquidity crunch in the market that affects the trading liquidity adversely for all securities and not a particular security. When the liquidity is high in the market, the variation ' in price is lower compared to a situation, when the liquidity is poor.

Liquidation risk arises on account of (a) adverse change in the market prices
...(b) inability to liquidate position at a fair market price
(c) liquidation-of position causing large price change (d) inability to liquidate a position at any price.

Credit & counterparty risk : The market participants keep on valuing the credit risk of the issuers of the securities, taking into account, the credit rating by credit rating agencies, from time to time. The credit risk is the risk that arises on i.; account of default by the issuer of a security or because of rating migration of the security. When rating of a security is downgraded, it results in decline in the price of that security.

As a result of such change in the price of security, there is possibility of a default by a party dealing in that instrument,, which is called counter-party risk.

Market Risk Management - Framework
Organizational Structure

Management of market risk is the major concern of top managements of banks. The Boards of banks have to frame market risk management policies, procedures, prudential risk limits, review mechanisms and reporting and auditing systems to take care of bank's exposure on a consolidated basis and risk measurement systems that capture all material ; sources of market risk and assess the effects on the bank.

The successful implementation of any risk management process begins at the level of top management in the bank with the demonstration of its strong commitment to integrate basic operations and strategic decision making with risk management.

Ideally, the organizational set up for Market Risk Management comprises:

- The Board of Directors
- The Risk Management Committee
- The Asset-Liability Management Committee (ALCO)
- The ALM support group/ Market Risk Group
- The Middle Office

Role of Board of Directors : it has the overall responsibility for management of risks. The Board should decide the risk management policy of the bank and set limits for liquidity, interest rate, foreign exchange and equity price risks.

Role of Risk Management Committee : It will be a Board level Sub committee including CEO and heads of Credit, Market and Operational Risk Management Committees members. The responsibilities of Risk Management Committee with regard to market risk management aspects include:

- Setting policies and guidelines for market risk measurement, management and reporting;
- Ensuring that market risk management processes (including people, systems, operations, limits and controls) satisfy bank's policy.
- Reviewing and approving market risk limits, including triggers or stop-losses for traded and accrual portfolios
- Ensuring robustness of financial models, apd effectiveness of all systems used to calculate market risk.
- Appointment of qualified and competent staff and ensuring posting of qualified and competent staff and of independent market risk manager's, etc.

Role of Asset-Liability Management Committee : ALCO is responsible for ensuring adherence to the limits set by the Board as well as for deciding the business strategy of the bank in-line with bank's budget and decided risk management objectives. The number of members of ALCO depends on bank's size, business mix and organisational complexity. Its role include, inter alia, the following :-

- Product pricing for deposits and advances;
- Deciding on desired maturity profile and mix of incremental assets and liabilities;
- Articulating interest rate view of the bank and deciding on the future business strategy;
- Reviewing and articulating funding policy;
- Decide the transfer pricing policy of the bank;
- Reviewing economic and political impact on the balance sheet

Role of ALM Support Groups It consists of operating staff and is responsible for analysing, monitoring and reporting the risk profiles to the ALCO. The Risk management group should prepare forecasts (simulations) **showing the effects of** various possible changes in market conditions related

to the balance sheet and recommend the action needed to adhere to bank's internal limits, etc.

Role of Middle Office : It provides the independent risk assessment which is critical to ALCO's key-function of controlling and managing market risks in accordance with the mandate established by the Board/Risk Management Committee. It is a highly specialised function and must include trained and competent staff, expert in market risk concepts.

Market Risk Management - Process

An effective market risk management process comprises of (a) risk identification, (b) setting up of limits and triggers, (c) risk monitdring, (d) models of analysis that value positions or measure market risk, (e) risk reporting, etc.

(a) Risk identification

Banks are required to analyse all products (both standard and non-standard products) and **transactions for the risks** associated with them.

- Standard products have 'Product Program' for each of them. All Risk Taking Units are required to operate within an

approved Market Risk Product Program, which defines procedures, limits and controls for all aspects of the product.

New Products or non-standard products operate under a Product Transaction Memorandum on a temporary basis when the full Market Risk Product Program is being prepared. At the minimum, this should include procedures, limits and controls. The final- product transaction program should include market risk measurement at an individual product and aggregate portfolio level.

(b) Risk Measurement

The market risk measures capture the variations in the market value of the portfolio due to uncertainties associated with various risk parameters. These are based on (a) Sensitivity and (b) downside potential.

1. Sensitivity

Sensitivity measures the variance in market price due to unit movement of a single market parameter (like interest rate, market liquidity, inflation, exchange rate, stock prices etc). A change in current interest rate, for example, will bring change in the market value of the bond. However, this does not take into account the effect of simultaneous change in other parameters. It is measured as a change in the market value due to unit change in the variable.

For example, if market value of a bonds portfolio changes by Rs.100,000 for a 1% change in rate of interest, interest rate sensitivity of the portfolio is Rs.1,00,000.

Sensitivity include Basis point value and duration also.

1.1 Basis Point Value (BPV)

BPV is used as a measure of risk. It is the change in the value of a security (say a bond), due to one basis point (0.01%) change in market yield. With higher change in BPV, there is higher risk associated with the bond. It can be calculated as under :

At current market yield of 8%, a 10 year-9% bond, has a price of Rs.92 (face value Rs.100). The yield changes to 7.95% due to change in current interest rates, which leads to new price of Rs.92.10. Hence, for one BP fall in the yield, market price changes by Rs.0.02 (for 5 BP the change being 10p). Hence, on an investment of Rs.1 cr, the gain will be Rs.2000 and the gain on change in price from Rs.92 to Rs.92.10 (i.e. 10p), would be Rs.20000 (10x2000).

1.2 Duration

The concept was first proposed by Macaulay to describe a bond's price sensitivity to change in yield with a single number. Duration is defined as the *weighted average of the time* until expected cash flows from a security are received, relative to the current price of the security. The weights are the present values of each cash flow divided by the current price. The duration measures changes in economic value resulting from a %age change of interest rates under the simplifying assumptions that changes in value are proportional to changes in the level of interest rates and that the timing of payments is fixed.

Duration is equal to the time that the holder of the bond has to wait to receive the present value of the cash flow. For example, if the duration is say 3.7 years for a 5-year 6% bond with face value of Rs.100 with semi-annual interest, the total cash flow to be received over the 5-year period, of Rs.130 (interest principal), would be equal to receiving Rs.130 at the end of 3.7 years, as a bullet payment.

The Modified duration is standard duration divided by 1 + r, where `r' is the level of market interest rates - is an elasticity. As such, it reflects the percentage change in the economic value of the instrument for a given percentage change in I + r.
In other words, Modified Duration = Macaulay's Duration/(1+r), where Macaulay's Duration =-E CFt(t) (HT) / CFt/(1 +r) to the power t CF- Rupee value of cash flow at time t
T= Number of periods of time until the cash flow payment
r¯ =Periodic yield to maturity of the security generating cash flow and
k=the number of cash flows
Duration reflects the timing and size of cash flows that occur before the instrument's contractual maturity. Generally, the longer the maturity or next repricing date of the instrument and the smaller the payments that occur before maturity (e.g. coupon payments), the higher the duration (in absolute value). Higher duration implies that a given change in the level of interest rates will have a larger impact on economic value. The bond price changes can be estimated using the modified duration as under:

2. Downside Potential

It captures possible losses by ignoring the profit potential. Downside risk is the most comprehensive measure of risk. It integrates the sensitivity and volatility with the adverse effect of uncertainty. It is most relied upon by banks and their regulators. The downside potential takes into account Var, back testing and Stress testing.

2.1 Value at RiSk (VaR)

VaR is defined as an *estimate of potential loss in a position* or asset/liability or portfolio of assets/liabilities over a given holding period at a given level of certainty.

VaR measures the risk. VaR is an estimate of the potential loss (and not gain) likely to be suffered and not the actual loss. The actual loss may be different from the estimate. VaR measures the probability of loss for a given time period over which the position is held. The given time period could be one day or a few days or a few weeks or a year. VaR will change if the holding period of the position changes. The holding period for an instrument/position will depend *on* liquidity of the instrument/ market With the help of VaR, we can say with varying degrees of certainty that the potential loss will not exceed a certain amount. This means that VaR will change with different levels of certainty.
For example, a bank having 1 day VaR of Rs.10 cr with 99% confidence interval means that there is only 1 chance in 100, that daily loss will be more than Rs.10 cr under normal trading conditions.
The Bank for International Settlements (I3IS) has accepted VaR as a measurement of market risks and provision of capital adequacy for market risks, subject to approval by banks' supervisory authorities.

VaR Methodologies

VaR can be arrived as the expected loss on a position from an adverse movement in identified market risk parameter(s), with a specified probability over a nominated period of time.

Volatility in financial markets is usually calculated as the standard deviation of the percentage changes in the relevant asset price over a specified asset period. The volatility for calculation of VaR is usually specified as the standard deviation of the percentage change in the risk factor over the relevant risk horizon.

There are 3 main methods to calculate VaR i.e. parametric, Monte Carlo Simulation and Historical Simulation:

1. Parametric: It estimates VaR with equation that specifies parameters such as volatility, correlation, delta, and gamma. It is *accurate for traditional assets and linear derivatives,* but less accurate for non linear derivatives.

2. Monte Carlo Simulation: It estimates VaR by simulating random scenarios and revaluing positions in the portfolio. It is appropriate for all types of instruments, linear and nonlinear.

3. Historical Simulation: It estimates Var by reliving history; takes actual historical rates and revalues positions for each change in the market.

Approaches for calculation of Var:

There are 3 main approaches to calculating value-at-risk: (a) the correlation method - variance/covariance matrix method; (b) historical simulation and (c) Monte Caho simulation. All 3 methods require a statement of 3 basic parameters i.e. (a) holding period, (b) confidence interval

and

(c) the historical time horizon over which the asset prices are observed.

Correlation method	Historical Simulation Approach	Monte Carlo simulation
The change in the value of position is calculated by the sensitivity of each price changes in the asset(s), with a matrix of the various volatilities and correlation. It deterministic approach.	It calculates the change in the value of using the actual historical underlying asset(s), but starting from value of the asset. It does Variance/covariance matrix. The historical period chosen affects the if the period is too short, it may not variety of events and relationships various assets and within each asset too long, may be too stale to predict This method does not require the user to make any explicit assumptions about correlations and the dynamics of the risk factors because the simulation follows every historical move.	It calculates the change in a portfolio using a sample of generated price scenarios. user has to make certain about market structures, between risk factors and the of these factors. He is imposing his views and opposed to the naive historical simulation method.

At the heart of all three methods is the model The closer the models fits economic reality, the more accurate the estimated VAR numbers and therefore the better they will be at predicting the true VAR of the firm. There is no guarantee that the numbers returned by each VAR method will be anywhere near each other.

Other uses of VaR

- VaR is used as a MIS tool in the trading portfolio to "slice and dice" risk by levels/ products/geographic/level of organisation etc.
- It is also used to set risk limits.
- In its strategic perspective, VaR is used to decisions as to what business to do and what not to do.
- It is used to measure and manage market risks in trading portfolio and investment portfolio.

Limitation of VaR : VaR as a useful MIS tool has to be 'back tested' by comparing each day's VaR with actuals and necessary re-examination of assumptions needs to be made so as to be close to reality. It cannot substitute sound management judgement, internal control and other complementary methods.

Estimating Volatility; VaR uses past data to compute volatility. Different methods are employed to estimate volatility such as (a) arithmetic moving average from historical tittle series data (b) exponential moving average method. In the Exponential moving average method, the volatility estimates rises faster to shocks and declines gradually. Further, different banks take different number of days of past data to estimate volatility. Volatility also does not capture unexpected events like EMI] crisis of September 1992 (called "event risk"). All these complicate the estimation of volatility. VaR should be used in combination with stress testing to take care of event risks that takes into account the worst case scenario.

2.2 Back Test

The Bank for International Settlements outlines back-testing best practices in its January 1996 publication "Supervisory framework for the use of `back-testing' in conjunction with the internal models approach to market risk capital requirements.

Back test is a process where the model based VaR is compared with the actual performance of the portfolio. Back tests compare the realized trading results with model generated risk measures, both to evaluate a new model and to reassess the accuracy of existing models.

Although no single methodology for back-testing has been established, banks using internal VaR models for market risk capital requirements must back test their models on a regular basis. Banks should generally back test risk models on a monthly or quarterly basis to verify accuracy. In these tests, they should observe whether trading results fall within pre-specified confidenCe bands as predicted by the VaR models. If the models perform poorly, they should probe further to find the cause (e.g., check integrity of position and market data, model parameters, methodology).

2.3 Stress Testing

Stress testing is used by banks to gauge their potential vulnerability to exceptional events. It addresses the large moves in key market variables of that kind that lie beyond day to day risk monitoring but-that could occur. The process of stress testing, involves first identifying these

potential movements, including which market variables to stress, how much to stress them by, and what time frame to run the stress analysis over. Once these market movements and underlying assumptions are decided upon, shocks are applied to the portfolio. Revaluing the portfolios allows one to see what the effect of a particular market movement has on the value of the portfolio and the overall Profit and Loss. Stress testing and value-at-risk: Stress tests supplement value-at-risk (VaR).
VaR is thought to be a critical tool for tracking the riskiness of a bank's portfolio on a day-to-day level, and for assessing the risk-adjusted performance of individual business units.
Stress tests offer a way of measuring and monitoring the portfolio consequences of extreme price movements of this type.

Stress Testing Techniques

Stress testing covers many different techniques. The 4 are discussed here –

Simple sensitivity test	scenario analysis	Maximum loss approach	Extreme value theory (EVT)
It Isolates short-term impact on a portfolio's	It specifies the shocks that plausibly affect a number of market risk factors simultaneously if an	It assesses the a business unit's portfolio by identifying the most	It is a means to better capture the risk loss in extreme, but possible, circumstances. EVT is the statistical
value of a series	extreme, but possible, event occurs.	potentially damaging	theory on the behaviour of the 'tails"
Of predefined	It seeks to assess the potential	combination of moves of	(i.e.,, the very high and low potential
moves in	consequences fur a firm of	market risk	values) of probability
particular market	extreme, but possible, state of the	Interviewed risk managers	Because it focuses only on the tail of a
risk factor.	world. A scenario analysis can	who use such	probability distribution, the method
example, if the	based on an historical event or a	loss" approaches find the	be more flexible. For example, it can
risk factor were an exchange rate, the shocks might	hypothetical event. Historical scenarios employ shocks that waned in specific historical	output of suds be instructive but they tend not to rely on the	accommodate skewed and fat-tailed distributions. A problem with the extreme value approach is adapting it to a
be exchange rate	episodes. Hypothetical scenarios use	results of such exercises in	situation where many risk factors drive
changes of +/- 2	a structure of shocks thought to be	the setting of exposure	the underlying return distribution.
percent, 4	plausible in some foreseeable, but	limits in any systematic	Moreover, the usually unstated
percent, 6 percent	unlikely circumstances for which	manner, an implicit	assumption that extreme events are not
and 10 percent.	there is no exact parallel in	recognition of the	correlated through time is

	history. Scenario analysis is currently the leading stress technique.	character of the combination of cantuted by such a measure.	Despite these drawbacks, EVT is notable for being the only stress test that attempts to attach a probability to stress test results.

Technique	What is the "stress test result"
Simple Sensitivity Test	Change in Portfolio value for one or more shocks to a smile risk factor
Scenario Analysis : (Hypothetical or historical)	Change in Portfolio value if the scenario were to occur
Maximum loss	Sum of individual trading units worst- case scenarios
Extreme value theory	Probability distribution of extreme losses

What Makes a good Stress Test: A good stress test should

- be relevant to the current position
- consider changes in all relevant market rates
- examine potential regime shifts (whether the current risk parameters will hold or break down)
- spur discussion
- consider market illiquidity, and
- consider the interplay of market and credit risk

How should risk managers use stress tests: Stress tests produce information summarising the bank's exposure to extreme, but possible, circumstances. The role of risk managers in the bank should be assembling and summarising information to enable senior management to understand the strategic relationship between the bank's risk-taking (such as the extent and character of financial leverage employed) and risk appetite. Typically, the results of a small number of stress scenarios should be computed on a regular basis and monitored over time. Some of the specific ways stress tests are used to influence decision-making are to:

- manage funding risk
- provide a check on modeling assumptions
- set limits for traders
- determine capital charges on trading desks' positions

Limitations of Stress Tests: Stress testing can appear to be a straightforward technique. In practice, however, stress tests are often neither transparent nor straightforward. They are based on a large number of practitioner choices as to what risk factors to stress, how to combine factors stressed, what range of values to consider, and what time frame to analyse. Even after such choices are made, a risk manager is faced with the considerable tasks of sifting through results and identifying what implications, if any, the stress test results might have for how the bank should manage its risk-taking activities.

A well-understood limitation of stress testing is that there are no probabilities attached to the outcomes. Stress tests help answer the question "How much could be lost?" The lack of probability measures exacerbates the issue of transparency and the seeming arbitrariness of stress test design. Systems incompatibilities across business units make frequent stress testing costly for some banks, reflecting the limited role that stress testing had played in influencing the bank's prior investments in information technology.

(c) Risk Monitoring & Control

Risk monitoring and control requires setting up of risk limits or controlling market risk, based on economic measures of risk while ensuring appropriate risk adjusted return. Controlling market risk means keeping the variations of the value of a given portfolio within given boundary values through actions on limits, which are upper limits imposed on the risk. This can be accomplished through:

1 Framing policy for limiting the roles and authority
2 Structure of limits and approval process
3 Systems and procedures for products and transactions, to capture all risks
4 Guidelines on portfolio size and mix
5 Systems for estimating portfolio risk under normal and stressed situations

6 Defined policy for marking to market .
7 Limit monitoring and reporting

Limits and Trigger's

- All trading transactions will be booked on systems capable of accurately calculating relevant sensitivities on a daily basis; usage of Sensitivity and Value at Risk limits for trading portfolios and limits for accrual portfolios (as prescribed for ALM) must be measured daily. Where market risk is not measured daily, Risk Taking Units must have procedures that monitor activity to ensure that they remain within approved limits at all times.
- Mandatory market risk limits are required for Factor Sensitivities and Value at Risk for mark to market trading and

appropriate limits for *accrual* positions including Available-for-Sale portfolios. Requests for limits should be submitted annually for approval by the Risk Policy Committee. The approval will take into consideration the Risk Taking Unit's capacity and capability to perform within those limits evidenced by the experience of the Traders, controls and risk management, audit ratings and trading revenues.

- Approved Management Action Triggers or Stop-loss are required for all mark to market risk taking activities.
- Risk Taking Units are expected to apply additional, appropriate market risk limits, including limits for basis risk, to the products involved; these should be detailed in the Market Risk Product Programme. Risk Monitoring
- A rate-reasonability process is required to ensure that all transactions are executed and revalued at prevailing market rates; rates used at inception or for periodic marking to market for risk management or accounting purposes must be independently verified.

Financial Models used for revaluations for income recognition purposes or to measure or monitor Price Risk must be independently tested and certified.

- stress tests must be performed preferably quarterly for both trading and accrual portfolios. This may be done when the underlying assumptions of the model/ market conditions significantly change as decided by the Asset Liability Committee.

Models of analysis

- Line Management must ensure that the software used in Financial Models that value positions or measure market risk is performing appropriate calculations accurately.
- The Risk Policy Committee is responsible for administering the model control and certification policy, providing technical advice through qualified and competent personnel. It is left to the bank to seek any independent certification.
- Financial Models must be fully documented and minimum standards of documentation must be established.
- Someone other than the person who wrote the software code must perform certification of models; testers must be competent in designing and conducting tests; records of testing must be kept, including details of the type of tests and their results. Assumptions contained in the Financial Models must be documented as part of the initial certification and reviewed annually. Unusual parameter sourcing conventions require annual approval by the Risk Policy Committee.
- Any mathematical model that uses theory, formulae or numerical techniques involving more than simple arithmetic operations must be validated to ensure that the algorithm employed is appropriate and accurate.
- Persons who are acceptable to the Risk Policy Committee and independent of the area creating the model must validate models in writing. It is left to the bank to decide on who should validate, whether internal or external, at the discretion of the Risk Policy Committee.
- Models to calculate risk measures like Sensitivities to market factors either at transaction or portfolio level and Value at-Risk should be validated independently.
- Unauthorised or unintended changes should not be made to the models. These standards should also apply to models that are run on spreadsheets until development of fully automated processors for generating valuations and risk measurements.
- The triode's should also be subject to model assumption review on a periodic basis. The purpose of this review is to ensure applicability of the model over time and that the model is valid for its original intended use. The review consists of evaluating the components of the financial model and the underlying assumptions, if any.

(d) Risk Reporting

Risk report should enhance risk communication across different levels of the bank, from the trading desk to the CEO. In order of importance, senior management reports should:

- be timely
- be reasonably accurate
- highlight portfolio risk concentrations
- include written commentary, and
- be concise.

Problem Question

M/s ABC, a broker, has purchased shares for Mr. B valuing Rs.12 lac. They can inform Mr. 13 in the following three manners:

L Purchased 1000 shares at Rs.1200 per share.
2. Invested Rs.12 lac in purchase of shares i.e. in taking a position in shares.
3. Invested in the shares and if price changes by 1%, the impact would be equal to Rs.12000.

Based on the past movements of this share, the price may fluctuate by 3% daily (called daily volatility) which may result in potential loss of Rs.83768.

En this case:

- Market factor = Stock price i.e. Rs.1200
- Market factor sensitivity = Rs.12000 (I% of total position)
- Daily volatility = 3%
- Defeasance period (i.e. to defease the risk i.e. to sell the stock) =1 day
- Defeasance factor at 3% volatility (@99% confidence) = 3 x 2.326
- Value at risk (potential loss amount under normal market conditions = Rs. 83768

Key Terms

Market risk : Risk of adverse deviations of the marked to market value of the trading portfolio as a result of market movements during the period when, a position is maintained.

Liquidation Risk : Risk involved in liquidation of a security due to poor liquidity of the security or poor market liquidity position. It comprises asset liquidation risk and market liquidation risk.

Asset Liquidation risk : Risk involved in liquidation of a security due to lack of trading liquidity in that security. Market Liquidation risk : Risk involved in liquidation of a security due to poor market liquidity.

Credit risk : Risk of potential loss in value of a security on account of default by the issuer or change in the credit rating of the security by credit rating agencies.

Counterparty risk: Risk associated with the default by the counterparties dealing with such securities.

Derivatives : Over the counter instruments such as interest rate swaps, currency swaps, options. These are not as liquid as the market instruments.

Risk identification : The process of identifying the risk involved in dealing with various securities, by using various tools / programs.

Risk measurement : The framework for measurement of risk on account of transactions in securities. This include sensitivity and downside potential.

Sensitivity : The measurement of change in the market value of a security, due to unit change in one variable. This includes basis point value (BPV) and duration.

Basis Point Value : The change in value due to I basis point (i.e. 0.01%) in the market yield from a security.

Duration : The time, equivalent to, on average, that the holder of a security has to wait to get the present value of the future cash flows.

Downside potential : The process that captures possible losses (and not gains) involved in transactions in a security. It involves Value at Risk (VaR), back testing, stress testing.

Value at Risk (VaR): The estimated worst loss at a specified confidence level (using the estimated volatility i.e. rate or price movement), over a given period, assuming the normal trading conditions.

Price volatility : it is the degree of variance in the price. it is not affected by the yield but affected by the time and duration.

Variance / co-variance matrix (correlation) : A method of calculation of VaR where change in calculated by combining the sensitivity of each component to price change in the underlying assets with variance / co-variance matrix. Historical simulation : A method of calculation of VaR which calculates the change in value of a position using the actual historical movements of the underlying

assets, starting from the current value.

Monte Carlo simulation : A method of calculation of VaR which calculates the change in the value of a portfolio using a sample of randomly generated price scenario.

Back-testing : A process where a model based VaR is compared with the actual performance of a portfolio. it is carried out to evaluation of a new model or to assess the accuracy of an existing model.

Stress testing: A process used to determine the possible changes in the market value of a portfolio due to abnormal movement in one or more market parameters.

Stress testing techniques : The technique used in stress testing and include simple sensitivity test, scenario analysis, maximum loss and extreme value theory.

Simple sensitivity test : A stress testing technique that isolates the short term impact on value of a portfolio of a series of predefined movements in a particular market risk factor.

Scenario Analysis : A stress testing technique that specifies the shocks that might affect a no. of market risk factors simultaneously, if possible events occur.

Maximum loss approach : A stress testing technique that assesses the risks of a portfolio by identifying the most potentially damaging combination of moves of market risk factors.

Extreme Value Theory : A stress testing technique which a method to better capture the risk of loss in extreme but possible situations.

Limits and triggers : These are the approved market risk limits for factor sensitivities and Vail. fixed by the designated authority in a bank

Risk mitigation : The process to reduce the market risk by adopting strategies that reduce or eliminate the volatility of a portfolio.

Credit Risk

Credit risk is defined as the possibility of losses associated with deterioration in the credit quality of borrowers or counterparties. It arises from a bank's dealings with an individual, corporate, bank, financial institution or a sovereign (Govt.). The losses can occur (a) either from a default due to inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, settlement and other financial transactions (b) or result from reduction in portfolio value due to actual or perceived deterioration in credit quality. Credit risk may take the following forms:

Situation	How
Direct Lending:	Principal and or interest amount may not be repaid
Guarantees or letters of credit	funds may not be forthcoming from the constituents upon crystallization of the liability.
Treasury operations	the payment or series of payments due from the counter parties under the respective contracts may not be forthcoming or ceases;
securities trading businesses -	Funds/ securities settlement may not be effected
Cross-border exposure	the availability and free transfer of foreign currency funds may either cease or restrictions may be imposed by the sovereign.

Organizational Structure

Sound organizational structure is important for successful implementation of an effective credit risk management system. The organizational structure for credit risk management should have the following basic features:

Board of Directors: The Board of Directors should have the overall responsibility for management of risks. The Board should decide the risk management policy of the bank and set limits for liquidity, interest rate, foreign exchange and equity price risks.

Risk Management Committee: The Risk Management Committee will be a Board level Sub committee including CEO and heads of Credit, Market and operational Risk Management Committees. It will devise the policy and strategy for integrated risk management containing various risk exposures of the bank including the credit risk. For this purpose, this Committee should effectively coordinate between the Credit Risk Management Committee (CRMC), the Asset Liability Management Committee and other risk committees of the bank, if any. It is imperative that the independence of this Committee is preserved. The Board should, therefore, ensure that this is not

compromised at any cost. In the event of the Board not accepting any recommendation of this Committee, systems should be put in place to spell out the rationale for such an action and should be properly documented. This document should be made available to the internal and external auditors for their scrutiny and comments. The credit risk strategy and policies adopted by the committee should be effectively communicated throughout the organisation.

Credit Risk Management Committee (CRMC): Each bank may, depending on the size of the organization or loan/ investment book, constitute a high level Credit Risk Management Committee (CRMC). The Committee should be headed by the Chairman/CEO/ED, and should comprise of heads of Credit Department, Treasury, Credit Risk Management Department (CRMD) and the Chief Economist.

The functions of the Credit Risk Management Committee should be as under:

- Be responsible for the implementation of the credit risk policy/ strategy approved by the Board.
- Monitor credit risk on a bank wide basis and ensure compliance with limits approved by the Board.
- Recommend to the Board, for its approval, clear policies on standards for presentation of credit proposals, financial covenants, rating standards and benchmarks,
- Decide delegation of credit approving powers, prudential limits on large, credit exposures, standards for loan collateral, portfolio management, loan review mechanism, risk concentrations, risk monitoring and evaluation, pricing of loans, provisioning, regulatory/legal compliance, etc.

Credit Risk Management Department (CRMD) : Concurrently, each bank should also set up Credit Risk Management Department (CRMD), independent of the Credit Administration Department. The CRMD should:

- Measure, control and manage credit risk on a bank-wide basis within the limits set by the Board/ CRMC
- Enforce compliance with the risk parameters and prudential limits set by the Board CRMC.
- Lay down risk assessment systems, develop MIS, monitor quality of loan/ investment portfolio, identify problems, correct deficiencies and undertake loan review/audit. Large banks could consider separate set up for loan review/audit.
- Be accountable for protecting the quality of the entire loan/ investment portfolio. The. Department should undertake portfolio evaluations and conduct comprehensive studies on the environment to test the resilience of the loan portfolio.

Risk identification

Credit Risk (Transaction risk) : It is the risk due to possible default by the borrower. It has two components i.e. (a) default risk (b) credit spread risk.

- Default risk — It is driven by the potential failure of a borrower to make promised payments either partly or wholly. If a part payment is made, the obligation is reduced and this is called recovery rate.
- Credit spread or downgrade risk: If a borrower has not defaulted, there is still the possibility of risk due to deterioration in credit quality, which is called downgrade risk, as due to deterioration in credit quality, the credit rating may change.

Portfolio Risk : The risk associated with credit portfolio of the bank as a whole (total loans of the bank), is termed portfolio risk, which has two components i.e. (a) Intrinsic Risk and (b) Concentration Risk.

- Intrinsic risk or systemic Risk — This is the risk which prevails in the industry in which the credit exposure has been taken by the bank, which means that risk to economy (industry/activity) is risk to bank also. This means if economy does not perform well as a whole, the performance of the credit portfolio of the bank will also be affected adversely.
- Concentration risk : Where a bank does not diversify its portfolio i.e. it keeps on taking exposure in limited no. of companies or business segments or in geographical regions. In such circumstances there is concentration risk.
- Counter party (credit) risk: A counter party or a debtor of the borrower may fail to honour his obligations to the borrowers which will have adverse effect on his repayment capacity. If the default occurs before the date when settlement of the underlying transaction is due, the borrower may be exposed to the replacement risk of having to bear costs of replacing or cancelling the deal, which are often less than the full amount of the transaction.

Political risk: We cannot underestimate the potential impact on a business or decisions taken by national and supranational governments, government agencies and regulatory bodies empowered to control trade or to set prices and industry standards. Their extensive armoury includes taxation,

quotas, tariffs and other trade barriers, currency exchange controls and inconvertibility, restriction on foreign ownership and the repatriation of profits or capital, availability of grants and subsidies, setting interest rates, granting licenses and monopolies, nationalisation, expropriation and restitution of assets to former owners. When dealing with an overseas business or with a State (sovereign risk) borrowers may also need to consider the country's social and economic stability, its trading practices, customs and ethics, its commercial law, including insolvency, and the effectiveness of its legal system.

Country risk: When banks engage in granting credit internationally, they undertake, in addition to standard credit risk, risk associated with conditions in the home country of a foreign borrower or counterparty. Country or sovereign risk encompasses the entire spectrum of risks arising from the economic, political and social environments of a foreign country that may have potential consequences for foreigners debt and equity investments in that country. Transfer risk focuses more specifically on a borrower's capacity to obtain the foreign exchange necessary to service its cross-border debt and other contractual obligations. In all instances of international transactions, banks need to understand the globalization of financial markets and the potential for spill over effects from one country to another or contagion effects for an entire region.

Example : Popular Bank has large no. of branches in Southern India. The growth of advances in the bank for the last 45 years is around 27%. The major portion of the lending of the bank is to large companies generally engaged in textiles business. Of late the bank has also started granting loans to individual focusing on salaried class. A no. of loans to these salaried persons have been given for their housing needs and consumer credit requirements. What type of risk the bank is exposed to.

Default risk : Bank is facing a situation where the individual borrowers or companies may fail to make payment due to - their financial constraints or repayment capacity problems. Hence bank is facing default risk.

Downgrade risk or credit spread risk: Bank has financed a large no. of companies the performance of which is affected by the overall performance of the industry in which those companies are functioning. It is possible that a no. of companies over a time period may not be able to record good performance consistently. Hence these companies are exposed to slowdown which would affect their credit rating. Hence the bank is facing down grade risk.

Intrinsic risk : The bank has allowed advances to companies and also individuals. The performance of these companies is dependent upon the overall performance of the economy and performance of the those segments of the industry, to which they relate. Similarly, there can be change in the repayment capacity of the individuals depending upon the performance of the economy. Hence bank is exposed to Intrinsic risk.

Concentration risk : Bank has allowed advances in the Southern parts of the country, in a particular industry i.e. textiles. In case of loans to individuals also the bank has allowed more loans for housing and consumer credit. It appears, 1. that bank has not diversified its portfolio. Hence bank is facing concentration risk.

Risk Measurement

Risk measurement can be by way of

A credit rating

B quantification through estimating expected loan losses.

Credit Risk Rating

A Credit-risk Rating Framework (CRF) is necessary to avoid the limitations associated with a simplistic and broad classification of loans/exposures into a "good" or a "bad" category. The CRF deploys a

number/ alphabet/ symbol as a primary summary indicator of risks associated with a credit exposure. Such a rating framework is the basic module for developing a credit risk management system and all advanced models/approaches are based on this structure. In spite of the advancement in risk management techniques, CRF is continued to be used to a great extent. These frameworks have been primarily driven by a need to standardise and uniformly communicate the "judgement" in credit selection procedures and are not a substitute to *the* vast lending experience accumulated by the banks' professional staff.

End Use of Risk-Ratings made on the CRF: Broadly, CRF can be used for the following purposes:

a. Individual credit selection, wherein either a borrower or a particular exposure/ facility is rated on the CRF.

b. Pricing (credit spread) and specific features of the loan facility. This would largely constitute

transaction-level analysis.
c. Portfolio-level analysis.
d. Surveillance, monitoring and internal MIS
e. Assessing the aggregate risk profile of bank/ lender. These would be relevant for portfolio-level analysis. For instance, the spread of credit exposures across various CRF categories, the mean and the standard deviation of losses occurring in each CRF category and the overall migration of exposures would highlight the aggregated credit-risk for the entire portfolio of the bank.

Credit Risk Models

A credit risk model seeks to determine, directly or indirectly, the answer to the following question: Given our past experience and our assumptions about the future, whakis the present value of a given loan or fixed income security? A credit risk model also seeks to determine the (quantifiable) risk that the promised cash flows will not be forthcoming. The techniques for measuring credit risk that have evolved over the last twenty years are prompted by these questions and dynamic changes in the loan market.

The increasing importance of credit risk modeling should be seen as the consequence of the following three factors:

- Banks are becoming increasingly quantitative in their treatment of credit risk.
- New markets are emerging in credit derivatives and the marketability of existing loans is increasing through securitisationl loan sales market.
- Regulators are concerned to improve the current system of bank capital requirements especially as it relates to credit risk.

The credit risk models are intended to aid banks in quantifying, aggregating and managing risk across geographical and product lines_ The outputs of these models also play increasingly important roles in banks' risk management and performance measurement processes, customer profitability analysis, risk-based pricing, active portfolio management and capital structure decisions. Credit risk modeling may result in better internal risk management and may have the potential to be used in the supervisory oversight of banking organisations.

Example : A bank has allowed loans to 1000 borrowers. Their credit rating falls in A for 400 borrowers, in B for 550 borrowers and the other fall in C category. The experience of the bank shows that normally the default level in case of A category borrowers is 2% and for B category it is 4% and in case of C category it is 15%. How this credit rating of the borrowers can be used by the bank.

Solution The credit rating of the borrowers done by the bank can be used by the bank for: a. fixing the price of the loans for different category of borrowers. It can be lower for A category borrowers where
default is smaller and higher in case of B and still higher in case of C category of borrowers, so that cost of default is recovered.

b making an assessment of the default. Based on that the bank can make adequate provision of capital for its portfolio:

c formulating future policy of lending.

d making an assessment about the stability of revenue flows from these borrowers. The interest income revenue will be more stable in case of A category borrowers compared to B category.

e the data can be used by the bank for making an assessment about rating migration (bow many borrowers are migrating from one category to another category).

Rating Migration

Rating migration stands for the change in the rating of a single borrower or a group of borrowers or of the entire portfolio, over a time period, say one year, when they are rated on the same model.

For example, companies ABC Limited (credit limits Rs.60 cr) and XYZ Ltd (credit limits Rs.100 cr) were rated B and company PQL Limited (credit limits Rs.40 cr) was rated C, a year back After one year when these companies are re-rated, ABC Ltd was rated in C category, XYZ Ltd continued to be rated in B while PQL Limited was rated B. It will be observed here that there is no overall change in the no. of borrower falling in category B and in C but individually there is migration of one borrower to a lower category and migration of one borrower to a higher category. It is possible that portfolio-wise, there may be change in the quality depending upon the individual exposure, the bank has taken in these companies. The bank's portfolio in B category, was, to the extent of Rs.160 cr (i.e. 80% of the total in these 3 companies) and in C category to the extent of Rs.40 cr (i.e. 20%) a year back. The composition has changed to Rs.140 Cr (i.e. 70%) in B category and Rs.60 cr (i.e. 30%) in C category.

Example: A bank had 200 loan accounts in A category a year back. When their rating was done recently, the following rating, was noticed:

A+	A	B	C	Default
12	180	2	4	2

The migration of loan accounts above reflects that A category borrowers have shown 1% default probability (2 out of 200). If such data is studied for no. of years and for different category of borrowers, the bank can have a fair estimate of probability of default. Further, the bank can make comparison of its position with that of the migration pattern published by the rating agencies.

Selection of rating models: The rating model acceptable to regulatory authorities of a country should fulfill the 2 criterion (a) whether all relevant factors have been taken into account, in the model — important among them being management quality, financial position, industry position, past conduct and performance.(b) whether the rating migration system compares well with the market standards.

Many international banks have adopted the following rating models.

Altman's Z Score : A credit rating model that forecasts the probability of a firm becoming bankrupt within 12 months' period. It combines five financial ratios.

JP Morgan's Credit Metrics: A credit fa' ting model developed by JP Morgan which focuses on estimating the volatility in the value of assets caused by variations in the quality of assets.

Credit Risk+: A credit rating model by Credit Swiss which is based on actuarial calculation of expected default rates and unexpected losses from the default.

Credit risk control & Monitoring (CRM)

The credit risk control and monitoring is directed both at the transaction level and portfolio level. The following points are important to be noted in this area:

a a comprehensive management information system and credit information system is important for an effective CRM.

b existing MIS is required to be reviewed and updated regularly

c an elaborate and well communicated policy at transaction level is essential which must lay guidelines relating to procedures, risk taking

d a detailed MIS and CIS structure should be set up and enforced for future data requirements.

Credit risk policies and guidelines at Transaction Level (Branch Level)

At transaction level (i.e. at Branch level where the loan is sanctioned / transaction is undertaken) the instruments of credit risk management include (a) credit appraisal process (b) risk analysis process (c) credit audit and loan review (d) monitoring process.

To ensure an effective credit risk management, the loan policy document approved by the Board of Directors of the bank should take care of following:

. Delegation of powers i.e. credit approving authority
2. Credit appraisal guidelines
3. Rating standards and benchmarks
4. Pricing strategy
5. Loan review mechanism

1- Delegation of powers: Banks should have policies in place for delegation of. powers. The delegation can be multi-tier approving system where the proposals-are considered by Committee or Approval Grid, that may consist of 3-4 officers, one of which should be from CRMD. Only those proposals should be approved where majority of members agree.

2. Credit appraisal guidelines: These guidelines should take into account the borrower standards, procedures for analyzing credit requirements and risk factors. This brings uniformity of approach. These guidelines may relate to pricing policy, risk mitigation, risk monitoring and review at the transaction level.

Prudent limits : Credit risk can be limited by fixing prudent ceilings on various types of exposure. The prudent limits may be fixed on:

- Single party and group credit exposure
- Industry exposure
- Asset concentration
- Large exposure
- Maturity profile exposure

- Limits for financial and profitability ratios etc.

3. Rating Standards and benchmarks: Credit rating should be de-linked from the regular renewal exercise. The periodicity of risk assessment exercise may be determined on quarterly, half-yearly or yearly intervals as per risk policy of the bank.

4. Pricing of risk : Risk return pricing is a fundamental tenet of risk management. In a risk-return setting, the borrowers with weak financial position and hence placed in high credit risk category should be priced high. Thus banks should evolve scientific system to price the credit risk, which should have a bearing on the expected probability of default. The pricing of loans normally should be linked to risk rating or credit quality. The probability of default could be derived from the past behaviour of the loan portfolio, which is the function of loan loss provision / charge offs for the last, say five years or so. Banks should build historical database on the portfolio quality and provisioning / charge off to equip
themselves to price the risk. But value of collateral, market forces, perceived value of accounts, future business potential, portfolio/industry exposure and strategic reasons may also play important role in pricing. Flexibility should also be made for revising the price (risk premia) due to changes in rating/value of collateral over a time period.

Large sized banks across the world have already put in place Risk Adjusted Return on Capita! (RAROC) framework for pricing of loans, which calls for data on portfolio behaviour and allocation of capital commensurate with credit risk inherent in loan proposal. Under RAROC framework, lender begins by charging interest mark-up to cover the expected loss - expected default rate of the rating category of the borrower_ The lender then allocates enough capital to the prospective loan to cover some amount of unexpected loss -variability of default rates_ Generally, the international banks allocate enough capital so that the expected loan loss reserve or provision plus allocated capital covers 99% of the loan loss outcomes.

There is however, need for comparing the prices quoted by competitors for borrowers perched on. the same rating/quality. Thus any attempt at price-cutting for market share would result in mispricing of risk and adverse selection.

Credit risk control and monitoring at Portfolio Level (Head Office Level)

At portfolio level, the control and monitoring action take into account:

- Risk of the given portfolio
- Expected losses
- Requirement of risk capital
- Impact of changing the portfolio mix on risk
- Expected losses and capital
- Marginal and absolute risk contribution of a new position
- Diversification benefits from change of mix

The activities to be undertaken for risk control and monitoring include:

- Identification of weakness in the portfolio through risk migration method
- Evaluation of exposure distribution over rating categories
- Evaluation of *rating* wise distribution in various industries and set exposure limits
- Move towards credit portfolio value at risk models
- Fixation of quantitative ceiling on aggregate exposure in specified rating categories
- Undertake rapid portfolio reviews, stress tests and scenario analysis

Portfolio Management Why important Management of portfolio has gained importance due to

- Less demand from companies for credit products due to disintermediation
- Different avenues available to companies leading to more supply
- Lowe returns and increased important of risk
- New opportunities for banks to invest such as pass through certificates, syndicated lending, project and structured finance.
- Availability of new tools to manage credit portfolio such as securitization, secondary loan trading, credit derivatives.

Role of Loan Review Mechanism

Loan review mechanism can be used for constantly evaluating the quality of loans with a view to bring about qualitative improvements in credit administration.
An effective loan review mechanism should be capable
(a) to identify promptly, the loans which develop credit weaknesses and initiate timely corrective action,
(b) to evaluate portfolio quality and isolate potential problem areas,
(c) to provide information for determining adequacy of loan loss provisions,
(d) to assess the adequacy of and adherence to, loan policies and procedures, and
(e) to monitor compliance with relevant laws and regulations and
(f) to provide top management with information on credit administration, including credit sanction process, risk evaluation and post-sanction follow-up.
The loan reviews should generally examine the approval process, accurate and timeliness of credit ratings assigned by the loan officers, adherence to internal polices and procedures and applicable laws/regulations, compliance with loan covenants, post-sanction follow-up etc_

CREDIT DERIVATIVES

Banks undertake credit risk mitigation measures such as obtaining collaterals guarantees or covering themselves with credit derivatives. RBI had constituted a Working Group on Credit Derivatives and on its recommendations, issued the following guidelines:

Credit Derivatives : Credit derivatives are over-the counter financial contracts ("off-balance sheet" financial instruments), that permit the transferor to transfer credit risk (arising due to creation and owning of a financial asset) to another party without actually selling the asset. It can also be in the form of an on-balance sheet product *In other words, it is a financial contract, which involves*

payments by one party to another on the basis of 'performance" of a specified underlying credit asset.

Parties : There are two parties namely;

Protection Seller (or Credit Risk Buyer or Guarantor }: That receives premiums or interest — related payment, in return for assumption of the credit risk;

Protection Buyer (Credit Risk Seller or Beneficiary) : The bank that transfers the credit risk.

The protection seller makes the payment to protection buyer when the Credit Event happens, which usually includes bankruptcy, insolvency, merger, cross acceleration, cross default, failure to pay, repudiation, and restructuring, delinquency, price decline or rating downgrade of the underlying asset / issuer.

Types of Credit Derivatives: To start with, RBI has proposed to allow only the following 2 kinds of derivatives i.e.

- Credit Default Swap (CDS),
- Credit Linked Note (CLN).

Credit Default Swap (CDS) : The protection buyer pays a fee through the life of the contract, in return for a credit event payment by the protection seller following a credit event.

In case the credit event does not occur: Protection Seller continues to receive the periodic payment and in case of occurring of a credit event, the Protection Buyer will receive a credit event payment.

If a Credit Event occurs and physical settlement applies : The transaction shall accelerate and Protection Buyer shall deliver the Deliverable Obligations to Protection Seller against payment of a pre-agreed amount If a Credit Event occurs and cash settlement applies, the transaction shall accelerate and Protection Seller shall pay to Protection Buyer the excess of the par value of the Deliverable Obligations on start date over the prevailing market value of Deliverable Obligations upon occurrence of Credit Event.

Credit Linked Note (CLN) It is a combination of a regular note and a credit option and an on-balance sheet equivalent of a credit default swap. Under this structure, the coupon or price of the note is linked to the performance of a reference asset. It offers lenders a hedge against credit risk; to investors, a higher yield for buying a credit exposure. CLNs arc generally created through a Special Purpose Vehicle (SPV), or trust, which is collateralized with highly rated securities. Investors buy the securities from the trust (or issuing bank) that pays a fixed or floating coupon

during the life of the note. At maturity, the investors receive par value unless the referenced creditor defaults or declares bankruptcy, in which case they receive an amount equal to the recovery rate. Here the investor is, in fact, selling credit protection in exchange for higher yield on the note.

Types of Credit Derivatives that are permitted Banks have been initially permitted to use credit derivatives only for the purpose of managing their credit *risk,* which includes:

- Buying protection on loans / investments to reduce credit risk,
- Selling protection for the purpose of diversifying their credit risk and reducing credit concentrations and taking exposure in high quality assets,
- Market making activities by banks in credit derivatives are not envisaged for the present.

For the present, banks will not be permitted to take long or short credit derivative positions with a trading intent. It means that banks may hold the derivatives in their banking books and not in trading books except in case of Credit Linked Notes, which can be held as investments in the trading book if the bank so desires

Risk Mitigation

The basic objective of risk identification or quantification is to take steps which help mitigation of the risk to the extent possible and desirable. The objective of risk mitigation is to transfer the risk to counter parties_

The risk mitigation process involves making use of various tools such as :

(a) Selection of Credit Risk Environment
(b) Diversified credit portfolio
(c) Risk sensitive credit granting process
(d) Audit trail in credit sanction process
(e) Appropriate exposure ceilings
(f) Borrower specific exposure ceiling
(g) Industry specific exposure ceiling
(h) Surveillance responsibilities

At transaction level, the banks mitigate the risk by obtaining collateral securities, cash margins, guarantees from 3rd parties. Recently the banks have started looking for instruments such as credit derivatives.

At portfolio level, the banks use asset securitization, credit derivatives etc. to mitigate credit risk.

SECURITISATION

Securitisation of assets is an additional channel for *recycling of funds* by business entities including banks.

Securitisation is a process through which the bank loan receivables *(say instalment of a term loan due in future, sanctioned by the bank),* are converted into debt instruments (such as pass through certificate, with a fixed rate of return) and then sold through SPV.

Special Purpose Vehicle(SPV) — A company normally promoted by a large institution that will purchase the loans for securitization. (usually, in the form of a trust). The loans and securities are held by the SPV (on behalf of investors of pass through certificate), to ensure that the investors' interest is secure even if the originator goes bankrupt.

Pass through certificate (PTC) The debt instruments issued for securitization purposes (like bonds or debentures), are called pass-through certificate.

Originator : The bank which offers assets (i.e. loans) for securitisation to meet need of cash. The risk is transferred by the originator to the investor through PTC.

A bank may invest in PTCs representing the loans of other banks.

Types of securitisation

Traditional securitization : It is a structure where the cash flow from an underlying pool of exposures is used to service risk position_ Payment to the investors depend upon the performance of the portfolio that has been securitized. Synthetic securitization: his a structure that reflect different degrees of credit risk of an underlying pool of exposures which is hedged through derivative instruments. In that case, the investors' risk is dependent on the performance of the underlying pool.

Securitisation exposures may include:

1. Asset-backed securities
2. Mortgaged backed securities

3. Credit enhancements
4. Liquidity facilities
5. Interst rate or currency swaps
6. Credit derivatives and tranched cover

Clean up call option — It is an option which allows the securitization exposure to be called before all of the underlying exposures or securitization exposures that have been repaid.

Credit enhancement : It is a contractual arrangement in which the banks retain or assume a securitistion exposure and in substance, provide some degree of added protection to other parties to the transactions.

KEY TERMS

Credit risk : The possibility of loss arising on account default by the borrower or counterparties due to inability or willingness or deterioration in the quality of credit portfolio.

Default risk The risk on account of potential failure of the borrower to make promised payments, partly or wholly. Credit spread risk or downgrade risk : The risk arising on account of actual or perceived deterioration in credit quality and may arise from a rating change. There may not be actual default on the part of the borrowers.

Systematic or intrinsic risk : It is the risk which corresponds to the risk to that segment of the economy, to which that loan is extended. If a portfolio is diversified across regions, industries, markets and borrowers, the portfolio risk is minimized but the risk is still prevalent due to risk to those regions, industries or market.

Concentration risk : The risk to the portfolio on account of concentration of loans in specific regions, industries, markets or borrowers, instead of diversification of the portfolio.

Counterparty risk : The risk arising on account of non-performance of trading partners of the borrower, leading to default by the borrower. It is a transient financial risk associated with trading.

Country risk : The risk arising due to default by the borrower or counterparty on account of restrictions imposed by the govt. of other countries due to economic conditions prevailing in the countries of counterparties.

Credit rating : An assessment of the borrower to determine whether after expiry of a given period, the borrower will have the capability to honour the financial commitments.

Credit rating model : The tool or a methodology, used by a credit rating agency to carry credit rating.

Rating migration : The change in the rating of a borrower over a period of time when rated on the same standard or model, which may lead to down grade risk.

Altman's Z Score : A credit rating model that forecasts the probability of a firm becoming bankrupt within 12 months' period. It combines five financial ratios.

JP Morgan's Credit Metrics: A credit rating model developed by .11[3] Morgan which focuses on estimating the volatility in the value of assets caused by variations in the quality of assets.

Credit Risk+: A credit rating model by Credit Swiss which is based on actuarial calculation of expected default rates and unexpected losses from the default.

Credit appraisal : The process of evaluation of creditworthiness of the borrower and the activity/project with a view to take decision on the credit request from a prospective borrower.

Prudential limits : The ceilings fixed by the bank on different type of exposure say, loan concentration, credit exposure, maturity profile of the loan book etc.

Risk pricing : The fixation of interest rates and other levies by the bank corresponding to the quantified risk.

Loan review mechanism: A tool for constant evaluation of the quality of the loan portfolio with a view to bringing qualitative improvements in credit administration.

Credit risk mitigation : The process through which the credit risk is reduced or transferred to a counter party. It may involve proper documentation, securing through collaterals etc.

Securitisation: A process where the financial securities are issued against the cash inflows (in the form of repayment of principal and interest) generated from a pool of loan assets.

Special purpose vehicle : An agency that carries the process of securitization.

Credit derivatives : The tradable financial instruments created on the basis of underlying credit assets (like loans, bonds, accounts receivables etc.) by unbundling them into a commodity. CDs transfer the risk in the credit assets without transferring the underlying assets_

Protection buyers The originators of the credit derivatives which transfer the credit risk to the protection sellers without transferring the credit asset.

Protection sellers: The party which undertakes to provide the protection to the protection buyer, for a price, from credit risk with reference to a notional value.

Credit event: In the context of credit derivatives, it is a happening like delinquency, default, foreclosures, prepayment etc. as agreed in the contract, taking place with reference to the obligation, when protection seller shall be required to make the payment.

Credit default swaps (CDS) A simple and popular form of Credit Derivative under which the protection buyer agrees to pay regular premium to the protection seller for buying protection against the reference obligation. These are generally off-balance sheet items.

Credit linked notes (CLN) : These are on-balance sheet equivalents of a credit default swap, that combine credit derivatives to normal bond instruments. It converts a credit derivative to a marketable instrument.

Total return swap (TRS): Under this arrangement the protection buyers swaps with the Protection seller , the actual return on an asset, in return for a premium.

Operational Risk

Definition: Operational risk has been defined by the Basel Committee on Banking Supervision (BCBS), as 'the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events'. This definition is based on the underlying causes of operational risk. It seeks to identify why a loss happened and at the broadest level includes the breakdown by 4 causes i.e. (a) people, (b) processes, (c) systems and (d) external factors.

Deregulation and globalisation of financial services, together with the growing sophistication of financial technology, are making the activities of banks and thus their profiles more complex. Evolving banking practices such as (a) highly Automated Technology (b) emergence of E-Commerce (c) emergence of banks acting as very large volume service providers (d) outsourcing, suggest that risks other than credit risks and market risks can be substantial. Operational risk has to be properly examined in the context of these changes.

Classification of operational risk:

Operational risk arises almost from all types of transactions and activities, the banks undertake. Hence operational risk takes various forms and it can cause damage in different degree. As the dimension of banking business will continue to change, the new types of operational risks will also continue to emerge. The important features of the operational risk are:

1.1t exists everywhere in the banks (organization).

2. Such risks vary in their components. Few risks have high occurrence with low value and some. have low occurrence with high value.

3. It continuously changes with the banks/organizations, undergoing change.

Basel II classification of operational risk

Basel 11 classification of operational risk is based on causes, effect & events which is summarized as under:

	Cause	Events
Cause based	People oriented causes	Negligence, incompetence, insuffident training, integrity, key man
	Process oriented (transaction based) causes	Business volume fluctuation, organizational complexity, product complexity, major changes
	Process oriented (operational control based) causes	Inadequate segregation of duties, lack of management supervision, inadequate_procedures
		Poor technology and telecom, obsolete application, lack of automation, information system complexity, poor design, development and testing

	Technology oriented causes External causes	Natural disasters, operational failures of a 3rd party, deteriorated Social or political context. Legal liability, Regulatory, compliance and taxation penalties, Loss or damage to assets, Restitution, Loss or recourse, Write-downs
Effect based		
Event based	Internal frauds	Actions intended to defraud, misappropriate, circumvent the regulations etc which involves at least one internal party.
	External Frauds	Actions intended to defraud misappropriate e etc which involves a 3rd Party.
	Employment practices and workplace safety	Losses arising on account of acts inconsistent with employment., health or safety laws
	Clients, products and business Practices	Losses arising from unintentional or negligent failure to meet a professional obligation to Specific clients
	Damage to physical assets	Losses from damage to physical assets
	Business disruption and system failures	Losses arising from disruption of business or system failures
	Execution, delivery and process management	Losses from failed transaction processing or process management, from relations with trade counterparties etc.

PRACTICES FOR OPERATIONAL RISK MANAGEMENT

Seven principles (out of total 10) of Basel 11 document 'Sound Practices of Management of Operational Risk' are relevant to the operational risk management 'practices **in** banks. These principles are:

1. Board of Directors should approve and periodically review the Operational Risk Management (ORM) framework.
2. Board of Directors to ensure that ORM framework is subject to comprehensive internal audit.
3 Senior Management should be responsible for implementation of ORM framework approved by the Board. It should develop policies, processes, procedures for managing operational risk, within the overall policy approved by the Board.
4. Banks should identify the operational risk, inherent in all products, activities, processes & systems.
5 Banks should implement a process to regularly monitor operational risk profiles and material exposures to losses.
6 Banks should have policies, processes and procedures **to control / mitigate** operational risk.
7 Banks should have contingency and business continuity plans to ensure operations on ongoing basis.

MANAGEMENT OVERVIEW AND ORGANISATIONAL STRUCTURE

Board Responsibilities:
Board of Directors of a bank is primarily responsible for ensuring effective management of operational risks. The Board would include Committee of the Board to which the Board may delegate specific operational risk management responsibilities:

- It should approve an appropriate operational risk management framework for the bank and review it periodically.
- It should provide senior management with clear guidance and direction.
- It should be responsible for establishing a management structure capable of implementing the bank's operational risk management framework.

Board shall review the framework regularly to ensure, that the bank is managing the operational risks arising from external market changes and other environmental factors, as well as those operational risks associated with new products, activities or systems.

- Board should **ensure** that the bank_has in place adequate internal audit coverage to satisfy itself that policies and procedures have been implemented effectively.

Senior Management Responsibilities

Senior management should have responsibility for implementing the operational risk management framework approved by the Board of Directors. The additional responsibilities that devolve on the senior management include the following:

- To translate operational risk management framework into specific policies, processes and procedures that can be implemented and verified within the different business units.
- To assess the appropriateness of the management oversight process in light of the risks inherent in a business unit's policy.
- To ensure bank's activities are conducted by qualified staff with the necessary experience, technical capabilities and access to resources, and that staff responsible for monitoring and enforcing compliance with the institution's risk policy have authority independent from the units they oversee.
- To give particular attention to the quality of documentation controls and transaction-handling practices.
- To ensure that the bank's HR policies are consistent with its appetite for risk and are not aligned to rewarding staff who deviate from policies.

Role of Operational Risk Management Committee

The Operational Risk Management Committee is an executive committee. The Committee may meet quarterly, or mote often as it determines it necessary. Key roles of the Committee are:

- Review the risk profile, understand future changes and threats, and concur on areas of highest priority and related mitigation strategy.
- Assure that adequate resources are being assigned to mitigate risks as needed
- Communicate to business areas and staff components the importance of operational risk management, and assure adequate participation and cooperation
- Review and approve the development and implementation of operational risk methodologies and tools, including assessments, reporting, capital and loss event databases.
- To proactively review and mange potential risks which may arise from regulatory changes/or changes in economic /political environment in order to keep ahead.
- To discuss and recommend suitable controls/mitigations for managing operational risk.
- To analyse frauds, potential losses, non compliance, breaches etc. and recommend corrective measures to prevent recurrences.
- To continually promote risk awareness across all business units so that complacency does not set in.

Role of Operational Risk Management Department (ORMD)

The ORMD is responsible for coordinating all the operational risk activities of the Bank, working towards achievement of the stated goals and objectives. Specific activities of the ORMD include:

- **Risk Profile —** ORMD will work with all areas of the bank and assemble information to build an overall risk profile of the institution, understand and communicate these risks, and analyze changes/trends in the risk profile. ORMD will utilize the following four-pronged approach to develop these profiles:
- Consolidation and Reporting of Data — ORMD will collect relevant information from all areas of the bank, build a consolidated view of operational risk, assemble summary management reports and communicate the results to the risk committees or other interested parties. Key information will include risk indicators, event data and self-- assessment results and related issues.
- Analysis of Data — ORMD is responsible to analyze the data on a consolidated basis, on an individual basis and on a comparative basis.
- Best Practices — ORMD will identify best practices from within the bank or from external sources and share these practices with management and risk. specialists across the Bank *as* beneficial. As part of this role, they will participate in industry conferences surveys, keep up to date on rules and regulations, monitor trends and practices in the industry, and maintain a database/library of articles on the subject.
- Policies — ORMD will be responsible for drafting, presenting, updating and interpreting, the Operational Risk Policy.
- Coordination with Internal Audit —ORMD will work closely with Internal Audit to plan assessments and concerns about risks in the Bank. ORMD and Internal Audit will share information and coordinate activities so as to minimize potential overlap of activities.

PROCESSES & FRAMEWORK

Each bank must have policies *and* procedures that clearly describe the major elements of the Operational Risk Management framework including identifying, assessing, monitoring and controlling I mitigating operational risk. Given the advantages associated with effective Operational Risk Management, it is imperative that the strategic approach of the risk management function should be oriented towards:

- An emphasis on minimising and eventually eliminating losses and customer dissatisfaction due to failures in processes.
- Focus on flaws in products and their design that can expose the institution to losses due to fraud etc.
- Align business structures and incentive systems to minimize conflicts between employees and the institution.
- Analyze the impact of failures in technology / systems and develop mitigants to minimize the impact.
- Develop plans for external shocks that can adversely impact the continuity in the institution's operations.

Identification of operational risk

Banks should identify and assess the operational risk inherent in all material products, activities, processes and systems. Banks should also ensure that before new products, activities, processes and systems are introduced or undertaken, the operational risk inherent in them is identified clearly and subjected to adequate assessment procedures.

Effective risk identification should consider both internal factors (such as the bank's structure, the nature of the bank's activities, the quality of the bank's human resources, organisational changes and employee turnover) and external factors (such as changes in the industry and technological advances) that could adversely affect the achievement of the bank's objectives.

The first step towards identifying risk events is to list out all the activities that are susceptible to operational risk To begin with, banks can list the main business groups viz. corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage, The analysis can be further carried out at the level of the product teams in these business groups, e.g. transaction banking, trade finance, general banking, cash management and securities markets.

After the listing of products, various operational risk events associated with these products are recorded. An operational risk event is an incident/ experience that *has* caused or has the potential to cause material loss to the bank either directly or indirectly with other incidents. Risk events are associated with the people, process and technology involved with the product.

Assessment of Operational Risk : Tools

In addition to identifying the risk events, banks should assess their vulnerability to these risk events. Amongst the possible tools that may be used by banks for assessing operational risk are:

- Self Risk Assessment
- Risk Mapping
- Key Risk Indicators

Monitoring of Operational Risk

An effective monitoring process is essential for adequately managing-operational risk Regular monitoring activities can offer the advantage of quickly detecting and correcting deficiencies in the policies, processes and procedures for
managing operational risk. Promptly detecting and addressing these deficiencies can substantially reduce the potential frequency and/or severity of a loss event.

- Banks should identify appropriate indicators that provide early warning of an increased risk of future losses. Such indicators (often referred to as early warning indicators) should be forward-looking and could reflect potential sources of operational risk such as rapid growth, the introduction of new products, employee turnover, transaction breaks, system downtime, and so on.
- The frequency of monitoring should reflect the risks involved and the frequency and nature of changes in the operating environment. Monitoring should be an integrated part of a bank's activities.

- The results of these monitoring activities should be included in regular management and Board reports, as should compliance reviews performed by the internal audit and/or risk management

functions.

- Reports generated by (and/or for) intermediary supervisory authorities may also inform the corporate monitoring unit which should likewise be reported internally to senior management and the Board, where appropriate.

Mapping of Business Lines: For the purpose of operational risk management, the activities of a bank may be mapped into eight business lines identified in the New Capital Adequacy Framework.

1. Corporate finance
2. Trading and sales
3. Retail banking
4. Commercial banking
5. Payment and settlement
6. Agency services
7. Asset management
8. Retail brokerage

Controls / Mitigation practices for Operational

Risk These practices take into account the following:

- Collection of operational risk data i.e. incident reporting framework.
- Regular monitoring and feedback mechanism in place for monitoring any deterioration in operational risk profile.
- Collation of incident reporting data to assess frequency and probability of occurrence of operational risk events. For Operational Risk management several methods may be adopted for mitigating the risk. For example:

(a) Losses that might arise on account of natural disasters can be insured against.

(b) Losses that might arise front business disruptions due to telecommunication or electrical failures can be mitigated by establishing redundant backup facilities.

(c) Loss due to internal factors, like employee fraud or product flaws, which may be difficult to identify and insure against, can be mitigated through strong internal auditing procedures.

Operational Risk Quantification

The Basel Committee has put forward a framework consisting of 3 options for calculating operational risk capital charges in a 'continuum' of increasing sophistication and risk sensitivity. These are, in the order of their increasing complexity, viz.,

(i) the Basic Indicator Approach

(ii) the Standardised Approach and

(iii) Advanced Measurement Approach.

Reserve Bank has initially allowed the banks to use the Basic Indicator Approach for computing regulatory capital for operational risk. Some banks are expected to move along the range toward more sophisticated approaches as they develop more sophisticated operational risk management systems and practices which meet the prescribed qualifying criteria.

The Basic Indicator Approach

At the minimum, banks in India should adopt this approach immediately while computing capital for operational risk. Under this, the banks have to hold capital for operational risk equal to a fixed percentage (alpha) of a single indicator which has currently been proposed to be "gross income". This approach is available for all banks irrespective of their level of sophistication. The charge may be expressed as follows:

K BIA = [E (GI a)]/n

Where: KBIA = the capital charge under the Basic Indicator Approach.

GI = annual gross income, where positive, over the previous three years

a =15% set by the Committee, relating the industry-wide level of required capital to the industry-wide level of the indicator.

n = number of the previous three years for which gross income is positive.

The Standardised Approach

In the Standardised Approach, banks' activities are divided into 8 business lines given above.

Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business line. Beta serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate

level of gross income for that business line_ It should be noted that in the Standardised Approach gross income is measured for each business line, not the whole institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.

Beta factors for different business lines

Corporate finance Gross income	18%	Trading and sales Gross income	18%
Retail banking Gross income	12%	Commercial banking Gross income	15%
Payment and settlement Gross	18%	Agency services Gross income	15%
Asset management Gross income	12%	Retail brokerage Gross income	12%

Advanced Measurement Approaches (AMA)

Under the AMA, the regulatory capital requirement will be equal the risk measure generated by the bank's internal operational risk measurement system using the quantitative and qualitative criteria for the AMA. Use of the AMA is subject to supervisory approval.

Supervisory approval would be conditional on the bank demonstrating to the satisfaction of the relevant supervisors that the allocation mechanism for these subsidiaries is appropriate and can be supported empirically.. The board of directors and senior management of each subsidiary are responsible for conducting their own assessment of the subsidiary's operational risks and controls and ensuring the subsidiary is adequately capitalised in respect of those risks.

Generic Measurement Approach

Measurement approach implementation begins with operational risk profiling which involves the following:

- Identification and quantification of operational risk
- Prioritization of operation risk and identification of risk concentrations
- Formulation of strategy by the bank for operational risk management and risk

based audit. The estimated levels of operational risk depend on:

(a) Estimated probability of occurrence which is mapped on a scale of 5 which implies

1. negligible risk
2. low risk
3. medium risk
4. high risk &
5. very high risk.

(b) Estimated potential financial impact : It is also mapped on,a scale of5 as above.

(c) Estimated impact of internal controls: This is estimated as fraction in relation to total control which is valued at 100%.

For example if the probability of occurrence is medium i.e. 2, potential financial impact is very high i.e. 4 and impact of internal controls is 50%, the estimated level of operational risk can be worked out as:

Estimated level of operational risk = estimated level of occurrence x estimated potential financial impact x estimated impact of internal controls.

=I (2 x 4 x (1 — 0.5] ^0.5 =1.73 or Low.

Risk mitigation

Under the AMA, a bank will be allowed to recognise the risk mitigating impact of insurance in the measures of operational risk used for regulatory minimum capital requirements. The recognition of insurance mitigation will be limited to 20% of the total operational risk capital charge calculated under the AMA. A bank's ability to take advantage of such risk mitigation will depend on compliance with the following criteria:

- The insurance provider has a minimum claim paying ability rating of A (or equivalent).

The insurance policy must have an initial term of no less than one year. For policies with a residual term of less than one year, the bank must make appropriate haircuts reflecting the declining residual term of the policy, up to a full 100% haircut for policies with a residual term of 90 days or less. The insurance policy has a minimum notice period for cancellation of 90 days.

- The insurance policy has no exclusions or limitations triggered by supervisory actions or, in the case of a failed bank, that preclude the bank. receiver or liquidator from recovering for damages suffered or expenses incurred by

the bank, except in respect of events occurring after the initiation of receivership or liquidation proceedings in respect of the bank, provided that the insurance policy may exclude any fine, penalty,

or punitive damages resulting from supervisory actions.

- The risk mitigation calculations must reflect the bank's insurance coverage in a manner that is transparent in its relationship to, and consistent with, the actual likelihood and impact of loss used in the bank's overall determination of its operational risk capital.
- The insurance is provided by a third-party entity. In the case of insurance through captives and affiliates, the exposure has to be laid off to an independent third-party entity, for example through re-insurance, that meets the eligibility criteria_
- The framework for recognising insurance is well reasoned and documented.
- The bank discloses a description of its use of insurance for the purpose of mitigating operational risk.

Scenario analysis

A bank must use scenario analysis of expert opinion in conjunction with external data to evaluate its exposure to high-severity events. This approach draws on the knowledge of experienced business managers and risk management experts to derive reasoned assessments of plausible severe losses_ For instance, these expert assessments could be expressed as parameters of an assumed statistical loss distribution. In addition, scenario analysis should be used to assess the impact of deviations from the correlation assumptions embedded in the bank's operational risk measurement framework, in particular, to evaluate potential losses arising from multiple simultaneous operational risk loSs events. Over time, such assessments need to be validated and re-assessed through comparison to actual loss experience to ensure their reasonableness.

Business environment and internal control factors

in addition to using loss data, whether actual or scenario-based, a bank's bank-wide risk assessment methodology must capture key business environment and internal control factors that can change its operational risk profile. These factors will make a bank's risk assessments more forward-looking, more directly reflect the quality of the bank's control and operating environments, help align capital assessments with risk management objectives, and recognise both improvements and deterioration in operational risk profiles in a more immediate fashion. To qualify for regulatory capital purposes, the use of these factors in a bank's risk measurement framework must meet the following standards:

- The choice of each factor needs to be justified as a meaningful driver of risk, based on experience and involving the expert judgment of the affected business areas. Whenever possible, the factors should be translatable into quantitative measures that lend themselves to verification.
- The sensitivity of a bank's risk estimates to changes in the factors and the relative weighting of the various factors need to be well reasoned. In addition to capturing changes in risk due to improvements in risk controls, the framework must also capture potential increases in risk due to greater complexity of activities or increased business volume.
- The framework and each instance of its application, including the supporting rationale for any adjustments to empirical estimates, must be documented and subject to independent review within the bank and by supervisors.
- Over time, the process and the outcomes need to be validated through comparison to actual internal loss experience, relevant external data, and appropriate adjustments made.

Integrated Risk Management (IRM)

IRM stands for management of all risk that are associated with the activities undertaken across the entire organistion. For banks these risks are liquidity risk, interest rate risk, market risk, credit risk and operational risks.

Total risk to an organization is the net *effect* of all risks associated with the activities of a bank. Net effect of all risks may not be same as sum total of all risk due to diversification effect of risk. Hence integration implies a coordinated approach (and not accounting approach) across various activities and taking benefit of various diversification opportunities that exist or may be created in the bank.

Need for IRM: This approach centralizes the process of supervising risk exposure so that the organization can determine how best to absorb, limit or transfer the risk. The information available with the bank can be analyzed to determine the overall nature of organizational risk exposures including their correlation, dependencies and off-sets. The advantages are:

1. It aligns the strategic aspects of risk with day to day operational activities.
2. It facilitates greater transparency for investors and regulators

3.- It enhances revenue and earning growth

4. It controls downside risk potential.

Integrated Risk Management Approach

The process of IRM consists of :
(a) strategy — integration of risk management as a key corporate strategy.
(b) organization — establishment of Chief Risk Officer position with accountability to board.
(c) process — identifying, assessing and controlling risk should be common across the banks
(d) systems — risk management systems should be developed to provide information to support the enterprise risk management functions.
Organizational structure : The Board is the apex unit responsible for the entire risk of the bank. Risks are not to be seen in isolation and have to be managed in an integrated manner.
Policies and procedures: These should be developed using a top down approach and consistent with one another. Risk limits: Such limits assist in maintaining overall exposures at acceptable levels.
Risk reporting : Bank wide risk reports are used to quantify sources of risk across the bank and to estimate total exposure to financial markets.
Integrated systems: The framework should be supported by an information technology architecture consistent with such integration.

TEST YOURSELF : MCQ ON RISK MANAGEMENT, RISK & BANKING BUSINESS

1. Risk is defined as uncertainties resulting in:
a) Adverse outcome, adverse in relation to planned objectives or expectations
b) Adverse variation of profitability or outright losses (financial risk)
c) Both (a) & (b) d) None of these
2. Financial Risk is defined as
a) Uncertainties in cash flow b) Variations in net cash flow
c) Uncertainties resulting in outright losses
d) Uncertainties resulting in adverse variation of profitability e) Both (c) & (d)
3. Uncertainties in cash inflows and / or outflows create uncertainties in:
a) net cash flow b) profits c) Both (a) & (b) d) none of these
4_ Which of the following is not correct?
a) Lower risk implies lower variability in net cash flow
b) Higher variability in net cash flow may result in higher profits or higher losses
c) Higher risk would imply higher upside and downside potential
d) Zero risk would imply no variation in net cash flow e) None of these
5. Return on zero risk investment would be ----as compared to other opportunities available in the market ; a) high ,b) low c) medium d) higher or low depending upon type of investment
Strategic risk is a type of : a) exchange riskb) liquidity risk c) interest rate risk d) operational risk e) none of these
6. Investment in RBI bonds at 6.5% interest rate with a maturity of 5 years is investment.
a) zero risk b) lower risk c) medium risk d) high risk
7. The capital requirement of a business would be lower when there is :
a) lower variation in net cash flow b) lower risk
c) lower possibility of loss d) all of these e) none of these
8. The key driver in managing a business is seeking enhancement in
a) Return on investment b) Risk Management capability
c) risk adjusted return on capital d) all of these e) None of these
9. Risk adjusted return on investment is:
a) Netting risk in a business or investment against the return from this
b) Managing risk on investments

c) Managing-return on investment through risk management
d) Adjusting return on investment against the risk
11.An investment will be more preferred and higher will be the reward to investors when:
a) RAROC is higher b) RAROC **is** lower c) RAROC is one d) none of these
12.The banking book is generally not exposed to : a) liquidity risk b) interest rate risk c) credit risk
d) operational risk e) None of these
13.Which of the following is / are characteristics of the assets held in Trading Book?
a) They are normally not held until maturity
b) They are normally held until maturity and accrual system of accounting is applied
c) Mark to market system is followed d) Both (a) & (c) e) Both (b) & (c)
14.Trading book is mainly exposed to
a) Market Risk b) Market Liquidity Risk c) Credit Risk
d) Operational Risk e) All of these
15.The transactions relating to guarantees, letters of credit, committed or back up credit lines form part of
a) Banking Book b) Trading Book
c) Off Balance Sheet Exposures d) All of these
16.The liquidity risk of banks arises from :
a) Funding of long term assets by short term liabilities
b) Funding of short term assets by long term liabilities
c) Funding of long term liabilities by short term assets
d) None of these
17. Funding liquidity risk is defined as:
a) Excess of liabilities over assets
b) Excess of long term liabilities over long term assets
c) Excess of short term liabilities over short term assets
d) Inability to obtain funds to meet cash flow obligations
18. Liquidity risk in banks manifest in different dimensions. Which of the
a) Funding risk arises from the need to replace net outflows withdrawal / non renewal of deposits
b) Time risk arises from the need to compensate for non receipt funds e.g. NPA
c) Call risk arises due to crystallization of contingent liabilities
d) Both (a) & (b) e) None of these
19.Where an asset maturing in two years at a fixed by a liability
risk will be: a) Basis risk b) Yield curve risk c) Gap risk d) embedded option Risk
20.The risk of adverse variance of the mark to market value of change in market prices of interest rate instruments, equities, is called: a) Price Risk b) Market Risk c) Translation Risk d) Both a & b
21.In the financial market bond prices and yields are
a) inversely related b) directly related ,
c) inversely or directly related depending on type of bond d) none of these
22.When a bank is unable to conclude a large transaction in a particular instrument near the current market price, it is called as a) Market risk b) Market Liquidity risk c) Default risk d) counter party risk
23.Potential of a bank borrower or counterparty to fail to meet its obligations according to agreed terms is called: a) credit risk b) default risk c) market liquidity d) market risk e) either (a) or (b)
24.The risk related to non performance of the trading partners due to counter party's refusal and or inability to perform is called ------risk : a) Liquidity, b) Operational , c) Counter Party , d) None
25.Country risk is an example of
a) Market risk b) Credit risk c) Operational risk d) Liquidity risk
26.The risk of loss resulting from inadequate or failed internal processes, people and systems

or from external events is called as risk
a) legal b) compliance c) Fraud d) Operational
27.Which of the following is not a operational risk?
a) Compliance risk b) Transaction risk c) Legal Risk
d) Counter party risk e) System risk
28.Strategic Risk and Reputation Risk fall in the category of
a) Market risk b) credit risk c) Operational risk d) none of these
29.Risk arising from fraud, failed business processes and inability to maintain business continuity
a) Transaction risk b) compliance risk c) credit risk d) none of these
30.Risk of legal or regulatory sanction, financial loss or reputation loss that a bank may suffer as a result of its failure to comply with any or all of the applicable laws, regulations etc. is called as:
a) Transaction risk b) Compliance risk c) legal risk d) Systems risk
31.Risk arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes is called:
a) Reputation risk b) Strategic risk c) Operational risk d) Management risk
32. Reputation Risk which arises from negative public opinion may result in:
a) exposing an institution to litigation b) financial loss
c) decline in customer base d) all of these e) none of these
33.Risk associated with a portfolio is always less than the weighted average of risks of individual items in the portfolio due to
a) Diversification of risks
b) The fact that all accounts in a portfolio will not behave in unidirectional manner
c) The fact that risks in all the accounts in a portfolio will not materialize simultaneously,
d) Both (a) & (b) only e) All of these
34.Aggregated risk of the organizations as a whole is called:
a) Transaction risk b) Portfolio risk c) Total risk d) None of these

ANSWER : TEST YOUR SELF – RISK AND BANKING BUSINESS

1	A	2	E	3	C	4	E	5	B	6	E	7	A	8	D	9	C	10	A
11	A	12	E	13	D	14	E	15	C	16	A	17	D	18	E	19	C	20	D
21	A	22	B	23	E	24	C	25	B	26	D	27	D	28	D	29	A	30	B
31	B	32	D	33	E	34	B												

TEST YOURSELF : MCQ ON MARKET RISK

1) Risk may be defined as:
a) Uncertainties resulting in adverse outcome
b) Adversity may be in connection with planned objective or expectation
c) When there is an adverse situation in terms of profitability is called financial risk
d) All the above
2) Which of the following Risk Factors may affect the Business adversity
a) Sales volume and sales price b) Purchase Price
c) Administrative expenses d) All these
3) The features of Zero Risk are:

a) It does not have any uncertainty with it
b) There is no variation in net cash flow
c) Return on such investment would be lower d) All these
4) Which of the following instruments do not contain Zero Risk?
a) Investment in Shares
b) Investment in Bonds and Debentures
c) Investment in Term Deposits
d) Investment in Government Bonds
5) Which of the following statements is not correct?
a) Large variation in net cash flows happens in the Business with higher Risk.
b) Capital requirement would be lesser in higher Risk Business
c) The profit potential would be lower in a Business with a lower Risk
d) Lower the variation in net cash flow lower the Risk
6) What is Risk Adjusted Returns on investment?
a) It is the process where a Risk in a Business or investment, is netted against the returns from it.
b) Higher the Risk Adjusted Return on capital higher is the reward for investors.
c) The investors would have more performance for such investments d) All these
7) A Bank may face the following Risk:
a) Balance Sheet Risk b) Transaction Risk c) Operating and Liquidity Risk
d) All these
8) The factors contributing to Balance Sheet Risk are:
a) Mismatch between the currency b) Maturity and interest rate pattern
c) Structure of Assets and Liabilities d) All these
9) The Balance Sheet Risk may result in:
a) Interest rate mismatch Risk b) Liquidity Risk
c) Foreign Exchange Risk d) All these
10) Which of the following is not a Transaction Risk?
a) Mismatch in Assets, and Liabilities portfolio b) Credit Risk
c) Price Risk d) Instrument Risk
11) The features price Risk are:
a) It includes the risks of loss due to the change in value of Assets and Liabilities
b) It also includes market risk due to fluctuations in price of Assets in the market.
c) This may happen on account of Issuer Risk which depends on the financial strength of
the issuer d) All these
12) Which of the following contributes to Instrument Risk?
a) The nature of hybrid instruments in the market.
b) Fluctuations in the market conditions
c) The prices of various instruments may react differently from one another d) All these
13) Which of the following is not market liquidity Risk?
a) Lack of liquidity of an instrument or Asset in time.
b) The financial strength of an instrument.
c) The loss may occur due to fluctuations in the market price at the times of liquidating.
d) All these
14) Which of the following may affect the yield on Assets?
a) Commodity prices b) Interest rates c) Exchange rates d) All these
15) The operating and liquidity risk may be on account of:

a) Failure of execute or settle a transaction
b) Adverse changes in the cash flows of transactions
e) (a) and (b) both d) None of these
16) The objectives of Risk management are:
a) Survival of an organization b) Earning stability
c) Efficiency in operations d) All these
17) Which of the followings is not an objective of Risk management?
a) Uninterrupted operations b) Higher deposit growth
c) Continued growth d) Creating good image
18) What is Risk management?
a) It is the process of identifying and controlling the Risk
b) The process includes measurement of Risk
c) Monitor and control of Risk is also an important aspect of Risk management. d) fill
19) The major components of Risk management are:
a) Risk identification b) Risk measurement c) Risk control d) All these
20) Payment and Settlement Risk may be on account of:
a) Payments and collections b) Funds transfer c) Clearing and settlement
d) All these
21) Risk in trading securities may arise from the following activities:
a) Foreign exchange transactions b) Equity holding
c) Lending and Repos d) All these
22) Which of the followings is not an agency service of the Bank?
a) Extending credit cards b) Escrow c) Depository Receipts d) Securities fending
23) What is the Off Balance Sheet Risk?
a) It is contingent in nature.
b) It can occur on account of issue of guarantees committed credit lines and issue of letter of credit.
c) Bank's commitment may happen on account of failure to meet, payment obligations
d) All the above
24) The significance of contingent liability is:
a) It adds to the Revenue generation of the Bank
b) Banks may also have Contingencies Receivables
c) The Bank is obliged to meet the commitment only on account of failure to meet the
obligation by the person on whose behalf bank has commitment d) All these
25) Derivative Risks are Off Balance Sheet and include the following:
a) Swaps b) Futures c) Forward contracts d) All these
26) What kinds of Risks Off Balance Sheet exposure may have?
a) Liquidity Risk b) Interest Risk c) Market Risk d) All these
27) Which of the following statements is correct?
a) Contingency exposure may become fund based exposure.
b) It can be a part of Banking Boa ˉor Trading Book
c) It may include credit Risk d) All these
28) Which of the following statements is not correct?
a) Off Balance Sheet exposures may become fund based exposure base0 OAF ceitoin contingencies.
b) Where Bank provides payment they are known as contingencies given.
c) Off Balance Sheet exposure may not have Interest Risk

d) Where Bank is the Beneficiary, it is known as receivable contingencies.
29) The feature of liquidity risk are:
a) It may arise from funding of long term assets by short term liabilities
b) The liabilities are subject to Refinance Risk
c) Funding liquidity is inability to obtain funds to meet cash flow obligations **d)** All these
30) Which of the following statements is correct?
a) The funding Risk may arise from the need to replace net outflows due to unanticipated withdrawals of deposit.
b) Time risk arises when performing Assets turn into non-performing Assets
c) Call Risk arises due to crystallization of contingent liabilities d) All these
31) The features of Interest Rate Risk are:
a) It is an exposure of Bank's financial condition to adverse movements in interest rates.
b) It has direct effect on Net Interest Margin.
c) It may also affect the market value of Equity d) All these
32) Which of the followings is not a mismatch Risk?
a) Holding Assets and Liabilities with different maturity dates and amount
b) Adverse movement in Interest Rate
c) When liability is repriced on a maturity date and this causes variation in the Interest Rate
d) All the above
33) What is Yield Curve Risk?
a) When two different instruments maturing at different time horizon for pricing Assets and Liabilities.
b) There may not be parallel movement in the Interest Rates of both of the instruments.
c) Non parallel movement in the Yield Curve may affect the Net Interest Income
d) All the above
34) Which of the following statements is correct regarding Yield Curve Risk?
a) When Interest Rates are floating Banks may price Assets and Liabilities on different instruments such as Treasury Bills, Call Money Rates, MIBOR etc.
b) A Bank needs to evaluate the movement in Yield Curves and impact of the curve on portfolio value and income
c) If a liability is raised through 91 days T Bill and is used to fund on Asset for 364 days it
could be a Yield Curve Risk d) All these
35) The features of Basis Risk are:
a) When interest rates of different Assets, Liabilities and Off Balance Sheet items change in different magnitudes it is called Basis Risk.
b) When Interest Rates of Asses rise in different magnitudes as compared to interest rate on corresponding liability which may result in variation Net Interest Income, it would be known as Basis Risk.
c) The Basis Risk is quite visible in a Volatile Interest Rate Scenario. d) All these
36) Which of the followings is not correct regarding the Basis Risk?
a) When a variation in the market interest rate effects Net Interest Income to expand it will have unfavorable basis shifts.
b) When interest rate movement causes Net Interest Income to contract the basis would have moved against the Bank.

c) The loan portfolio is funded out of a composite liability portfolio, this causes higher
degree of Basis Risk d) None of these

37) The features of Embedded Option Risk are:

a) When a Bank is exposed to Risk due to prepayment of a loan and premature withdrawal of term deposit it is called Embedded Option Risk.

b) This can be experienced in volatile situations.

c) The greater the magnitude of changes in interest rate the higher will be the Embedded
Option Risk. d) All these

38) Which of the following statements is not correct regarding Embedded Option Risk?

a) This results in reduction of projected cash flow,

b) It does not affect the Bank's income.

c) The risk may arise due to premature exercise of call/put options.

d) The withdrawals of deposits before maturity date would also cause Embedded Option Risk.

39) What is Reinvestment Risk?

a) When Interest Rate at which the future cash flows can be reinvested are uncertain it is called Reinvestment Risk.

b) Any mismatch in cash flows will expose a Bank.

c) Since the market interest rates move in different directions, it will have variation in net
interest income d) All these

40) The features of Net Interest position Risk are:

a) When there are more earning Assets than paying liabilities, interest rate may arise if market interest rates adjust downwards.

b) It may result in reduction in Net Interest Income.

c) It will have an impact on the economic value of Bank's Assets d) All these

41) What are the features of Price Risk?

a) When Assets are sold before their maturities it may result in Price Risk.

b) The Price Risk is closely associated with the Banks Trading Volume.

c) Bank may create such Trading investments out of short term movements in interest rates

d) All the above

42) Which of the following statements is not correct?

a) The Bond prices and yields are directly related.

b) Market Risk may apply for Pricing Risk for the Assets held in the Trading Book.

c) The Market Risk may also apply to foreign currency Risk d) None of these

43) What is Forex Risk?

a) A risk which may arise due to adverse exchange rate movements is called Forex Risk.

b) This occurs on account of an open position in spot or forward contracts.

e) It is applicable on an individual foreign currency. d) All these

44) A Counterparty Risk is:

a) It arises due to non-performance of the Trading partners where counterparty may refuse to perform.

b) It is treated as transient Financial Risk.

c) It is more associated with Trading. d) All these

45) The features of Country Risk are:
a) When a Risk arises due to imposition of restrictions by a country and a borrower is not able to perform the promise.
b) The Risk arises due to external factor.
c) A counterparty has no control on such Risk. d) All these
46) An Operational Risk can be defined as:
a) A risk resulting from lack of internal controls or systems is an Operational Risk.
b) Transaction Risk is also a part of Operational Risk.
c) Compliance Risk is also included in Operational Risk. d) All these
47) Which of the following statements is not correct?
a) Strategic Risk is the part of Operational Risk.
b) Any Risk which is not categorized as market risk may be Operational Risk.
c) Scope to Operational Risk is very wide.
d) Operational Risk may also arise due to external factors.
48) Which of the followings is not Operational Risk?
a) Fraud Risk
b) Adverse movement in Foreign Exchange Risk.
c) Communication Risk d) Documentation Risk
49) A Transaction Risk is:
a) Risk arising from fraud either internal or external.
b) It may be on account of failed Business processes.
c) When a Business is not able to maintain the continuity, it is known as Transaction Risk.
d) All the above
50) Which of the following statements is not correct?
a) Failed internal process is Transaction Risk.
b) When a Bank fails to comply with regulatory requirements, it may face Compliance Risk.
c) Compliance Risk is also known as Integrity Risk.
d) Reputation Risk is not the Operational Risk.
51) The non-compliance of the following may cause Compliance Risk:
a) Standards of good practice b) Codes of conduct
c) Compliance of applicable loans d) All these
52) Strategic Risk can be defined:
a) A Risk arising from adverse business decisions.
b) It is a function of compatibility of organizations strategic goals.
c) This is measured from resources deployed to reach goals and quality of implementation
d) All the above
53) Strategic Risk may arise due to:
a) Improper implementation of decisions
b) Lack of monitoring and control
c) Lack of responsiveness to industry changes . d) All these
54) The consequences of Reputation Risk may be:
a) Negative public opinion b) Decline in customer base
c) Financial loss to the organization d) All these
55) Which of the following statements is correct?
a) Since a Business have variations in cash flows which results in Risk.

b) The Risk in a Business may be measured by using standard deviation of past performance.
c) Standard deviation of risk may range from zero to one. d) All these
56) Financial Risk can be defined as:
a) Uncertainties in cash flow.
b) Uncertainties resulting in adverse variation of profitability.
c) A risk which may resulting outright losses.
d) Variations in Net Cash Flows.
57) Strategic Risk can be classified as:
a) Operational Risk b) Interest Rate Risk c) Forex Risk
d) None of these
58) Portfolio Risk is less than weighted average of individual Risks in the portfolio due to:
a) Diversification effect
b) Individual Risk do not materialize in an unidirectional manner
c) (a) and (b) both d) None of these
59) If a Bank funds its Assets from a pool of composite liabilities, it may face the following risk in addition to Credit and Operational Risk:
a) Basis Risk b) Mismatch Risk c) Liquidity Risk d) All these
60) When a Bank sanctions a loan to a large Borrower, which of the following risks it may not face?
a) Liquidity Risk b) Market Risk c) Credit Risk d) Operational Risk
61) The Risk mitigation measures may result in:
a) Reducing downside variability
b) Reducing upside potential
c) (a) and (b) both d) None of the above
62) If a depositor deposits in post office time deposit scheme, it is:
a) Zero Risk Investment b) Low Risk Investment c) Reasonable Risk Investment
d) High Risk Investment
63) If a Borrower repay a pre matured loan, a Bank may have the following Interest Rate Risk: a) Yield curve Risk b) Embedded Option Risk c) Basis Risk
d) Mismatch Risk
64) If a daily volatility of a stock is one percent what is the approximate volatility for 10 days? a) 3% b) 10% c) 1% d) 4%
65) Capital charge component of pricing Account for:
a) Internal generation of capital b) Cost of capital c) (a) and (b) both
d) Loss Premium
66) Which of the following financial instruments are included in trading transactions?
a) Debt securities b) Equity c) Forex instruments d) All these
671 Which of the following a Trading Book of a Bank does not consist?
a) Cash Reserve with RBI
b) Derivatives held for trading
c) Positions in financial instruments arising from matched market making.
d) Hedging positions
68) A Bank's Trading Book exposure may arise on account of the following :
a) Adverse changes in the interest rate.
b) Currency exchange rate unfavourable movements.
c) Market liquidity d) All these

69) Which of the following may be adversely affected due to Trading Book Risk?
a) Bank's Earnings b) Net Interest Margin c) Bank's Capital d) All these
70) The features of Earnings of market portfolio are:
a) Profit and loss arising from transactions.
b) The profit and loss between two dates is the variation of the market value.
c) Any decline in value results in a market loss. d) All these
71) What is Trading Liquidity?
a) It is ability to liquidate positions without affecting market prices.
b) Without attracting the attention of other market participants.
c) (a) and (b) both d) None of these
72) Liquidation Risk result in:
a) Average change in market price.
b) Inability to liquidate position at a fair market price.
c) Inability to liquidate position at any price. d) All these
73) Which of the following statements is correct?
a) Assets Liquidation Risk is a situation where a specific Asset faces lack of trading liquidity
b) Market Liquidation Risk is a situation where liquidity crunch is general
c) The above (b) affects trading liquidity adversity d) All these
74) The features of Credit Risk are:
a) Credit Risk of debt instruments is indicated by credit rating.
b) It indicates the Risk level associated with the debt instrument.
c) Lower the Risk level, lower is the spread over Risk Free Rate d) All these
75) The consequences of Credit Risk are:
a) When Rating of a financial instruments is lowered, the spread over the Risk Free Rate increases.
b) The price of the instruments is declined.
c) Where a default in payment of either the principal or interest occurs, market price of
financial instruments deteriorates. d) All these
76) Which of the following statements is not correct?
a) Credit Risk may arise on account of default of the Issuer/Borrower.
b) Rating migration may not cause Credit Risk.
c) Deterioration of the credit quality of the instrument have adverse impact on the price of
financial instrument d) None of these
77) Derivatives are:
a) Over the counter instruments.
b) They are not liquid as market instruments.
c) Banks hold derivatives until maturity. d) All these
78) Which of the following is not a derivative instrument?
a) Interest Rate Swap b) T. Bill c) Currency Swap d) Options
79) Which of the following statements is correct regarding Derivative?
a) Mark to market value of a derivative depends on market movements.
b) It is the present value of all future flows at market rates.
c) Hold to maturity risk is also known as counterparty risk d) All these
80) The current credit risk can be defined as:
a) It is a risk exposure in the current liquidation value.

b) Value of financial instrument varies depending upon market factors.
c) Credit risk amount varies with the change in the value d) All these
81) What is Settlement Risk?
a) In a financial market transaction one party pays money and receives the instruments.
b) The counterparty receives the money and parts with the instrument.
c) If any of the above transacting parties defaults it is known settlement risk.
d) All the above
82) Which of the following is true regarding settlement risk?
a) It is a systematic Risk.
b) There is much emphasis now a days on Risk free settlement.
c) In India we have now real time gross settlement system. d) All these
83) Which of the followings Market Risk Management Division does not consist?
a) Risk Management Committee
b) Asset Liability Management Committee
c) The Asset Liability Management Support Group d) All these
84) Which of the following are the responsibilities of Risk Management Committee?
a) Deciding prudential limits.
b) Evaluating Risk measurement models
c) Setting guidelines for market risk management. d) All these
85) What is sensitivity?
a) It indicates deviation of market price due to unit movement of a single market parameter.
b) If the liquidity in the market increases it would result in increased demand.
c) The increased demand may increase market price. d) All these
86) The market parameters which parameters which derive market value are:
a) Demand Supply Position b) Interest Rate c) Inflation d) All these
87) Which of the following is relevant to the measurement of sensitivity?
a) This indicates the degree of risk associated with the portfolio against the changes in interest rate.
b) It does not consider the impact of other parameters.
c) Sensitivity is more appropriate measurement to measure impact of interest rate changes
d) All the above
88) What is Basic Point Value?
a) It indicates the change in value due to one basis change in market yield.
b) It is a risk measurement tool.
c) Higher the Basic Point value, higher is the risk associated with the instrument.
d) All the above
89) Which of the following is not relevant regarding Basis Point value?
a) This helps to calculate profit or loss for a given change of yield.
b) Basis Point value does not change with the remaining maturity.
c) It may decline with time.
d) It can be zero on the day of maturity.
90) Which of the following is significant regarding Duration?
a) This concept was introduced by Frederick Mc Cauley.
b) It was proposed in 1938.
c) It describes bond's price sensitivity to yield change with a simple number.
d) All the above

91) Which of the following is correct regarding Duration?
a) The longer the duration of a security the greater will be the price sensitivity.
b) Bond price changes can be measured by using modified duration.
c) It is discounted by one period yield to maturity. d) All these
92) The Relationship of modified duration can be defined as:
a) % change in price + (-) modified duration multiplied by yield change.
b) Yield change
c) Change in market price and change in interest d) None of these
93) What is Downside Risk?
a) It is a comprehensive measure of risk as it integrates sensitivity and volatility with the adverse effect of uncertainty.
b) This is the most reliable model.
c) Downside potential only captures possible losses ignoring profit potential. d) All these
94) What is Value at Risk?
a) It can be defined as the loss amount accumulated over a certain period that is not exceeded in more than a certain percentage of all time.
b) It is defined as the predicted worst case loss at a specific confidence level over a certain period of time assuming normal trading conditions.
c) Value at Risk model relies on a model of random changes. d) All these
95) A bank is having one day value at risk of Rs. 10 crore with 99 per cent confidence level what does it signify?
a) There is only one change in 100 that daily loss will more than 100 core under normal trading conditions.
b) There is one percent chance that the daily loss may exceed Rs. 10 crore
c) It does not estimate losses in abnormal situations d) All these
96) The features of the value at Risk are:
a) It measures potential loss in market value of a portfolio.
b) It uses estimated volatility and correlations with a given horizon.
c) It is measured with a given confidence interval. d) All these
97) The conditions for calculating value at risk are:
a) Volatility of price. b) Correlation of prices with respect of all other Assets/Liabilities in the portfolio.
c) Normal circumstances means that the value at risk can not be measured when market is
under abnormal conditions d) All these
98) What is yield volatility?
a) It is degree of variance in yield.
b) This is unaffected by time and duration.
c) It rises when the yield fails. d) All these
99) The price volatility is:
a) A degree of variance in price.
b) The yield does not effect the price volatility.
c) The time and duration affect the volatility substantially. d) All these
100) Which of the following steps are involved in calculating price volatility?
a) It is multiplication of yield volatility and Basis Point Value.
b) The above (a) is then multiplied by the yield.
c) The above (b) is divided by price. d) All these
101) The approach to calculate the value at risk are: a)

Covariance matrix method b) Historical simulation
c) Monte Carlo simulation d) Any of these

102) What are the basis parameters for calculating value at risk?
a) Holding period b) Confidence interval c) Historical time horizon d) All these

103) • The features of correlation approach are:
a) It can be applied only in normal distribution function.
b) It uses standard deviation estimates.
c) It is useful on providing first hand estimation. d) All these

104) Which of the following is relevant to correlation approach?
a) This depends on observed behaviour of market variables.
b) Greater frequency of small changes occurring within a standard deviation of the mean.
c) Lower frequency of changes that are quite manifest between two standard deviations.
d) All the above

105) How the historical simulation approach works?
a) The hypothetical profit and loss portfolio of current positions is estimated for everyday in the data sample.
b) The correlation among the exposures and the volatility are implicit in the historical price movements.
c) From the profit and loss values, the biggest gain and worst loss limits are determined.
d) All the above

106) The features of historical simulation approach are:
a) The approach applies the historical price movements directly.
b) 100 or more trading data is used.
c) It calculates change in the value of a position using the actual historical movements of
the underlying asset. d) All these

107) What is the impact of length of historical period chosen?
a) It affects the results.
b) If period chosen is too short it may not establish relationships between the various assets and within each asset class.
c) If the period is too long it may be too stale to predict the future. d) All these

108) The advantages of historical simulation approach are:
a) It does not require the user to make any explicit assumptions about correlations and the dynamics of risk factors.
b) The simulation follows every historical move.
c) (a) and (b) both d) None of these

109) What is Monte Carlo simulation approach?
a) It can deal with any pattern of market movements.
b) It has higher efficiency.
c) Once the particular distribution is identified, the simulation can take care of scientific
treatment. (d) All the above

110) The features of Monte Carlo simulation are:
a) It calculates the change in the value of portfolio
b) It uses a sample of randomly generated price scenario.

c) The user make certain assumptions d) All these

111) What are the assumptions required to be made in Monte Carlo simulation approach?

a) Correlation between Risk Factors b) Market structure

c) Volatility of Risk factors d) All these

112) Why value at risk is useful?

a) It translates portfolio exposures.

b) It aggregates and reports multi product multi market exposures into one number.

c) It meets external Risk management disclosure and expectation. d) All these

113) Which of the following is not an advantage of value at risk?

a) It is not a worst case scenario.

b) It is an important component of current best practices in Risk management.

c) It has a value as a probabilistic measure of potential losses. (d) None

114) Which of the following statements is correct regarding value at Risk?

a) It is used for decisions as to what business to do and what not to do.

b) It can not substitute sound management judgment and internal control methods.

c) It is used to measure and manage market Risks in trading and investment portfolio.

d) All the above

115) The features of volatility measurement are:

a) Value at Risk uses past data to compute volatility.

b) Arithmetic moving average from historical time series data is used to estimate volatility.

c) Exponential moving average method may also be used to estimate volatility.

d) All the above

116) What is Back Testing?

a) It is a process where model based value at Risk is compared with the actual performance of the portfolio.

b) The Testing is used to assess the accuracy of existing models.

c) It requires comparison with actual performance on a continuous basis for a given
period. (d) All the above

117) What is Stress Testing?

a) It is used to determine possible changes in the market value of a portfolio which could arise due to non-normal movement in one or more market parameters.

b) This involves identifying market parameters to stress, quantum of stress an determine time frame.

c) The above parameters are used on portfolio. d) All these

118) Which of the following techniques stress testing covers?

a) Simple sensitivity analysis b) Scenario analysis c) Extreme value theory
d) All these

119) The simple sensitivity test is:

a) A simple sensitivity test isolates the short term impact on a portfolio's value.

b) It works on predefined moves in a particular market risk factor_

c) (a) and (b) of the above d) None of these

120) What is scenario analysis?

a) It analyses the shocks which may affect number of market risk factors if an extreme even occurs.

b) It assesses potential consequences of a firm.

c) It can be based on historical event or hypothetical event. d) All these

121) The features of Extreme Value Theory are:

a) It is the statistical theory on the behaviour of the tails (very high and low potential values) of probability distribution.

b) It is more flexible.

c) It helps in better capture the risk of loss in extreme but possible circumstances.

d) All the above

122) The features of a good stress test are:

a) Be relevant to current position.

b) It considers changes in all relevant market rates.

c) Consider market liquidity d) All these

123) In which of the following manners the stress tests are used?

a) To manage funding risk. (b) Set limits for traders.

c) To determine capital changes on trading desk position d) All these

124) The steps to monitor and control the Risk include:

a) Policy guidelines limiting roles and authority.

b) Guidelines on portfolio size and mix.

c) Systems and procedures to capture all risks. d) All these

125) What is relevant to limits and triggers?

a) Sensitivity and value at Risk limits of trading portfolios are measured daily.

b) Approved management triggers or stop loss for all mark to market risk taking activities.

c) Fixing appropriate market risk limits for basis risk. d) All these

126) Which of the following is to be avoided to manage risk of trading liquidity?

a) In frequently traded instruments.

b) Instruments with unusual tenors

c) One side liquidity in the market. d) All these

127) Risk mitigation is:

a) Reduction in market risk which is achieved by adapting strategies that eliminate volatility of portfolio.

b) Risk mitigation measures reduce upside potential or profit potential.

c) The risk mitigation strategies which involve counterparty will always be associated with

counterparty risk. d) All these

128) Which of the following statements is correct regarding correlation measures?

a) Prices of two financial instruments which have perfect negative correlation would move exactly in opposite directions.

b) If financial instruments have negative correlation and it is not perfect prices would move in opposite direction but not be 'exact.

c)—The price volatility will be considerably low. d) All these

129) If a portfolio have fixed rate bond and an interest rate swap with long on variable rate of interest. What would be the consequences?

a) As market interest rates move up the portfolio will suffer loses on Bond.

b) The Bond price would come down due to upward movement in interest rates.

c) Swap valuation will increase. d) All these

130) The features of an option are:

a) It, is a method to hedge market risks.

b) An option provides a right and not obligation.

c) The cost involved in an option is called option premium. d) All these

131) Which of the following statements is correct regarding option?
a) A long position on call option confers a right to buy the underlying instrument.
b) A pre determined price is called strike rate/price.
c) A long position on put option confers a right to sell the underlying instruments.
d) All the above

132) A Bank expects fall in price of a security if it sells in the market. The bank may face the following Risk:
a) Asset Liquidation Risk b) Market Risk c) Operational Risk d) All these

133) An 8 year 8% semi annual bond has a basis point value of Rs. 125. The yield on the bond has increased by 5 basis points. What would be the effect?
a) A loss of Rs. 625 b) A loss of Rs. 1000 c) A profit of Rs. 625 d) None

134) 1 day value at risk of a portfolio is Rs. 500.000 with 95 percent confidence level. In a period of 6 months (125 working days) how many times the loss on the portfolio may exceed Rs. 500000:
a) 4 days b) 5 days c) 6 days d) 7 days

135) A Bank suffers loss due to adverse market movements of a security. The security was held beyond defeasance period. The Bank may suffer the following risk:
a) Market Risk b) Operational Risk c) Market Liquidation Risk d) Credit Risk

136) A security which was rated A plus migrates to A rating. The risk will be:
a) Market Risk b) Credit Risk c) Market Liquidation Risk. d) Operational Risk

137) A Bond which have remaining maturity of 5 years is presently yielding 6%. Its modified duration is 5 years. What would be its Mc Cauley's duration?
a) 5.05% b) 3.77% c) 5.30% d) 6.00%

138) The stress testing is needed for the following reasons:
a) It helps calibrating value at Risk model:
b) It assesses Risk due to abnormal movement of market parameters.
c) It is an additional Risk measurement tool.
d) It is more accurate than value at Risk method.

TEST YOURSELF : MCQ ON CREDIT RISK

139) The features of Credit Risk are:
a) It arises from lending activities of a Bank.
b) When Borrower does not pay either interest or principal as and when due for payment.
c) If the loan is demand loan, the Borrower fails to make payment as and when demanded.
d) All the above

140) The Credit Risk may arise from:
a) Direct lending
b) Not crystallization of liability under the guarantees
c) In case of securities if settlement is not affected d) All these

141) What is default Risk?
a) It is the potential failure of a Borrower to make promised payments.
b) -In case of default a fraction of the obligation is paid, it is called recovery rate.
c) The default may be partly or wholly. d) All these

142) The features of credit spread Risk are:
a) The risk may be due to worsening in credit quality.

b) This may result in widening of credit spread.
c) This is known as credit spread Risk or down grade Risk. d) All these
143) Which of the following statements is not correct?
a) Loans are usually marked to market.
b) Capital market portfolios are marked to market.
c) Default Risk and down grade Risk are transaction level Risks.
d) Risk associated with credit portfolio as whole is termed portfolio Risk.
144) Portfolio Risk has following components:
a) Systematic as instrinsic Risk b) Concentration Risk
c) (a) and (b) both d) None of these
145) The Systematic Risk is:
a) When portfolio Risk is reduced due to diversification.
b) When portfolios are diversified among the various market segments the risk is reduced to a minimum level. c) This is known as systematic Risk d) All these
146) The concentration Risk is:
a) When portfolios are concentrated in form of a particular segment it gets concentration Risk
b) If the particular segment does not perform well the portfolio will have concentration Risk.
c) This happens only when portfolio is not diversified and it has more weightage in respect
of a particular industry d) All these
147) Which of the followings is relevant to systematic Risk?
a) The Risk is associated with the economy.
b) If the economy does nto perform well, the portfolio will be affected.
c) When economy stagnates, the credit portfolio of Bank does not perform well.
d) All the above
148) What is Risk diversification?
a) The diversification takes place across the Trade and Borrowers.
b) Diversification occurs at the Borrower and geographical level both.
c) The theory applies to diversification is that different firms do not default at the same time.
d) All the above
149)Risk measurement consists of:
a) Measurement of Risk through credit rating.
b) Quantifying the Risk by estimating expected loan losses.
c) Estimating unexpected loan losses. d) All these
150) The features of credit Rating are:
a) It is a process to assess the capability of a Borrower to honour its financial commitments in future.
b) The process helps in deciding the price of loans and advances.
c) Defaults in credit portfolio of a Bank may also be estimated. d) All these
151) The guidelines of RBI on credit Rating are:
a) The Banks should apply credit Rating to the Borrower accounts and classify categorywise.
b) To develop and maintain necessary data on defaults of Borrowers.
c) The Bank may estimate expected defaults, expected contribution art;t requirements to maintain the portfolio. d) All these

152) Credit Rating models differentiate the Borrowers in terms of degree of stability:
a) The Sales volume b) Net profit c) Revenue generation d) All these
153) Which of the followings is not correct?
a) The profitability has direct affect on Rating.
b) A highly profitable firm may have higher level of uncertainties in revenue generation.
c) Less profitable firm may have more stable revenue generation.
d) Stability in revenue generation is an important aspect in developing a credit Rating
model.
154) What is Rating Migration?
a) It indicates change in the Rating of a Borrower over a period of time.
b) The Rating model used does not change.
c) It is useful when migration of large number of accounts of similar rating is observed.
d) All the above
155) Which of the following factors, a Rating model takes in the account?
a) The Risk drivers in the various areas have *been* included in the model.
b) The model meet the market standards.
c) (a) and (b) both d) None of the above
156) The popular credit Rating models
a) The Altman's Z score b) J.P. Morgan c) Credit Swiss d) All these
157) The instruments of credit Risk management transaction level are:
a) Risk Analysis Process b) Credit Appraisal Process
c) Credit Audit and Loan Review d) All these
158) The efficiency of credit Risk management can be improved by:
a) Identifying the credit quality of Borrowers objectively.
b) Increasing default analysis
c) Providing early warning signals for deterioration in credit Risk of Borrowers.
d) All the above
159) Bank's loan policy document should contain:
a) Loan Review Mechanism
b) Rating Standards and Benchmarks
c) Credit Approval Mechanism d) All these
160) To limit the credit Risk prudential limits may be specified in respect of:
a) Financial and profitability b) Credit exposure
c) Maturity profile of the loan book d) All these
161) What is Risk pricing?
a) It stresses on Risk based pricing of loans.
b) It helps in generation of adequate Risk adjusted return on Capital
c) The credit spread should take into account the expected loss rates and charges on Capital
d) All the above
162) The features of Risk return pricing strategy are:
a) Borrowers with weak financial position should be priced high.
b) Pricing of credit Risk should take into account the probability of default.
c) The pricing should be linked to credit Rating. d) All these
163) Which of the following activities are important for monitoring and control of rreri' -└tAk? ¯¯
a)¯Identification of portfolio credit weakness.
b) Measurement of specific risk associated with individual credit exposure.

c) Evaluate exposure distribution over Rating categories. d) All these
164) Which of the following is not an activity to monitor and control the Risk?
a) To set exposure limits to contain concentration Risk.
b) Deciding Risk pricing to individual Borrowers.
c) To follow value at Risk model.
d) To fix quantitative ceilings on aggregate exposure in specified Rating categories.
165) Which of the followings are important to maintain portfolio quality?
a) Quantitative ceilings on aggregate exposure.
b) Rating wise distribution of Borrowers in various industries.
c) Monitoring of exposure performance. d) All these
166) Which of the followings is relevant to maintain the quality of the portfolio's
a) To undertake portfolio reviews stress tests and scenario analysis.
b) To introduce discriminatory time schedule for review of Borrowers.
c) (a) and (b) both d) None of these
167) The external credit Risk factors are:
a) State of the economy b) Wide fluctuations in equity price
c) Foreign Exchange rate d) All these
168) The new and emerging opportunities for credit expansion are:
a) Pass through certificate b) Syndicated loans
c) Project finance d) All these
169) Which of the followings new products have different risks:
a) Secondary loan trading b) Securitisation
c) Credit derivatives d) All these
170) The objective of Loan Review Mechanism are:
a) Identifying loans with credit weaknesses and initiate timely action.
b) To evaluate portfolio quality.
c) To ensure adequate provision for loss assets d) All these
171) Which of the following is relevant to Loan Review Mechanism?
a) To ensure compliance of loan policies and procedures
b) To supply information on credit Administration
c) (a) and (b) both d) None of these
172) The Loan Review Mechanism should focus on:
a) Accuracy and timely credit Ratings.
b) Compliance of internal systems and procedures
c) Post sanction monitoring and follow-up d) All these
173) The Loan Review Mechanism should not focus on:
a) Sufficiency of loan documentation
b) Extent of deposits held with the Bank by a Borrower
c) Portfolio quality.
d) Suggesting improvements in portfolio quality.
174) The quality of credit decisions should be evaluated with reasonable time say:
a) 1 month b) 2 months c) 3 to 6 months d) once in a half year
175) The features of credit Risk mitigation are:
a) It is a process through which credit Risk is reduced.
b) Credit review mechanism techniques reduce credit Risk.
c) Advantage of Risk mitigation must be weighed against the Risk acquired.
d) All the above
176) How the credit Risk can be mitigated?

a) Exposure collateralized by first priority claim.
b) Buying a credit derivative to offset credit Risk.
c) Asset securitization can also be used to reduce the credit Risk. d) All these
177) The process of securitization is:
a) It is a process where financial securities are issued against the cash flow generated from a pool of Assets.
b) A special purpose vehicle is created for the purpose
c) Special purpose vehicle issues financial securities to service interest and payments.
d) All the above
178) The securitization include Asset backed securities like:
a) Mortgage loans b) Currency swaps c) Credit derivatives d) All these
179) Which of the followings is correct regarding securitization?
a) The oriainated Bank transfers the ownership of such Assets to the securitized company_
b)The original Bank transfers credit Risk to the investors.
c)The securitized company may raise resources from the market d) All the above
180) What are credit derivatives?
a) When credit Risk from Assets are unbundled into a commodity and traded in the market they are called credit derivatives. b) Credit derivatives transfer risk in the credit Assets without transferring underlying Asset, c)They are Off Balance Sheet financial instruments. d) All these
181) The motives for credit derivatives for protection buyers are:
a) Transferring credit Risk without transferring the Credit Asset.
b) Hedging against credit Risks. -
c) Better portfolio management by diversification. d) All these
182) Motives for credit derivatives for protection sellers are:
a) Yield enhancement b) Speculation c) Diversification of credit Risk, d) All these
183) The credit linked notes are:
a) They are Off Balance Sheet items.
b) They convert credit derivatives into Capital market instruments.
c) Special separate company formed for this purpose can raise money from the market by issuing credit linked notes. d) All these
184) Which of the followings is not a credit Risk?
a) Default Risk b) Credit Spread Risk c) Intrinsic Risk d) Basis Risk
185) Risk of a portfolio with over exposure in steel sector will be:
a) more than systematic Risk b) equal to intrinsic Risk
c) Less than intrinsic Risk d) None of these
186) Which of the following statements is correct?
a) Credit Risk measurement is based on credit Rating.
b) Effective monitoring and control is needed to control lending Risk.
c) Loan Review Mechanism is an effective tool for constantly evaluating the quality of loans. d)All the above
187) The Risk that arises due to worsening of credit quality is:
a) Intrinsic Risk b) Credit Spread Risk
c) Portfolio Risk d) Counterparty Risk
188) Which of the following skills are necessary for effective management of credit portfolio?
a) Knowledge of credit Rating models.
b) To maintain necessary data on defaults of Borrowers rating category wise.

c) Both (a) and (b) d) None of these

189) Which of the following models combines five financial ratios using reported accounting information and equity values to produce an objective measure of Borrowers financial position?

a) Altman's Z score b) Credit Metrics c) Credit Risk Plus d) All these

190) A transaction where financial securities are issued against eh cash flow generated from a pool of Assets is called: a) Securitisation b) Credit Default Swaps c) Credit Linked Notes d) Total Return Swaps

191) Under the process of securitization the Rights of original lender are transformed in form of: a) Securitised company b) Investors c) Special purpose vehicle d) None

192) The features of total return swaps are:

a) The protection buyer swaps with the protection seller total actual return on an asset in return for premium.

b) The premium is arrived at by adding a spread to a reference rate like LIBOR.

e) The protection seller is able to synthetically create an exposure to the reference asset without actually lending to it. d) All these

TEST YOURSELF : MCQ ON OPERATIONAL RISK

193)The operational Risk may arise on account of failed or inadequate:

a) internal processes b) people and systems c) external events d) All

194)Operational Risk on account of people oriented causes may include:

a) negligence b) incompetence c) insufficient training d) All these

195)The Transaction Based Causes in the operational Risk may include:

a) Business volume fluctuation b) Organisational Complexity

c) Product Complexity d) All these

196)Operational control based causes will include the following:

a) Inadequate segregation of duties b) Lack of management supervision

c) Inadequate procedures d) All these

197)Technology oriented causes under operational Risk will not include the following:

a) Poor technology b) Lack of management supervision

c) Lack of automation d) Poor design development

198) Effect based operational Risk may include the following:

a) Legal Liability b) Regulatory compliance and taxation penalties

c) Restitution d) All these

199) The following events may result in operational Risk:

a) Internal Fraud b) External Fraud

c) Employment practices and work place safety d) All these

200) Operational Risk may arise on account of the following events:

a) Damage to physical Assets b) Business disruption

c) Execution delivery and process management d) All these

201) How many principles of Basel II document are relevant to organization level?

a) 10 b) 3 c) 7 d) 2

202) The operational Risk management policy should cover the following:

a) Operational Risk management structure b) Role and Responsibilities

c) Operational Risk management processes d) All these

203) The process of operational Risk management include:

a) Identification of Risk/control.

b) Implementation of Qualitative Approach to assess operational Risk_

c) To analyse operational Risk profile d) All these

204) Which of the following activities are relevant to operational Risk control practices?

a) Collection of operational Risk data.

b) Adequate feedback mechanism

c) Management and control of large exposures d) All these

205) The operational Risk can be measured through:

a) the Basic indicator approach b) the Standardised approach

c) Advanced measurement approach d) All these

206) The Feature of Basic Indicator Approach are:

a) A Bank must hold capital for operational Risk.

b) The amount of Capital should be equal to 15% of positive annual gross income.

c) Gross income is defined as net interest income plus net non-interest income

d) All the above

207) Under the standardized approach, Banks divide their business activities into following Business lines: a) 2 b) 8 c) 10 d) 12

208) What is the process of Standardised Approach?

a) Gross income is a broad indicator under each business line_

b) Gross income serves as a scale of Business operations.

c) The capital charge for each business line is calculated by multiplying gross income by a

factor assigned to that business line. d) All these

209) Which of the following Business lines, Beta Factor is 18%?

a) Corporate Finance b) Trading and Sales

c) Payments and Settlement d) All these

210) Which of the followings is correct regarding Business Line Beta Factors?

a) Retail Banking and Asset Management 12% b) Retail Brokerage 12%

c) Commercial Banking 15% d) All these

211) The steps involved in operating profiling are:

a) Identification and quantification of operational Risks.

b) Identification of Risk concentration.

c) Formulation of Bank's strategy for operational Risk management d) All these

212) Which of the followings is relevant for estimation of level of operational Risk'?

a) Probability of occurrence b) Potential financial impact

c) Impact of internal controls d) All these

213) Estimated impact of internal control depends on:

a) Historical effectiveness of internal controls.

b) Estimated impact of internal controls on Risks.

c) The above is estimated as fraction in relation to total control which is valued at 100% All the above

214) Estimated level of operational Risk will be calculated as:

a) Estimated probability of occurrence

b) Multiply (a) by estimated potential financial impact.

c) Multiply (b) by estimated impact of internal controls

d) All the above steps are considered

215) How operational Risk mitigation could be achieved?

a) Insurance cover may minimize the Risk.

b) Capital Allowance under insurance is available.

c) Qualitative approach in operational frame work would also be useful. d) All these
216) What is scenario analysis?
a) It involves expert opinion in conjunction with external data.
b) It evaluates exposure to high severity events.
c) The Approach uses the knowledge and experience of Risk Management experts.
d) All the above
217) Scenario analysis should be used:
a) To assess the impact of deviations from the correlation assumptions.
b) To evaluate potential losses arising from multiple simultaneous operational Risk loss events.
c) Both (a) and (b) d) Only (a)
218) Integrated Risk Management is:
a) To manage all risks that are associated with all the activities in an organization
b) The ultimate impact of all the activities lies on Revenue generation.
c) The sum total of all risk impacts is a crucial factor. d) All these
219) In a Bank integrated Risk includes:

a) Liquidity Risk b) Interest Rate Risk c) Market and Credit Risk d) All these
220) Which of the following is relevant to integrated Risk?
a) Total Risks of an organization are also the net effect of all Risks associated with an organization.
b) Net effect of all Risks may not be the same due to diversification effect of Risks.
c) Integrated Risk implies coordinated approach across various Risks. d) All these
221) Which of the following is correct regarding integrated Risk?
a) Risks add to instability
b) Higher the Risk more is instability
c) Risk adjusted returns on capital assumes importance in integrated Risk management
d) All the above
222) The significance of integrated Risk management is:
a) It integrates organizations internal and external business processes.
b) It applies Standard Risk Terminology.
e) It facilitates reporting which helps in taking optional Risk decisions.
d) All the above
223) The features of integrated approach for Risk management are:
a) The process of supervising risk exposure gets centralized
b) Organization can decide how best to transfer Risk
c) It is an ongoing Business process d) All these
224) Which of the following is not an advantage of integrated Risk management?
a) Day to day operational activities are not designed
b) It facilitates greater transparency for the investors.
c) Revenue and earnings are enhanced.
d) It controls downward Risk potential.
225) The Business challenges to manage integrated Risk are: a) Globalization of market.
b) Concern about business continuity and operational reliability
c) Fast technological changes d) All these
226) Which of the following are limitations in identifying the issues in integrated Risk management?

a) Cultural limitations b) Business unit boundaries
c) (a) and (b) of the above d) None of these

227) What is the utility of integrated Risk management for a Bank?
a) It helps a Bank to relate capital reserves more effectively.
b) It helps in quantifying the amount of capital required to absorb unexpected losses.
c) It contributes to better business performance. d) All these

228) Risk Adjusted Rate of capital can be determined:
a) By dividing a unit's net income by its economic capital
b) It can be achieved by producing a profitability which is common across the Business units.
c) Both (a) and (b) d) None of these

229) The Risk Adjusted Rate of capital can also be used to:
a) Evaluate pricing decisions
b) Product profitability
c) Differential between relationships that makes money for an institution and for those do not. d) All the above

230) The integrated Risk management process consists of:
a) Integration of Risk management strategy
b) Assigning Accountability to the concerned executive
c) Development of Risk management system d) All these

231) The process of integrated Risk limits will be helpful in:
a) Communication Risk appetite in the organization
b) Maintenance of overall exposure at acceptable level
c) Affecting delegation of authority d) All these

232) The impact of Basel II recommendations on integrated Risk management would be:
a) Significant reduction in capital requirement
b) Lower capital charges
c) Compliance with expected standards of identifying measuring and controlling Risk
d) All the above

233) Which of the followings is not operational Risk?
a) Defaults b) External Events , c) People and Systems
d) Inadequate internal processes

234) Which of the followings Basel II recommended for:
a) Cause Based Classification b) Event Based Classification
c) Effect Based Classification d) All these

235) The advantages of integrated Risk framework are:
a) It relates Capital and Reserves more effectively to their actual level of Risk exposure.
b) To evaluate pricing decisions
c) To evaluate product profitability d) To affect Risk Transfer decisions

236) Measurement of operational Risk for the purpose of capital allocation can be done through:
a) Basic Indicator Approach b) Standardised Approach
c) Advanced Measurement Approach d) Any of these

237) A general approach for estimating the level of operational Risk can be based on:
a) Estimated profitability of concurrence b) Estimated potential financial impact
c) Estimated impact of internal controls d) All these

238) A proper management of operational Risk would result in:
a) Lesser Risk Capital . b) Competitive edge c) (a) and (b) both
d) None of these
239) Given the following information, what would be level of operational Risk?
Probability of occurrence = 4, Potential financial impact = 4, Impact of internal controls = 0%
a) 4 b) 2 c) 0 d) 3
240) What is the Beta factor for corporate finance under standardized approach?
a) 15% b) 18% C) 12% d) 10%
241) Systematic Risk is the Risk of:
a) Failure of a Bank
b) Failure of entire Banking system
c) Failure of two Banks simultaneously
d) Where a group of Banks fail due to inter-relation effect.
242) The Central Bank Governors of G-10 countries participate in the Basel committee on Banking supervision. The members are
a) 13 b) 12 c) 11 d) 10
243) 1988 Capital Accord Framework accounted for:
a) Credit Risk b) Market Risk c) Defined capital component d) All these
244) The purpose of Back Testing is: a) To test a model b) To compare model results and actual performance, c) To record performance d) All these
245) Under Basel II Capital requirements under the accord is:
a) The maximum capital that is required to be maintained
b) Minimum capital to be maintained
c) Both (a) and (b) d) None of these
246) Which of the following impacts regulatory framework has on Risk management of Banks?
a) It devices constraints and guidelines which promote Risk management practices
b) The regulations stimulates development
c) It also enhances the Risk management process of Banks d) All these
247) Regulations on Risk management are also helpful in:
a) Defining Risk in a better way
b) Creating better methodologies for measuring Risk
c) Both (a) and (b) d) None of these
248) Which of the followings is the basic concept for imposing regulatory measures for Risk management?
a) Capital adequacy principle and Risk based capital
b) Bank's profitability c) Bank's Business performance d) All these
249) The regulatory measures on Risk management focus on:
a) Promoting sound business and supervisory practices.
b) Controlling and monitoring of systematic Risk
c) Protecting interest of depositor's d) All these
250) What is the Systemic Risk?
a) It is the Risk of failure of whole Banking system.
b) Individual Bank's of failure is one of the major sources of systematic Risk.
c) This takes place when there are high inter-relations between Banks through mutual lending and borrowing d) All these
251) A need for Regulations on Risk management is more important due to:
.a) The process of deregulation increased the competition which enhances more Risk.

b) Competition also promoted globalization
c) Risk controls are necessary for maintaining level playing field. d) All these

252) The Regulations on Risk management at international level have been taken up by:
a) World Bank b) Basel Committee on Banking supervision
c) Both (a) and (b) d) None of these

253) Basel Committee on Banking supervision works under:
a) ADB b) Bank for International Settlement c) World Bank
d) International Finance Corporation

254) The modus operandies of Basic committee on Banking supervision are:
a) It is instrumental in standardizing bank regulations across jurisdictions.
b) It defines the role of regulations
c) The committee meets 4 times in the year d) All these

255) When was the Basel accord took place in post deregulation era:
a) 1988 b) 1991 c) 1975 d) 1972

256) 1988 Basel Accord was enforced in:
a) G-10 Countries in 1992 b) Asian Countries in 1991
c) At International Level in 1988 d) none of these

257) Which of the following tier-1 of core capital consists?
a) Equity b) Disclosed Reserves c) (a) and (b) both, d) None of these

258) Tier-2 or supplementary capital consists:
a) Undisclosed Reserves b) Assets Revaluation Reserve
c) General Provisions d) All these

259) Which of the followings is not included in tier-2 capital of a Bank?
a) Reserves for bad and doubtful debts b) Paid up capital
e) Hybrid capital instrument d) Subordinated Debt

260)" The amendment in 1988 Basel Accord in 1996 basically focused on:
a) Explicit capital cushion for the price Risk to which Banks are exposed
b) Tier-I capital c) Both (a) and (b) d) None of these

261) 1996 Basel Accord amendment was implemented in:
a) 1996 b) 1998 c) 1997 d) 2000

262) The salient features of 1996 Basel Accord are:
a) To allow banks to use proprietary in house models for measurement of market Risk
b) Banks must compute value at Risk daily
c) Banks to use back testing d) All these

263) Which of the followings is not the feature of 1996 Basel Accord?
a) Tier-3 capital by issuing short term subordinated debt
b) Amendment to Tier-1 capital
c) To implement standardized approach using the Building Block Approach
d) Banks to segregate trading book and mark to market portfolios.

264) Which of the followings are basic principles of Basel Accord to control International supervisory coverage?
a) No foreign Bank should escape supervision
b) Supervision should be adequate
c) Both (a) and (b) d) None of these

265) The 1988 Basel Accord was revised keeping in view the following objectives:
a) To strengthen the international Banking system.
b) To adopt strong Risk management practices.

c) To maintain consistency in capital adequacy practices d) All these
266) The Revised Basel II Accord has been released on:
a) 26.6.2004 b) 1.12.2003 c) 15.3.2002 d) None of these
267) The main features of revised Basel II Accord are:
a) More Risk sensitive capital requirement.
b) Risk treatment on securitization ,c) It provides different options for determining capital requirement for credit and operational Risk. d) All these
268) Which of the followings is not true regarding revised Basel II Accord?
a) Capital requirement under new Accord is the minimum
b) Capital requirement includes liquidity Risk
c) It promotes stronger Risk management practices d) All these
269) Minimum capital requirement is:
a) Capital for Credit Risk b) Capital for Market Risk
c) Capital for Operational Risk d) All these
270) Capital for credit Risk should be measured based on following Approaches:
a) Standardized Approach
b) Internal Rating Based Foundation Approach
c) Internal Rating based Advanced Approach d) All these
271) Capital of market Risk be measured through:
a) Maturity Method b) Duration Method c) Internal Models Method d)All these
272) Capital for operational Risk can be measured by adopting:
a) Basic Indicator Approach b) Standardised Approach

c) Advanced Measurements Approach d) All these
273) Supervisory Revenue process under Basel II Accord consists:
a) Risk Assessment Evaluation
b) Maintenance of minimum capital
c) Ensuring soundness and integrity of Bank's internal process to assess capital adequacy d) All the above
274) According to Basel II Revised Accord Market discipline focuses on:
a) More disclosures b) Core disclosures and supplementary disclosure
c) Half yearly disclosures d) All these
275) According to revised Basel II Accord, capital requirement will be determined:
a) Minimum Capital Ratio (8%)
b) Above (a) should be multiplied by credit Risk plus market Risk plus operational Risk.
c) Only (a) of the above d) All these
276) Capital charge for credit Risk under standardized approach has the following features:
a) It has fixed Risk weights corresponding to each supervisory category
b) Banks to use external credit assessments to enhance Risk sensitivity.
c) The Risk weights are differentiated based on external credit assessment
d) All the above
277) The Standardised Approach to capital charge for credit Risk focuses on:
a) Loans considered as past due should have a Risk weight of 150 per cent.b) Uniform weight of 57 per cent on specified portfolios
c) Lower Risk weights for retail exposures d) All these
278) The features of Internal Rating Based Approach are:
a) It is innovative approach to measure capital requirement for credit Risk

b) It complies the capital requirement of each exposure directly before computing the Risk weighted assets
c) Capital charges are computed based on probability of default, loss given the default
and exposure at default d) All these
279) The conditions under internal rating based approach are:
a) **It** does not allow individual Bank to determine the elements for calculation of capital requirement.
b) Capital charges are determined through the combinations of quantitative inputs
c) It stresses on Banks internal assessment of key Risk drivers as primary inputs to the
capital calculations d) All these
280) Under Internal Rating Based Approach the Risk weights are calculated on the following parameters:
a) Probability of default by Borrower over a given time horizon.
b) Loss exposure if default occurs.
c) Remaining economic maturity of the exposure d) All these
281) According to revised Basel II Accord the supervisory review process should focus on:a) Sound Capital Assessment b) Proper Monitoring and Reporting
c) Frequent Internal Control Review d) All these
282) The principle 2 of supervisory review process of Basel 11 Accord specifies on:
a) The supervisors should ensure compliance of regulatory capital ratios.
b) Supervisors should initiate appropriate action if the results are not satisfied.
c) Both (a) and (b) d) None of these
283) Effective supervision can be achieved through:
a) On site inspections b) off site review
c) review of work done by external auditors d) All these
284) How many principles supervisory review process have under Basel II Accord?
a) 2 b) 3 c) 4 d) 8
285) The disclosure norms under market discipline should focus on:
a) Disclosure will defined on legal authority and accounting standards of each country.
b) Disclosure norms should match with internal financial reporting standards
c) Both (a) and (b) d) None of these
286) Capital charge for credit Risk requires inputs under Advanced Internal Rating Based Approach. The inputs are provided by:
a) Bank b) Supervisor c) Basel committee on Banking Supervision d)-All these
287) Basel **I** was modified to link the Risk with capital because:
a) Credit Risk assessment under Basel I was not risk sensitive
b) It promotes financial decision making on the basis of regulatory constraints
c) It did not recognize the role of credit Risk mitigant d) All these
288) The Basel 11 Accord is based on following pillars:
a) Minimum Capital requirement b) Supervisory Review Process
c) Market Discipline d) All these
289) Which of the followings is most relevant to Risk management process in Banks?

a) Supervision of large Borrowed Accounts b) Asset Liability Management
c) Management of non-performing Assets d) All these

ANSWER : TEST YOUR SELF – MARKET RISK , CREDIT RISK AND OPERATIONAL RISK

1	D	2	D	3	D	4	A	5	B	6	D	7	D	8	D	9	D	10	A
11	D	12	D	13	B	14	D	15	C	16	D	17	B	18	D	19	D	20	D
21	D	22	A	23	D	24	D	25	D	26	D	27	D	28	C	29	D	30	D
31	D	32	B	33	D	34	D	35	D	36	A	37	D	38	B	39	D	40	D
41	D	42	D	43	D	44	D	45	D	46	D	47	A	48	B	49	D	50	A
51	D	52	D	53	D	54	D	55	D	56	B	57	D	58	C	59	A	60	B
61	A	62	A	63	B	64	A	65	C	66	D	67	A	68	D	69	D	70	D
71	C	72	D	73	D	74	D	75	D	76	B	77	D	78	B	79	D	80	D
81	D	82	D	83	D	84	D	85	D	86	D	87	D	88	D	89	B	90	D
91	D	92	A	93	D	94	D	95	D	96	D	97	D	98	D	99	D	100	D
101	D	102	D	103	D	104	D	105	D	106	D	107	D	108	C	109	D	110	D
111	D	112	D	113	A	114	D	115	D	116	D	117	D	118	D	119	C	120	D
121	D	122	D	123	D	124	D	125	D	126	D	127	D	128	D	129	D	130	D
131	D	132	A	133	A	134	C	135	C	136	B	137	C	138	B	139	D	140	D
141	D	142	D	143	A	144	C	145	D	146	D	147	D	148	D	149	D	150	D
151	D	152	D	153	A	154	D	155	C	156	D	157	D	158	D	159	D	160	D
161	D	162	D	163	D	164	B	165	D	166	C	167	D	168	D	169	D	170	D
171	C	172	D	173	B	174	C	175	D	176	D	177	D	178	D	179	D	180	D
181	D	182	D	183	B	184	D	185	A	186	D	187	B	188	A	189	A	190	A
191	A	192	D	193	D	194	D	199	D	200	D	201	C	202	D	203	D	204	D
205	D	206	D	207	B	208	D	209	D	210	D	211	D	212	D	213	D	214	D
215	D	216	D	217	C	218	A	219	D	220	D	221	D	222	D	223	D	224	A
225	D	226	C	227	D	228	A	229	D	230	D	231	D	232	D	233	A	234	B
235	A	236	D	237	D	238	C	239	A	240	B	241	B	242	A	243	D	244	B
245	A	246	D	247	C	248	A	249	D	250	A	251	D	252	B	253	B	254	D
255	A	256	A	257	C	258	D	259	B	260	A	261	B	262	D	263	B	264	C
265	D	266	A	267	D	268	B	269	D	270	D	271	D	272	D	273	D	274	D
275	B	276	D	277	D	278	D	279	D	280	D	281	D	282	C	283	D	284	C
285	A	286	A	287	D	288	D	289	B										

CASE STUDIES / CASELETS ON RISK MANAGEMENT

Case Studies on Risk Identification

Case No: 1

A Gujarat based cooperative bank permitted loans amounting to Rs.1500 cr to the group companies of M/s Patel and Shah Limited, against overpriced shares of group companies. The following modus operandi was followed by the bank in disbursing these loans:

The bank will issue pay orders to the borrower without having any real cash balance in their account or without ensuring funding requirements as necessary in case of pre-paid instruments. M/s Patel and Shah Limited was having an account with bank B at a branch in Ahmedabad. Bank B discounted the pay order issued by the cooperative bank amounting to Rs.112 cr and presented these through clearing house. But *the* cooperative Bank failed to honour the pay order due to lack of fund. Resultantly, the pay orders were dishonoured. The clearing house regulator put embargo on the cooperative Bank.

Bank B is still to recover Rs.90 cr form M/s Patel and Shah Limited out of total of Rs.112 cr.
Later on the investigations revealed that on the day of failure to make payment by the cooperative Bank, 65% of the pay orders discounted by Bank B belonged to the cooperative Bank.
Bank B now hold its manager responsible for inadequate management control.
It is also found that around 65% of total loans given by the said cooperative Bank were restricted to 12 entities.
The collapse of the said cooperative Bank had a chain reaction in other cooperative banks.
Based on the above facts, answer the following questions:
01 Bank B's loss of Rs.90 *or* in discounting the pay orders is falls under:
a) credit risk
'b) operational risk
c) market risk
d) combination of credit risk and operational risk
02 Cooperative Bank's outstanding loans to M/s Patel and Shah Limited group was more than 38% of their capital funds. Such high exposure to a single group by a bank is against the regulatory guidelines to avoid:
a) concentration risk b) systematic risk
c) funding risk d) reputation risk
03 RBI is hesitant, for the time being to put embargo or ordered liquidation of the said cooperative Bank, as it could lead to possible:
a) legal risk b) systemic risk
c) counterparty risk d) liquidity risk
04 As per existing guidelines of RBI, the cooperative Bank was required to disclose their exposure to capital market under the heading of:
a) segment reporting
b) transaction with related parties
c) exposure to sensitive sectors
d) maturity pattern of assets and liabilities
Ans- 1-d 2-a 3-b 4-c

Explanations:
Qua-1: Credit risk because it involves borrowing. Operational risk because of staff negligence.
Que-2: Major portion of the advances relate to one group.
Que-3: Systemic risk means the risk of failure of a banking system due to failure of a major bank.
Que-4: Banks are submitting information to RBI on sensitive sector advances such as capital market exposure, commodity exposure etc.

CASE STUDIES ON ASSET LIABILITY MANAGEMENT

Case-1

As per RBI guidelines on ALM, capital and reserves are to be placed in over 5 years bucket, Savings Bank and Current Deposits may be classified into volatile and core portions. Savings Bank (10%) and Current (15%) Deposits are generally withdrawable on demand. This portion may be treated as volatile. While volatile portion can be placed in the time bucket 14 days, the core portion may be placed in over 1-3 years bucket. The term deposits are to be placed respective maturity buckets.
Capital — Rs. 1180 cr, Reserves — Rs. 12000 cr, Current account — Rs. 1000 cr, Saving Bank — Rs. 4000 cr, Term deposits 1 month maturity bucket — Rs. 400 cr, 1 to less than 3 months maturity bucket Rs. 800 cr, 3 months to less than 6 months maturity bucket — Rs. 1200 cr, 6 months to less than 12 maturity bucket Rs. 2000 cr, 1 year to less than 3 years maturity bucket — Rs. 1200 cr, 3 years to less than 5 years maturity bucket — Rs. 600 cr and above 5 years maturity bucket — Rs. 800 cr. Borrowing from RBI — Rs. 400 cr.
Based on the given information, answer the following questions:
01 What is the amount of current account deposit that can be placed in 14 days bucket:
a) Rs. 100 cr b) Rs. 150 cr c) Rs. 200 cr d) Nil
02 What is the amount of saving bank deposit that can be placed in 14 days bucket:
a) Rs. 100 cr b) Rs. 200 cr c) Rs. 300 cr d) Rs. 400 cr
03 What is the amount of current account deposit that can be placed in 1-3 years bucket:

a) Rs. 100 cr b) Rs. 400 cr c) Rs. 800 cr d) Rs. 900 cr

04 What is the amount of saving bank deposit that can be placed in 1-3 years bucket:

a) Rs. 4000 cr b) Rs. 3600 cr c) Rs. 3200 cr d) Rs. 3000 cr

05 What is the total of amount of term deposit that will be placed in various maturity buckets up to less than 12 months;

a) Rs. 2400 cr b) Rs. 2800 cr c) Rs. 3200 cr d) Rs. 4400 cr

Answers: 1-b 2-d 3-d 4-b 5-d

Explanations:

Que-1: Volatile portion of 15% to be placed in this bucket. Hence = 1000 x 15% = 150 cr **Que-2:** Volatile portion of 10% to be placed in this bucket. Hence = 4000 x 10% = 400 cr **Que-3:** Non-volatile portion of 90% to be placed in this bucket. Hence = 1000 x 90% = 900 cr **Que-4:** Non-volatile portion of 90% to be placed in this bucket. Hence = 4000 x 90% = 3600 cr **Que-5:** 400+800+1200+2000 = 4400 cr

Case-2

International Bank has following assets and liabilities in its balance-sheet as on Mar 31, 2010:

Capital — Rs. 4000 cr, Reserves — Rs. 24000 cr, Current accounts — Rs. 120000 cr, Saving *Bank* accounts — Rs. 120000 cr, Term deposits — Rs. 120000 cr, Borrowing from RBI — Rs. 12000 cr, cash balances — Rs. 27600 cr, balances with other banks — Rs. 60000cr, investment in securities — Rs. 60000 cr, bills payable — Rs. 80000 cr, cash credit — Rs. 80000 cr, term loans — Rs. 80000 cr and fixed assets — Rs. 12400 cr. Total assets and total liabilities = Rs. 400000 cr. The term loans have fixed rate of interest. Based on this information, answer the following questions.

01 What is the amount of interest rate sensitive assets:

a) Rs. 252000 b) Rs. 320000 c) Rs. 360000 d) Rs. 400000

02 What is the amount of interest rate sensitive liabilities:

a) Rs. 252000 b) Rs. 320000 c) Rs. 360000 d) Rs. 400000

03 In this case, how much and what type of gap in rate sensitive assets and liabilities, the bank is having: — -

a) Rs. 108000 cr, Negative gap b) Rs. 108000 cr, Positive gap

c) Rs. 120000 cr, negative gap d) Information is inadequate

04 What is the amount of Tier-1 capital of the *bank:*

a) Rs. 4000 cr b) Rs. 24000 cr c) Rs. 28000 cr d) Inadequate information

Answers: 1-c 2-a 3-b 4-c

Explanations:

Que-1: Assets other than cash and other assets are rate sensitive. Hence 400000 — 27600 **Q**

que-2: Liabilities other than capital, reserves and current accounts are rate sensitive 400000 4000 — 24000 --120000 = Rs. 252000 cr

Que-3: Interest sensitive assets are more than interest sensitive liabilities i.e. 360000 Hence, there is positive gap.

Que-4: Tier-1 capital comprises reserves and capital. Hence 4000 + 24000 = 28000 cr

Case-3

The bank-wise maturity profile of select deposit category of banks in %age terms of select maturity buckets, as on Mar 31, 2010 is as under: (figures in %age)

Liability/Asset	(PSU Banks	Old Private	New Pvt Bank	[Foreign Banks
Deposits	100	100	100	100
Up to 1 year	33	54	52	44
Over 1 yr to 3 years	37	33	44	44
Over 3 year to 5 years	13	6	3	4
Over 5 years	17	7	1	8

On the basis of given information, answer the following questions:

01 There is decline in rate of interest of 2% for a period up to 1. year. The bank group which will gain most is:

a) PSU Banks b) Old Private Banks

c) New Private Banks d) Foreign Banks

02 There is decline in rate of interest of 2% for a period up to 1 year. The bank group which will gain least

is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
03 There is increase in rate of interest of 1% for deposit with a period above 1 *year* to 5 *years*. The bank group which will be most affected adiersely is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
04 There is increase in rate of interest of 1% for deposit with a period above 1 year to 5 years. The bank group which will be list affected adversely is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
05 The *bank* group which is more relying on long term deposits above 3 years:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
Answers: 1-b 2-a 3-a 4-b _5-a
Explanations:
Que-1: Old private banks are dependent up to 54% deposits in up to 1 year category. Hence they gain most. **Que-2:** Public sector banks have the lowest amount of deposit in this category 33%. Hence they gain least. **Que-3:** PSU banks have 50% of their deposit in this category, which is highest in all the 4 bank groups. Hence they are affected most.
Que-4: Old private banks have 39% of their deposits in this category which lowest. Hence they are least affect. **Que-5:** PSU banks are having 30% of their deposits in this category, which is highest.

Case- 4

The bank-wise maturity profile of borrowing of banks in %age terms of select maturity buckets as on Mar 31, 2010 is as under☹ Figures in %age)

Liability/Asset	PSU Banks	Old Private	New Pvt Bank	Foreign Banks
Deposits	100	100	100	100
Up to 1 year	81	84	51	84
Over 1 yr to 3 years	15	3	45	11
Over 3 year to 5 years	2	6	2	3
Over 5 years	2	7	2	2

on the basis of given information, answer the following questions
01 There is increase in rate of interest of 2% for a period over 5 years. The bank group which Will lose most is:a) PSU Banks b) Old Private Banks c) New Private Banks d) Foreign Banks
02 There is increase in rate of interest of 2% for a period over 1 year up to 3 years. The bank group which will lose most is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
03 *There* is decrease in rate of interest of 0.5% for a period of over 3 years to 5 years. The bank group which will *gain* most is: _
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
04 There is decrease in rate of interest of 0.5% for a period of up to 1 year. The bank group which will gain least is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
05 The bank group which is depending most on over 3 *years'* borrowing is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
Answers: 1-b 2-c 3-b 4-c 5-b
Explanations:
Que-1: Old private banks carry the largest %age borrowing of 7% in this bucket. Hence highest cost increase. **Que-2:**

New private banks carry the largest %age borrowing of 45% in this bucket. Hence highest cost increase.
Que-3: Old private banks carry the largest %age borrowing of 6% in this bucket. Hence highest cost decrease. **Que-4:** New private banks carry the smallest %age borrowing of 51% in this bucket. Hence lowest cost decline.
Que-5: Old private banks carry the largest %age borrowing of 13% in this bucket.

Case- 5

The bank-wise maturity profile of select loans and advances banks in %age terms of select maturity buckets as on Mar 31, 2010 is as under: (figures in %age)

Liability/Asset	PSU Banks	Old Private Banks	New Pvt Bank	Foreign Banks
Deposits	100	100	100	100
Up to 1 year	39	42	42	54
Over 1 yr to 3 years	37	32	31	18
Over 3 year to 5 years	11	6	12	4
Over 5 years	13	20	15	24

01 There is increase in rate of interest of 0.5% for a period up to 1 year. The bank group which will gain most is:
a) PSU Banks b) Old Private Banks
c) New Private Banks V Foreign Banks
02 There is increase in rate of interest of 0.5% for a period up to 1 year. The bank group which will gain least is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
03 There is decrease in rate of interest of 1.5% for a period of above 1 year to 3 years. The bank group which will lose least is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
04 There is *decrease* in rate of interest of 1.5% for a period of above 1 year to 3 years. *The* bank group which will lose most is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
05 If there is upward movement in interest rare scenario for loans, the bank group having highest %age of loans due for repricing for up to one year term is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
Answers: 1-d 2-a 3-d *4-a* **5-d**
Explanations:
Que-1: Foreign banks carry the largest %age loans and advances of 54% in this bucket. Hence highest interest increase on loans.
Que-2: PSU banks carry the smallest %age loans and advances of 39% in this bucket. Hence lowest interest increase on loans.
Que-3: Foreign banks carry the smallest %age loans and advances of 18% in this bucket. Hence lowest interest decrease on loans.
Que-4: PSU banks carry the highest %age loans and advances of 37% in this bucket. Hence highest loss of interest.
Que-5: Foreign banks having the largest %age of 54% in this category.

Case- 6

The bank-wise maturity profile of select investments of banks in %age terms of select maturity buckets as on Mar 31, 2010 is as under : (Figures in %age)

Liability/Asset	PSU Banks	Old Pvt Banks	New Pvt Bank	Foreign Banks
Investments	100	100	100	100
Up **to 1** year	13	14	53	45

Over 1 yr to 3 year	16	13	42	34
Over 3 year to 5 year	22	9	2	5
Over 5 year	49	64	3	16

01 There is decrease in average yield of 0.75% for up to 1 year maturity. The bank group which will lose most is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
02 There is decrease in average yield of 0.75% for over 5 years maturity. The bank group which will lose least is :
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
03 --There is increase in average yield of 1.05% for over 5 years maturity. —The bank group which will gain-most is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
04 There is increase in average yield of 1.05% for over 5 years maturity. The bank group which will gain least is:
a) PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks
05 Assume that most of the investment comprise investment in govt. bonds and have negligible investments in shares and debentures. There is increase in market rate of interest of 1%. The highest diminution in the value of investment will be faced by in the over 5 year category:
a) • PSU Banks b) Old Private Banks
c) New Private Banks d) Foreign Banks7
Ans. 1-c 2-c 3-b • 4-c 5-b
Explanations:

Que-1: New private banks have **the** highest i.e. 53%age of their investment in_ Phis category. Hence they will loose **the most**

Que-2: New private banks have the lowest %age of 3% in this category. Hence, their loss will be lowest.

Que-3: Old private banks have the highest %age of 64% in this category. Hence, they gain most.

Que-4: New private banks have the lowest %age of 3% in this group. So they gain least.

Que-5: Old private banks have largest i.e. 64% of their investment in this category. The diminution (decline) in **value will** *be* highest in their case.

CASE STUDIES: INTEREST RATE RISK MANAGEMENT

Case- I

International Bank has come out with a policy for its branches for acceptance of deposits and granting of advances. its branches have taken deposits and allowed loans as under:

01 One of its branches accepted a deposit of Rs.10 lac which is to double in 10 years. These funds have been invested by the bank in a 3 year bond carrying interest rate of 13%. Which of the following kind of risk the bank is facing:
a) yield curve risk b) embedded option risk
c) basis risk d) reinvestment risk
02 The deposits as well as advance are linked by the bank to floating rate. The bank has been facing: a) real interest rate risk b) basis risk
0) reinvestment risk d) volatility risk
03 A branch has given a loan out of deposits at floating rate. The rate of interest on deposit has been linked by the bank with 91 days treasury bill rate and for the loan it is linked to 364 days treasury bill rate. The risk from such situation is called"
a) gap or mismatch risk b) interest risk
c) yield curve risk d) basis risk
04 The bank has advised its branches that while sanctioning a term loans, they must put a condition that premature payment will not be accepted in any circumstances. By putting this condition, the bank has avoided which type of interest rate risk?
a) yield curve risk b) Embedded option risk
c) Mismatch risk d) Basis risk
05 The depositors at times, have the tendency to withdraw the deposits before maturity, which leads to
a) yield curve risk **b)** embedded option risk
c) basis risk d) reinvestment risk
Ans. 1-d 2-b 3-c 4-b 5-b
Explanations:

Que-1: The bank has accepted a deposit with a maturity of 10 years, but the investment has to be rolled over after 3 year and will pose the reinvestment risk.

Que-2: Where the interest rate of different assets and liabilities may change in different magnitudes such interest rate risk, is called basis risk.

Que-3: Where the interest rates on deposit and advance can vary and not necessarily identically, the yield curve risk arises.
Que-4: Embedded option risk is the risk associated with the right given to the borrower to pre-pay their loans or right given to their depositors, to withdraw the deposit before maturity.
Que-5: Embedded option risk is the risk associated with the right given to the borrower to pre-pay their loans or right given to their depositors, to withdraw the deposit before maturity.

Case 2

Mumbai branch of Popular Bank granted term loan of Rs. 2 cr to a reputed corporate client for 6 years at 2% + Base rate. Presently, the *base* rate of the bank is 10%. The loan will be repaid by the company in 20 equal quarterly installments with a moratorium period of 6 months. The loan has been funded by the bank out of fixed deposit @ 7% fixed rate of interest, of equal amount, with a maturity period of 4 years. The CRR and SLR are to be ignored fbr the purpose of any calculations.

01 In this case, the loan *is* carrying floating rate and deposit is carrying fixed rate. If rate of interest is reduced during the first 4 years i.e. during the period of FDR, what type of risk, the bank is exposed to:
a) Funding risk b) Embedded option risk c) Basis risk • d) Gap or mismatch
02 The rate of interest at the and of 4 years on loan and on the fresh deposit to be raised for funding this loan can be different. This is called:
a) Reinvestment risk b) Embedded option risk c) Basis risk d) Gap or mismatch
03 With quarterly repayment of the loan, the repayment amount have to be deployed by the bank elsewhere and the rate of interest may not *be* at par with the interest being charged on the loan. Due to this, the bank is exposed to:
a) Reinvestment risk b) Embedded option risk c) Basis risk d) Gap or mismatch
04 There is a possibility that the company may pre-pay the loan or the depositor may withdraw the deposit pre-maturely. Due to this, the bank is exposed to:
a) Reinvestment risk b) Embedded option risk c) Basis risk d) Gap or mismatch
05 Which of the following other risk is not associated with this transaction:
a) Liquidity risk b) Market risk Credit risk d) Operational risk
Answers: 1-c 2-d 3-a 4-b 5-b

1. Explanations**:** If change in interest rate is of different magnitude, for an asset and its funding liability, such risk is called
basis risk.
2. The gap or mismatch risk arises when cost of funding does not match the return on funds and bank finds it difficult to fund the investment gainfully.
3. Reinvestment risk is the risk on account of lack of opportunities to invest the funds at the acceptable rate of return.
4. Embedded risk represents a situation where the counter party is given the option to terminate the transaction before the fixed price of the contract.
5. Market risk is associated with the trading book items. Hence market risk is not associated with this transaction. Other risks are possible.

Case -3

Basic Principles

If Rate sensitive assets are more than Rate sensitive liabilities, there is a positive gap and if Rate Senstivie liabilities are more than Rate sensitive assets, *there* is negative gap.
If there is negative gap NII increases if there is decline in interest rate and if there is positive gap, Nil increases if there is increase in interest rates.

The international Bank, provides following data regarding rate sensitive assets and liabilities of the bank as on 31st Mar 2010. The Nil **sp**read in percentage terms for the bank is **1.5%.**

Time of buckets	Assets	Liability	Gap	Cumulative gap
1-28 days	800	1000	-	-200
29 days to 3 months	650	550	100	-100
3-6 months	2700	3150	-	-550
6-12 months	450	600	-	-700
1-3 years	150	300	-	-850
3-5 years	450	200	25	-600
Over 5 years—	1000	200	80	200
Non-sensitive	300	500	-	0
Total	6500	6500	0	

Using the details given above, answer the following questions.

01 if interest rate falls by 25 bps, in the first time bucket, the likely impact on the NII for the bank shall be :
a) +15.50 cr b) +0.50 cr

c) Overall impact will be nil
d) +0.05 or
02 In terms of extant RBI guidelines on ALM, the maximum non-sensitive assets, a bank can have in percentage to total assets is.
a) 25% b) 10%
c) no such restriction by RBI

d) 20% ¯03 The total rate sensitive assets for the banks is Rs.
a) 6500 b) 6200
c) 6300 d) 6000
04 In rising interest scenario, the bank will have a impact of interest rate changes on NU:
a) favourable b) adverse
c) insufficient input d) neutral
A n s . 1 - b 2 - c 3 - b 4 - a
Explanation:
Que-1: 200 x 0.25% = 0.50 cr i.e. gain of 0.5 crore. When gap is negative bank gains when interest rate goes down
Que-2: There is no such ceiling prescription of RBI.
Que-3: 6500--300 = 6200
Que-4: Rate sensitive 6200 and liabilities 6000. Bank is asset sensitive. Hence in a rising scenario, the bank gains and in declining, the bank loses.

Case-4

The International Bank, provides following data regarding rate sensitive assets and liabilities of the bank as on 31st Mar 2010. The Nil spread in percentage terms for the bank is 2.00%

Time of buckets	Assets	Liability	Gap	Cumulative gap
1-28 days	2100	2400	-	- -300
29 days to 3 months	2400	2200	20	-100
3-6 months	3100	3700	-	-700
6-12 months	1200	1400 ,	-	-900
1-3 years	300	500	-	-1100
3-5 years	800	300	500	-600
Over 5 years	900	100	80	200
Non-sensitive	800	1000	-	0
Total	11600	11600	0	

01 If interest rate falls by 30 bps, in the time bucket (3-6 months), the likely impact on the Nil for the bank shall be :
a) +18.00 cr b) +9.00 cr
c) -18.00 cr d) +1.80 cr
02 In terms of extant RBI guidelines on ALM, the maximum non-sensitive assets, a bank can have in percentage to total assets is.
a) 15% b) 5%
c) 1% d) no such restriction by RBI
03 The total rate sensitive assets for the banks is Rs.
a) 11600 b) 11300
c) 11100 d) 10800
04 The declining interest scenario, the bank will have a impact of interest rate changes on Nil:
a) favourable b) adverse
c) insufficient input d) neutral
A n s . 1 - d 2 - d 3 - d 4 - b
Explanation:
Que-1: 600 x 0.30% = 1.80 cr
Que-2: There is no such restriction imposed by RBI.
Que-3: 11600-800 = 10800
Que-4: Rate sensitive 10800 and liabilities 10600. Bank is-asset sensitive. Hence in a rising scenario, the bank gains and in declining, the bank loses.

Case-5

International Bank has the following re-pricing assets and liabilities:
Call money - Rs. 300 cr
Cash credit loans — Rs. 240 a
Cash in hand — Rs. 200 cr

Saving Bank — Rs. 300 cr
Fixed Deposits — Rs. 300 cr
Current deposits — Rs. 250 a
On the basis of above information, answer the following questions:
01 What is the adjusted gap in re-pricing assets and liabilities:
a) Rs. 540 cr b) Rs. 600 cr
c) Rs. 60 cr negative d) Rs. 60 cr positive
02 What is the change in net interest income, if interest falls by 2% points across the board i.e. for all assets and liabilities:
a) Improves *by* Rs. 1.20 cr
b) Declines by Rs. **1.20** cr
c) Changes by Rs. 1 cr
d) There is no change
03 **if the interest rates on** assets and liabilities increase by 2%, what is the change in net interest income:
a) Improves by Rs. 120 cr
b) Declines by Rs. 1.20 cr
c) Change by Rs. 1 cr
d) There is no change
04 If interest rate falls on call money by 1%, on cash credit by 0.6%, on saving bank by 0.2% and on FD by 1%, what Is change in net interest income:
a) Improves by Rs. 0/2 cr
b) Declines by Rs. 0.82 cr
c) Declines by Rs. 0.84 cr
d) Declines by Rs. 0.96 cr
05 If interest rate increases on call money by 0.5%, on cash credit by 1%, on saving bank by 0.1% and on FD by 0.8%, what is change in net interest income:
a) Improves by Rs. t05 cr
b) Declines by Rs. 0.90 cr
c) Declines by Rs. 1.25 cr
d) Declines by Rs. 1.20 cr
Answers: 1-c 2-a 3-b 4-c 5d
Explanations:

Que-1: (SB+FD) - (Call money +CC) = (300+300) — (300+240) = Rs. 60 cr (assets are less than liabilities Hence negative gap). The cash in hand and current account deposits are not subject to re-pricing as these are not interest bearing, hence these have been ignored.
Que-2: There is negative gap (interest bearing liabilities more) of Rs. 60 cr [(300+300) — (300+240)1, which means the interest cost declines @2% on this negative gap, which leads to increase in Nil. Hence it is Rs. 60 cr x 2% = Rs. 1.20 cr.
Que-3: There is negative gap of Rs. 60 cr [(300+300) — (300+240)1, which means that the interest cost increases @2% on this negative gap which leads to decline in Nil. Hence it is Rs. 60 cr x 2% = Rs. 1.20
Cr.
Que-4: Fall in interest income in case of assets = (Call -300 x 1% = 3 cr) + (Cash credit -240 x 0.6% = 1.44) = Rs. 4.44cr.
Fall in interest expenses in case of liabilities (SB -300 x0.2 = 0.60 cr) + (300 xl% = 3.00 cr) = 3.60cr Net fall in interest income = 4.44 er — 3.60 cr = 0.84 cr
Que-5: Increase in interest amount in case of assets = (Call -300 x 0.5% = 1.50 cr) + (Cash credit -240 x 1% =2.40) = Rs. 3.90 cr.
Increase in interest amount in case of liabilities (SB -300 x 0.1 = 0.30 cr) + (300 x 0.8% = 2.40 cr) = 2.70 cr
Net improvement = 3.90 cr — 2.70 cr = 1.20 cr.

Case- 6

International Bank has the following re-pricing assets and liabilities:
Call money - Rs. 500 cr
Cash credit loans — Rs. 400 cr
Cash in hand — Rs. 100 cr
Saving Bank — Rs:500 a
Fixed **Deposits** — Rs. 500 a
Current deposits — Rs. 200 cr

There is reduction in rate of interest by 0.5% in call rates, 1% for cash credit, 0.1% for saving bank and 0.8% for FD. On the basis of above information, answer the following questions:
01 What is the adjusted gap in re-pricing assets and liabilities:
a) Rs. 200 cr positive b) Rs. 200 a negative c) Rs. 100 cr
positive d) Rs. 100 cr negative
02 Taking into account, the change in interest rate, calculate the amount of re-pricing assets as per the standard gap method in re-pricing assets and liabilities:
a) Rs. 700 a b) Rs. ¯650 cr —
c) Rs. 600 cr d) Inadequate information
03 Taking into account, the change in interest rate, calculate the amount of repricing liabilities as per the standard gap method in repricing assets and liabilities:
a) Rs. 450 cr b) Rs. 400 cr
c) Rs. 300 cr d) Insufficient information
04 What is the standard gap of the bank in repricing assets and liabilities:
a) Rs. 150 cr negative b) Rs. 175 cr positive
c) Rs. 200 cr positive d) Rs. 250 cr negative
01:d 02:b 03:a 04:c
Explanations**:**
Que-1: Adjusted gap = (Call money +CC) --(SB-r-FD) = (500+400) — (500+500) = (-) Rs. 100 cr (assets are less than liabilities — Hence negative gap). The cash in hand and current account deposits are not subject to re-pricing, hence these have been ignored.
Que-2: Call money 500x0.5 = Its. 250 cr + Cash credit 400x1 = 400 cr; Total = 650 cr
Que-3: SB 500 x 0.1 = 50 *cr* + FD 500 x 0.8 = 400 cr; Total = 450 *cr*
Que-4: Assets — Call money 500x0.5 = 250 cr + Cash credit 400 x 1 = 400 cr Total = 650 **Cr**
Liabilities — SB 500x0.1 = 50cr + **FD** 500x0.8 = 400 cr Total = 450 cr
Net change = 650-450 = Rs. 200 cr positive

Case-7

International Bank raised funds by way of 91 days term deposit at 6% rate of interest. It has following options to invest these funds:
(a) 91 days treasury bills @ 8%
(b) 91 days floating rate loan @ 8% with monthly re-pricing
(c) 3 years term loan @ 8%
01 If bank makes investment in 91 days treasury bills @ 8% and during the 91 days period, there is 1% increase in interest rate, what will be change in the net interest income, on reinvestment after 91 days?
a) 1% b) 0.5%
c) No change
d) Inadequate information to take decision
02 If bank invests the *funds* in 91 *days* floating rate loan @ 8% with monthly repricing and there is interest rate rise, what will be impact on net interest income of the bank:
a) NIT will increase *b)* NII will decrease
c) No change in NII d) Information is inadequate
03 If bank invests the funds in 91 days floating rate loan @ 8% with monthly repricing and *there* is interest rate fall, what will be impact on net interest income of the bank:
a) NIT will increase b) NII will decrease
c) No change in NII d) Information is inadequate
04 If bank invests these funds in a 3 years term loan @ 8%, what will be impact on net interest income of the bank, if there is increase in interest rates:
a) NII will increase b) NII will decrease
c) No change in NII d) Information is inadequate
05 If bank invests these funds in a 3 years term loan @ 8%, what will be impact on net interest income of the bank, if there is fall in interest rates:
a) NII will increase b) NII will decrease
c) No change in NH d) Information is inadequate
Answers: 1-c 2-a 3-b 4-b . 5-a
Que-1: Existing cost of deposit = 6% Existing interest on loans = 8%. NII = 8-6 = 2%
New cost of deposit= 6+1 = 7%. New return on treasury bills = 8+1 = 9%. NII = 9-7 = 2%
Hence no change in NII. It will continue to be 2%.

Que-2: Bank is asset sensitive because change in rate of interest on loan will take place twice in 91 days period due to monthly repricing of the loan while the deposit rate will not change during this period. Hence if interest rate increases, the interest income will increase and the NII will increase.
Que-3: Bank is asset sensitive because change in rate of interest on loan will take place twice in 91 days period due to monthly repricing of the loan while the deposit rate will not change during this period. Hence if interest rate falls, the interest income will decline and the **NII** will decline.
Que-4: Bank is liability sensitive because change in rate of interest on deposit will take place after each period of 91 days, as deposits have to be rolled over. On the other hand, the interest on loan will not change during this period. Hence if interest rate increases, the cost of deposits to the bank will increase and there will be no change in interest income. Hence NIT will decrease.
Que-5: Bank is liability sensitive because change in rate of interest on deposit will take place after each period of 91 days, as deposits have to be rolled over. On the other hand, the interest on loan will norchange during this period. Hence if interest rate falls, the cost of deposits to the bank will decrease and there will be no change in interest income. Hence NII will increase.

Case —8

International Bank raised funds by way of 182 days term deposit at 7% rate of interest. It has following options to invest these funds:
(a) 182 days treasury bills @ 9%
(b) 182 days commercial paper at floating rate of @ 9% with monthly re-pricing 7(C) 3
years term loan.@ 9%
01 If bank makes investment in 182 days treasury bills @ 9% and during the 182 days period, there is 1% increase in interest rate, what will be change in the net interest income, on reinvestment after 182 days?
a) 2% b) 1% c) 0,5% d) No change
02 If bank invests the funds in 182 days floating rate commercial paper @ 9% with monthly repricing and there is interest rate rise, what will be impact on net interest income of the bank:
a) NIT will increase *b)* NH will decrease
c) No change in NII d) Information is inadequate
03 If bank invests the funds in 182 days. floating rate commercial paper @ 9% with monthly repricing and there is interest rate fall, what will *be* impact on net interest income of the bank:
a) Nil will increase b) NII will decrease
c) No change in NH d) Information is inadequate
04 If bank invests these *funds in* a 3 years term loan @ 9º/0, what will be impact on net interest . income of the bank, if there is increase in interest rates:
a) NIT will increaseb) NII will decrease
c) No change in NII d) Information is inadequate
05 If bank invests these funds in a 3 years term loan @ 9%, what will be impact on net interest income of the bank, if there is fall in interest rates:
a) NII will increaseb) **NII** will decrease
c) No change in NII d) Information is inadequate
Answers: 1-d 2-a 3-b 4-b 5-a
Explanations:
Que-1: Existing cost of deposit = 7% Existing interest on loans = 9%. NII = 9-7 = 2%
New cost of deposit= 7+1 = 8%. New return on treasury bills = 9+1 = 10%. **NII** = 10-8 = 2% Hence no change in NII. It will continue to be 2%.
Que-2: Bank is asset sensitive because change in rate of interest on loan will take place five times during 182 days period due to monthly repricing of the commercial paper while the deposit rate will not change during this period. Hence if interest rate increases, the interest income will increase and the NIX will increase.
Que-3: Bank is asset sensitive because change in rate of interest on loan will take place 5 times during the 91 days period due to monthly repricing of the commercial paper while the deposit rate will not change during this period. Hence if interest rate falls, the interest income will decline and the NIT will decline.
Que-4: Bank is liability sensitive because change in rate of interest on deposit will take place after each period of 182 days, as deposits have to be rolled over during this period to fund the loan. On the other hand, the interest on loan will-not change during this period. Hence if interest rate increases, the cost of deposits to the bank will increase and there will be no change in interest income. Hence NIT will decrease.
Que-5: Bank is liability sensitive because change in rate of interest on deposit will take place after each period of 182 days, as deposits have to be rolled over. On the other hand, the interest on loan will not change during this period. Hence if interest rate fall, the cost of deposits to the bank will decrease and there will be no change in interest

income. Hence NII will increase.

Case 9

1. X purchased 20000 shares at Rs. 50 per share (total amount Rs 10 lac) with his own capital plus borrowing from market (his borrowing limit being 9 times of *his* capital. Hence ratio = 1:9). in a few days, there is 2% decline in the value of shares, which reduced the value of his portfolio to Rs. 980000 and also the amount of his capital by Rs. 20000 (leaving capital of Rs. 80000).
2. In the light of reduction in capital of Rs. 80000, he is required to liquidate the holding by Rs. 2 lac (10 times of reduced capital) to pay the excessive borrowing (due to reduced capital). But the market expects further fail in the value of this stock due to which the investment has become illiquid. In such circumstances, he can liquidate the holding at a loss only, which will further deplete his capital, which would force him for further liquidation of his holding for keeping the borrowing in permissible limit of 9 times of capital.
3. In case the liquidity position of the market suffers, it will further drive the share price down, which would result in losses. On the basis of this information, answer the following questions?

01 The risk of adverse movement In the price of shares has reduced the capital. This is called:
a) Price risk b)_Asset liquidity risk
c) Market liquidity risk d) Liquidation risk

02 For a specific security, as in the above case, when the liquidity in the market is reduced, it is called:
a) Price risk . b) Asset liquidity risk
c) Market liquidity risk d) Liquidation risk

03 In case the liquidity position of the market suffers, it will further drive the share price down, which would result in losses. This is called:
a) Price risk b) Asset liquidity risk
c) Market liquidity risk d) Liquidation risk

Answers: **2-b 3-c**

Explanations:
1. The risk of adyerse movement in the price is called price risk
2. The risk of reduced liquidity in the market for a specific security is called asset liquidity risk
3. In case the liquidity position of the market suffers, it will further drive the share price down, which would result in losses. This is called market liquidity risk.

BANK FINANCIAL MANAGEMENT
CASE STUDIES ON VOLATILITY, BPV, DURATION, VaR

Basic Principles

Steps for calculating Mean, Variance, Volatility
1. Divide total of observations with number of observations. This will give mean.
2. For calculating variance, for each observation deviation is calculated from mean. Then square of each deviation is calculated. The sum of squared deviation is divided by number of observations. This will give variance.
3. The volatility is square root of variance. It is also called Standard Deviation
4. Lower the Standard Deviation to Mean ratio lower the risk_
5. The risk associated with a portfolio is lesser than risk associated with individual components of portfolio.

Case — 1

You have the following information available regarding closing stock price movement of share price of ABC Limited for 12 months period ended December 2009:

On the basis of above information answer the following questions:

Month	Closing Price	Month	Closing Price	Month	Closing Price
Jan	20	May	24	Sept.	76
Feb	22	Jun	34	Oct.	90
Mar	38	July	46	Nov.	42
April	20	Aug	82	Dec	102

01 What is the mean price (average price) of this stock for the observation period?
a) Rs.51'.37 b) Rs.53.17
c) Rs.55.79 d) Rs.56.22

02 The variance of the selected data (for 12 months) will be
a) 974.15 b) 986.12
c) 997.16
d) inadequate information to calculate

03 The volatility (i.e. standard deviation) of this stock for these 12 months period is:

a) 34.67 b) 33.41

c) 32.39 d) 31.21

A n s . 1 - b 2 - a 3 - d

Explanations: -

Que-1: The average comes to Rs.53.17 (total of all values/12) = 638/12= 53.17

Que-2: For calculating variance, for each observation deviation is calculated from mean. Then square of each deviation is calculated. The sum of squared deviation is divided by number of observations. This will give variance.

Que-3: The volatility is square root of variance.

Case 2

The stock price of lnfosys Limited has shown the following closing prices at the end of each month for the year ended December 2009:

Month	Closing price -	Month	Closing price	Month	Closin g
January	265	May	345	Sept	512
February	276	June	267	October	324
March	390	July	415	Nov	285
April	312	August	421	December	302

On the bas's of above information answer the following questions.

01 What is the mean price (average price) of this stock for the observation period?

a) Rs.342.83 b) Rs.351.22 .

c) Rs.355.84 d) Rs.356.29

02 The variance of the selected data (for 12 months) will *be* approximately

a) 5431.09 b) 5587.78

c) 5743.56 d) 5887.06

03 *The* volatility (i.e. standard deviation) of this stock for these 12 months period is :

a) 74.54 b) 76.73

c) 82.93 d) 91.52

A n s . 1 - a 2 - d 3 - b

Explanations:

Que-1: The average comes to Rs.342.83 (total of all values/12)= 4114/12 = 342.83

Que-2: For calculating variance, for each observation deviation is calculated from mean. Then square of each deviation is calculated. The sum of squared deviation is divided by number of observations. This will give variance..

Que-3: The volatility is square root of variance.

Case-3

International Bank analyzed the Operating Profits of 5 regions for last 5 years. The Standard Deviation and Standard Deviation to Mean for the 5 Years are gwen in the following table.

Name of Zones	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Mean (average)	Standard Deviation (S.D)	S.D. To Mean
Jaipur	10	3	4	8	11	36	7.20	3.56	0.46
Chandigarh	3	8	1	6	4	22	4.40	2.70	0.61
Bangalore	12	8	9	2	4	35	7.00	4.00	0.57
Lucknow	6	9	2	3	5	25	5.00	2.74	0.55
Patna	7	12	5	8	6	38	7.60	2.70	0.36
Total of Zones	38	40	21	27	30	156	31.20	7.85	

From the above data, answer the following questions assuming that the bank's credit exposure is at equal levels for each zone:

01 From business risk point of view, the performance of the zone which is subjected to maximum risk exposure appears to be

a) Jaipur b) Patna

c) Chandigarh d) Lucknow

02 From business risk point of view, the performance of the zone which is subjected least risk exposure appears to be

a) Bangalore b) Patna

c) ¯Chandigarh d) Lucknow

03 The ratio of Standard Deviation to Mean for all zones put together for ABC Bank Limited is

a) 7.85 b) 31.20

c) 0.516 d) 0.25

04 The Zones having wide variance of results from year to year is .

a) Jaipur b) Lucknow

c) Chandigarh d) Bangalore

Ans. 1-c 2-b 3-d 4-d

Explanations:

Que-1: The zone having highest standard deviation to mean ratio, is exposed to more risk, compared to other zones.

Que-2: The zone having lowest standard deviation to mean ratio, is exposed to least risk, compared to other zones.

Que-3: SD/Mean = 7.85131.20 = 0.25

Que-4: The variation range for this zone is highest. The lowest was 2 in 4th year and highest was 12 in the Ist year.

Case - 4

Mumbai branch of Popular Bank has following cash flow from its loan portfolio from different segments:

Cash flow	Year1	Year2	Year3	Total	Mean	Standard deviation	SD/ Mean
Corporate	40	31	36	107	35.66667	4.50925	0.1264
MSE	20	28	19	67	22.33333	4.932883	0.2209
Retail	15	17	17	49	16.33333	1.15470	0.0707
Personal	5	8	6	19	6.333333	1.527525	0.2415
Total	80	84	78	242	80.66667	3.05505	0.0379

01 The risk associated-with cash flow in case of corporate business segment (measured by way of ratio of standard deviation to mean) is:

a) 35.66% b) 4.50%

c) 12.64% d) 3.79%

02 The highest risk in all the 4 segments of business, in the above case in terms of cash flows, is in case of: a) Corporate business b) MSE business

c) Retail business d) Personal business

03 The lowest risk in all the 4 segments of business, in the above case in terms of cash flows is in case of a) Corporate business b) MSE business

c) Retail business d) Personal business

04 The variation in net cash flows arising out of all the business line is:

a) Unidirectional *b)* Not unidirectional

c) Very volatile

d) Adequate information is not available

05 The overall risk, to the portfolio at the branch is and the variation in different segments ranges between :

a) 3.79%, 3.79% to 24.12%

b) 3.79%, 7.07% to 24.12%

c) 7.07%, 7.07% to 24.12%

d) 7.07%, 3.79% to 24.12%

Answers: 1-c 2-d 3-c 4-b 5-b Explanations:

1. The ratio of standard deviation to mean is 0.1264 or 12.64% in case of corporate business in the above case.

2. The highest variation of 0.2412 or 24.12% is in respect of personal business and the lowest *in* case of retail segment where it is 7.07% only. For the overall portfolio this is 3.79% **only.**

3. The highest variation of 0.2412 or 24.12% is in respect of personal business and the lowest in case of retail segment where it is 7.07% only. For the overall portfolio this is 3.79% **only.**

4. The net cash flows are not unidirectional because in case of retail., these are regularly increasing. In case of MSE segment, the variation is quite wide. So is the position with corporate segment.

5. From the given information, it is observed that for the overall portfolio the risk is 3.79% and the range is 7.07% to 24.12%

Case - 5

International Bank analyzed and Operating Prof ts of 5 regions for last 5 years. The Standard Deviation and Standard Deviation to Mean for the 5 years are green in the following table.

Name of Zones	' 1	Year 2	Year 3	Year 4	Year 5	Total	Mean (average)	Standard Deviation (S.D)	S.D. To Mean_,
Jaipur	16	21	18	20	24	99	19.8	3.03	0.15
Chandigarh	9	19	5	12	5	50	10.0	5.83	0.58
Bangalore	13	15	17	18	19	82	16.4	2.41	0.15
Lucknow	16	14•	13	16	14	73	14.6	1.34	0.09
Patna	12	21	19	12	17	81	16.2	4.09	0.25
Total of Zones	66	90	72	78	69	385	77.0	8.94	

From the above data, answer the following questions assuming that the bank's cred t exposure is ¯at equal levels for each zone:

01 From business risk point of view, the performance of the zone which is subjected to maximum risk exposure appears to be

a) Jaipur b) Patna
c) Chandigarh d) Lucknow

02 From business risk point of view, the performance of the zone which is subjected least risk exposure appears to *be*

a) Bangalore b) Patna
c) Chandigarh d) Lucknow

03 The ratio of Standard Deviation to Mean for all zones put together for ABC Bank Limited is

a) 8.94 b) 77.0
c) 0.32 d) 0.12

04 The Zones having wide variance of results from year to year is

a) Jaipur b) Lucknow
c) Chandigarh d) Bangalore

Ans. 1-c 2-d 3-d 4-d

Explanations:

Que-1: The zone having highest standard deviation to mean ratio, is exposed to more risk, compared to other zones.

Que-2: The zone having lowest standard deviation to mean ratio, is exposed to least risk, compared to other zones.

Que-3: SD/Mean = 8.94/77.00 = 0.12

Que-4: The variation range for this zone is highest. The lowest was 5 in 3^{n1} year and highest was 19 in the 2nd year.

Case- 6

International Bank an investment in bonds as under, on Sept 30, 2009:

	Face value	Yield %	Price (Rs.	Cost (Rs.)
7% Gol Bond 2016	100000	7.12	108.40	108400
9% Gol Loan 2018	100000	7.34	124.00	124000

Due to change in yield of these securities, the yield and price changed as under as on Mar 31, 2010:

7% Gol Bond 2016	100000	7.32	105.80	105800
9% Gal Loan 2018	100000	7.65	120.50	120500

On the basis of above information, answer the following questions:

01 What is change in basis point value for each basis point increase in yield for 7% Gol bonds during this period?

a) 14.5 paise b) 13.1 paise c) 12.5 paise d) 12.34 paise

02 What is the change in basis point value for each basis point increase in yield for 9% Gal bonds during this period?

a) 10.02 paise b) 11 paise c) 11.29 paise d) 11.90 paise

03 If there is increase in yield by 100 basis points during this period, what will be the price of 7% Gal bonds.

a) Rs.95.20 *b)* Rs.93.90 c) Rs.92.10 d) no change will take place

04 If there is increase in yield by 100 basis points during this period, what will be the price of 9% Gal bonds.

a) Rs.112.71 ----b) Rs.111.96 c) Rs.111.12 d) Rs.110.87

05 The bank decides to sell the 7% Gol bonds on Mar 31, 2010 itself, to stop the loss. How much it will lose on this sale transaction?

a) Rs.1210 b) Rs.1670 c) Rs.2400 d) Rs.2600

06 The bank decides to sell the 9% Gol bonds on Mar 31, 2010 itself, to stop the loss. How much it will lose on this sale transaction?

a) Rs.3500 b) Rs.3100 c) Rs.2800 d) Rs.2600

Ans. 1-a 2-c 3-b 4-a 5-d 6-a

Explanations:

Que-1: (108.40-105.80)/ (7.32-7.12) = Rs.2.90/20 = 14.5 paise

Que-2: (124-120.50)/(7.65-7.34)= Rs.3.50/31 = 11.29 paise

Que-3: Change for one basis points = (108.40-105.80)1(7.32-7.12) = Rs.2.90/20 = 14.5 paise. Change for 100 basis points = 14.5p x 100 = Rs.14.50. Hence value after change = 108.40 -14.50 = Rs.93.90

Que-4: Change for one basis points = (124-120.50) /(7.65-7.34)= Rs.3.50/31= 11.29 paise. Change for 100 basis points = 11.29 x100 = Rs.11.29. Hence changed value = 12.40-11.29 = Rs.112.71

Que-5: 108400 -105800 = 2600

Que-6: 124000-120500 = 3500

Case - 7

International bank *an* investment in bonds as under, on Seat 30.2009:

	Face . value	Yield %	Price (Rs.	Cost (Rs.
9% Gol Bond 2016	200000 -	-8.40	107.60	215200
11%' Go! Loan 2018	200000	8:80	110.50	221000

Due to *change* in yield of these securities, the yield and price changed as under as on Mar 31, 2010:

9% Gol Bond 2016	200000	8.20	109.80	219600
11% Gol Loan 2018	200000	8.60	113.30	226600

01 What is change in basis paint value for each basis point increase in yield for 9% Gal bonds during this period?

a) 12 paise b) 11 paise
c) 10 paise d) no change

02 What is the change in basis point value for each basis point increase in yield for 11% Gal bonds during this period?

a) 12 paise b) 13 paise
e) 14 paise d) no change

03 If there is increase in yield by 100 basis points during this period, what will be the price of 9% Gol bonds.

a) Rs.118.60 b) Rs.116.90
c) Rs.114.80 d) no change

04 If there is decrease in yield by 100 basis points during this period, what will be the price of 11% Gol bonds.

a) Rs.105.20 b) Rs.109.90
c) Rs.119.10 d) Rs.124.50

05 Due to expected adverse change, the bank decides to sell the 9% Gol bonds on Mar 31, 2010 itself, to make the profit. How much profit it will be able to make on this sale?

a) Rs.4200 b) Rs.4000
c) Rs.3800 d) Rs.3750

06 Due to expected adverse change, the bank decides to sell the 11% Gol bonds on Mar 31, 2010 itself, to make the profit How much profit it will be able to make on this sale?

a) Rs.4210 b) Rs.4670
c) Rs.5400 d) Rs.5600

Ans. 1-b 2-c 3-a 4-d 5-a 6-d

Explanations:

Que-1: (109.80-107.60)/ (8.40-8_20) = Rs.2.20/20 = 11 paise

Que-2: (113.30-110.50)/(8.80-8.60)= Rs.2.80/20 = 14 paise

Que-3: Change for one basis points = (109.80-107.60)1(8.40-8.20) = Rs.2.20/20 = 11 paise. Change for 100 basis points = 11 x 100 = Rs.11.00. Hence value after change = 107.60+ 11.00 = Rs.118.60

Que-4: Change for one basis points = (113.30-110.50) /(8.80-8.60)= Rs.2.80/20=14 paise. Change for 100

basis points = 14 x100 = Rs.14.00. Hence changed value = 110.50-14.00 = Rs.124.50
Que-5: 219600 —215200 = 4200
Que-6: 226600-221000 = 5600

Case 8

Popular Bank made an investment in govt. bonds worth Rs. 5 cr. The maturity period of the bonds is 5 years, the face value is Rs. 100 and the coupon rate is 8%. The bond has a market yield of 10% and the price is Rs. 92.00. Due to change in interest rates, the market yield changes to 9.90% and the market value to Rs. 92,50.

01 Based on the above information, please calculate the basis point value of the bond:
a) 0.02 b) 0.05
c) 0.10 d) 0.20

02 What will be the change in value of investment, for the total investment of Rs. 5 cr for per basis point in the yield:
a) Rs. 25000 b) Rs. 20000
c) Rs. 15000 d) Rs. 10000

03 If there is 0.10% change in the yield, what will *be* change in the value of the bond on an investment of Rs. 5 *cr:*
a) 100000 6) 200000
c) 250000 d) 500000

Answers: 1-b 2-a 3-c Explanations:
1. Change in price of bond = 0.50. Change in yield 10 basis points. Per basis point change = 0.50/.10 = Rs. 0,05
2. Change in price of bond = 0.50. Change in yield 10 basis points. Per basis point change = 0.50/.10 = Rs. 0.05 OR Per Rs. 1 Cr = Rs. 5000
3. Change in price of bond = 0.50. Change in yield 10 basis points.
Per basis point change = 0.50/.10 = Rs. 0.05 OR Per Rs. 1 cr = Rs. 5000
For total investment the change per basis point is = 50000000 x 0.05 = 25000
If per basis point change, the value change is Rs. 25000, for 10 points it will be 25000 x 10 = 250000

Case 9

Popular Bank want to invest Rs. 1 lac. It has option to make investment in the following two securities. The cted return is also iven:

Cash flow	Year **1**	Year 2	Year 3	Year 4	Year 5	Total
Investment 1	8000	8000	8000	8000	8000	40000
Investment 2	5000	7000	14000	6000	12000	44000

01 If time value of money is not taken into account, the rate of return on these investments is:
a) 8% and 8% b) 8% and 8.5%
c) 8% and 8.8% d) 8.5% and 8.8%

02 Out of these 2 investment, which one would be more preferable for the bank:
a) Investment 1 because it provides stable return
b) Investment 2 because it provides higher return
c) Investment 1 or 2 at judgement of the bank based on risk
d) Inadequate information is given. Decision not possible

03 If return from both the investments is taken as equal taking into account the risk associated with volatility, what is the risk adjusted rate of return and what is the risk premium:
a) 8.8%,8% b) 8%, 8.8%
e) 8.8%, 0.8% d) 8, 0.8%

Answers: 1-c 2-a 3-d
Explanations:
1. Investment 1 = Average return = 40000/5 = 8000. Rate of return 8000/1 lac = 8%
Investment 2 = Average return = 44000/5 = 8800. Rate of return 8000/1 lac = 8.8%
2. Investment 1 provides stable return which is risk free, while Investment 2 provides volatile return, which is risk prone. Hence, overall investment 1 is better.
3. The gap of return will be the risk premium i.e. 8.8% - 8% = 0.8%. The risk adjusted rate of return will be 8%.

Case - 10

Bank holds 3 years bonds with face value of Rs. 1000 and coupon rate of 6% payable half-yearly. The current yield is 10% on this bond.

01 What is the present market value of the bond:
a) Rs. 1000 b) Rs. 942.34 - c) Rs. 898.49 d) Rs. 857.91
02 What is the duration in the above case:
a) 3 years b) 2.9054 years c) 2.7761 years_ d) 2.6190 years
03 Calculate the modified duration in the above case:
a) 3 years b) 2.9054 years c) 2.7761 years d) 2.6190 years
04 In the above case, if the yield changes from 10% to 10.5% what will be percentage change in value:
a) 1.3095% b) 1.2293% c) 1.1205% d) 1.0000%
05 What will be change in the value of the bond:
a) Rs. 10.00 b) Rs. 10.50 c) Rs. 11.21 d) Rs. 11.77
06 What will be the new value of bond after increase in yield from 10% to 10.5%:
a) 898.49 b) 892.13
c) 886.82 d) 871.13
Answers: 1-c 2-c 3-d 4-a 5-d 6-c 7- 8-
Explanations:
1 Annual coupon is Rs. 60 (1000 x 6%). Hence Half yearly = Rs. 30. Period as per Macaulay's duration method is given in ne

2. As calculated in the above table
3. Modified duration or MD = duration/(1 f r) = 2.7761/1.06 = 2.6190
4. Percentage change in value of bond = MD x numerical change in the stated yield = 2.6190 x 0.5 = 1.3095%
5. Change in value of bond = Value x percentage change **= 898.49 x 1.3095 = 11.77**
6. Original value - change in Value = 898.49 - 11.77 = 886.82

Case -11

The dealer at Popular Bank purchased 5000 shares of a public sector undertaking at Rs. 200 per shares totaling Rs. 10,00,000. If the price change is 1%, there will be impact of Rs. 10000. The price change can go up to 4%. That may result into a loss of Rs. 93040.

03. In this transaction, the stock price is *known* as:
a) Market factor b) Market factor sensitivity
c) Volatility d) Defeasance period
02 What is the market factor sensitivity:
a) 5000 shares b) *Rs.* 200 per shares
c) Rs. 10 lac d) Rs. 10000
03 The price change can go up to 4%. This means the daily ___ is 4%:
a) Defeasance factor b) Market factor
c) Volatility d) Value at risk
04 The defeasance period in this transaction is:
a) One day b) 2 days
c) 4 days d) 7 days
05 What is the value at risk (VaR) in this transaction:
a) Rs. 93040 b) Rs. 100000
c) Rs. 105900 d) Rs. 120000
Answers: 1-a 2-d 3-c 4-a 5-a
Explanations:

1	2	3	4	5	6
Period (IIY)	Coupon in Rs.	Present value Factor	Present Value of coupon (2 x	PV of Coupon/Price i.e. 898.49	Duration (PV/Price) x period [1 x 5]
-0.50	30.00	0.952381	28.57	0.0318	-0.0159
-1.00	30.00	0..907029	27.21	0.0303	-0.0303
-1.50	30.00	0.863838	25.92	0.0288-	-0.0433
-2.00	30.00	0.822702	24.68	0.0275	-0.0549
-2.50	30.00	0.783526	23.51	0.0262	-0.0654
-3.00	30.00	0.746215	768.60	0.8557	-2.5663
Total			898.49	1.000	-2.7761

1. The stock price is known as market factor.
2. Rs. 10000 is the market factor sensitivity as with 1% change, the effect would be Rs. 10000.
3. This is called volatility i.e. daily fluctuation.
4. The defeasance period represents the daily fluctuation period.

Case - 12

The VaR of a Govt. of India bond security is 0.70%. The current yield is 8.10%.

01 In the worst case scenario, the prospective:

a) buyer of the security can expect, the yield to fall to 7.40% by next day
b) buyer of the security can expect, the yield to rise to 8.80% by next day
c) seller of the security can expect, the yield to fall to 7.40% by next day
d) None of the above

02 In the worst case scenario, the prospective:

a) seller of the security can expect, the yield to fall to 7.40% by next day
b) buyer of the security can expect, the yield to rise to 8.80% by next day
c) seller of the security can expect, the yield to rise to 8.80% by next day
d) None of the above

03 In the above case, the VaR at 95% confidence means:

a) There is 5% possibility for the yield to be higher than 0.70%
b) There is 1% possibility for the yield to be lower than 0.70%
c) There is 5% possibility of adverse change being higher than 0.70%
d) Inadequate information to draw any conclusion **Answers: 1-a 2-c 3-c Explanations:**

1. VaR of 0.70% means that the maximum change in the yield can be 0.70%. Hence in a worst case scenario, the buyer of the security can expect, the yield to fall to 7.40% (8.10 — 0.70%) by next day and the seller can expect the yield to rise to 8.80% (8.10 + 0.70%).
2. VaR of 0.70% means that the maximum change in the yield can be 0.70%. Hence in a worst case scenario, the buyer of the security can expect, the yield to fall to 7.40% (8.10 — 0.70%) by next day and the seller can expect the yield to rise to 8.80% (8.10 + 0.70%).
3. At 95% confidence level, the possibility for an adverse change in yield being higher than 0.70% is only to the extent of 5%.(i.e. loss being higher than 0.70%). At 99% confidence, this possibility is to the extent of 1% only.

Module: C

Treasury Management

Concepts and function; instruments in the treasury market, development of new financial products, control and supervision of treasury management, linkage of domestic operations with foreign operations.
Interest rate risk, interest rate futures
Mix / Pricing of Assets, Liabilities - On-Balance Sheet Investment and Funding Strategies - Stock options, debt instruments, bond portfolio strategy, risk control and hedging instruments. Investments - Treasury bills, money market instruments such as CDs, CPs, IBPs
Securitisation and Forfaiting; refinance and rediscounting facilities.
Derivatives - Credit Default Swaps / Options

Introduction to Treasury Management

Treasury : Treasury deals with short term funds flows (with a maturity less than one year) of a bank (except SLR investments (that are of long maturity also).
Treasury Functions of a bank, as a conventional concept, is considered to be a service centre that takes care of funds management for the bank, such as:

- to maintain adequate cash balances to meet day to day liquidity requirement,
- to deploy surplus funds generated in banking operations
- to source funds to bridge the occasional gaps in cash flows.
- to meet reserve requirements such as SLR and CRR

Treasury as a profit centre: With deregulation and liberalization of financial markets, the scope of treasury function has been expanded and it has now become a profit centre having trading activities i.e. trading in securities and forex products.

Integrated treasury : It refers to integration of (I) money market operations, (2) securities market operations and (3) foreign exchange operations of a bank_

The integration is the result of opportunities available to the banks in the post-reforms era due to (a) deregulation of interest rates (b) full convertibility on current account (c) partial convertibility in capital account leading to flow *of* large quantity of foreign funds as FII and FDI. (d) funds availability in the form of NRI deposits, EEFC funds, float funds in ECB of corporate customers.

Funds can be easily transferred due to improvement in payment and settlement system (RTGS etc.) (a) from long term investments to short term investments (b) from securities market to money market and (c) from money market to currency market_

Functions of integrated treasury :

- to meet the reserve requirements
- to provide efficient merchant banking services to customers
- global cash management
- to optimize profit by exploiting market opportunities in forex market, money Market and security market
- risk management
- to provide support for asset-liability management_

Integrated Treasury and customers Due to integration of market activities, the treasury is in direct contact with the customer which is called merchant business where it undertakes the treasury operations for the customers in addition to bank's own treasury operations_ These operations relate to (a) hedging export receivables (b) raising foreign currency loans (c) making overseas *investments_*

Process of Globalization

Globalization refers to interaction between domestic and global markets. In other words it is process of integrating domestic market with global markets that characterizes free flow of capital and minimum regulatory intervention.

The flow of foreign exchange includes not only for trade transactions (i.e. import and export) and corporate and individual borrowing or remittances for different purposes, but also the FDI and FII (i.e. transfer of wealth).

Role of RBI: Enactment of Foreign Exchange Management Act 1999 (FEMA), to replace Foreign Exchange Regulation Act (FERA) has facilitated flow of foreign exchange. RBI has renamed the Exchange Control Deptt as Foreign Exchange Department wef January 2004 RBI now permits large movement of capital, to and from India (i.e. inflows and outflows) either by automatic route or by delegation of powers to ADs. RBI's permission to banks to borrow and invest through their overseas correspondence in foreign currency, has placed with banks, sizable funds at their command.

Impact of globalization : Immediate impact of globalization is 3-fold.

Interest rates are influenced by global interest rate trends that also impact exchange rates. A change in rate of interest by Federal Reserve, USA impacts the trading at BSE or NSE.

2. Emergence of new institutional structure (on the lines of the one available in developed markets) i.e. creation of Clearing Corporation of India, National Securities Depository Corporation, concept of primary dealers, investment institutions
3. Widening of range of products such as rupee derivatives including swaps, forwards, options to hedge currency and interest rate risk and generate trading profits in a dynamic market situation:

Evolving role of Treasury as a profit centre

The treasury operations have the following special features i.e.:
I . Treasury operations are in a market which if free from credit risk, due to which little capital allocation is required unlike credit operations which requires lot of capital support.
2. Treasury operations are highly leveraged as return on capital is very high. (i.e. low capital high volume)
3. Operational cost of treasury operations is very low unlike a branch banking.
4. Treasury operates in narrow spreads but with huge volumes that generates profits.

Sources of treasury profits: Treasury generates profits from two types of sources i.e.

(a) conventional and

(b) contemporary.

(a) Conventional sources:

- Foreign exchange business : Sale and purchase of forex to customers (importers and exporters) generates profits being the difference between selling rate and buying rate, called 'spread'. In order to manage their risk, the banks
do not maintain open positions in forex and try to square through inter-bank operations.
- Money market deals : Banks lend short term surplus funds to other banks in call money and earn interest.
- Investment activity: Banks make investment in Govt. securities as SLR and other non-SLR securities to earn — regular income. Strategic investment is also made in subsidiaries and associate companies by banks to venture into other business lines.

(b) contemporary sources: Treasury income is being earned by banks from market operations that involve buying and selling or borrowing and lending or investing in tradable assets.

- Interest and currency arbitrages : Treasury due to its operations in various markets is in a position to identify the interest differentials in its favour in various markets and accordingly it borrows from one market and lends in
another market to make profits. Similarly it purchase foreign currency in market and sells in another market to take advantage of price difference.
- Trading: Treasury purchases securities and also foreign exchange with a view to retain for some time and then sell
it to make profits. However, in this process it faces market risk, foreign exchange risk etc. However, they are able to make profits out of such activities..
- Treasury products : Treasury sells various types of risk management products and structured loans to corporates such as forward rate contract, currency swap.

Organization of Treasury

Treasury is under direct control of the Head Office, in a bank and has the following features:
It can be organized as a Department of the bank or as a Specialized branch. As a branch it can have its books of account and as a department, it has the advantage of easier coordinatidn with other departments.
It has certain degree of autonomy with its own accounting system
As a specialized branch it can enjoy status of an AD for forex business.

It is headed by a senior executive normally a General Manager, who reports directly to the Chief Executive of the bank. It has three main divisions
(a) dealing room – called front office
(b) back office – called treasury administration and
(c) middle office.

(a) Dealing Room : It is headed by Chief Dealer with other dealers functioning under him, who undertake sale and
purchase transactions. These dealers specialize in their respective areas such as forex, money market or securities market.

There can be dealers dealing in different foreign currencies, depending upon the size of treasury operations.

The dealers for securities market will be for secondary market only as primary market falls under the purview of investment department outside the dealing room but within the Treasury domain.

(b) Back office : This department:

- Undertakes the verification and settlement of deals concluded by the dealers.
- Deals are verified on the basis of deal slips and confirmation from the counterparties.
- Issues relating to book-keeping and reporting / returns are taken care of, by the Back office.
- It also maintains Nostro Accounts, Funding and Security account with RBI, Demat accounts with depository participants etc.
- Settlement of transactions is the key function of back office which also ensures that the payments and receipts take place on value date basis (because delay results into Toss to the bank).

(c) Middle Office : It is created to provide information to management and implement risk management system. Its functions include the following:

It monitors exposure limits and stop loss limits of Treasury.

- It reports to the management on key parameters of performance.
- It implements transfer price mechanism.
- In smaller banks, it also functions as ALM support group.

Investment Department : It deals with primary issues. The investment proposals are properly appraised and sanction is obtained from an appropriate level as per delegation system prevalent in the bank.

Other departments : These include accounts and administration, system administration, remittance etc, which are administrative in nature.

Treasury Products

Treasury products Treasury refers to the products available in the financial market for raising and deploying funds for (a) investment and (b) trading in foreign exchange and securities market
Products available in Forex Market:
The forex is a virtual market without physical boundaries_ The information dissemination is very fast through electronic media such as Reuters, Money Line, Bloomberg etc. The foreign exchange markets, as such, are as near-perfect with an efficient price discovery system_ The products are explained as under:

I. Spot trades
2. Forward
3. Swap
4. Investment of foreign *exchange* surpluses
5. Loans and advances
6. Rediscounting of bills

1. Spot trade : The spot trading in foreign currencies refers to a situation where the settlement takes place up to T+2 days i.e. maximum on the 3rd day. The settlement may take place on same

day (ready rate) or on T 1 day i.e. by the next day (TOM rate). The ready rate and TOM rate are less favourable to the buyer and more favourable to seller_ Example : X sells certain foreign currency to Popular Bank on Feb I I, the settlement will take place on the same day. Bank will make payment by applying ready rate. If the settlement is to take place on Feb 12, the bank will apply TOM rate. If it takes place on Feb 13, Tf rate would be applied_

2_ Forward The forward in foreign currencies refers to a situation where the settlement takes place in future i.e. after T+2 days, on a pre-fixed rate and on a pre-fixed date, which are decided on the date of contract. Forward may be at *a* discount (where future rate of forex. is lower compared to present/spot rate) or at a premium (where future rate of forex. is higher).

Example US $ is quoted at Rs.39.20 on Dec 12 (which is its spot rate). It is quoted at Rs.39.40 for delivery in January (which is forward rate). Here the forward is at a premium_ Had the January rate been lower than Rs.39.20, the forward would have been at a discount.

Forward rates are arrived at on the basis of interest rate differentials of two currencies (which are added or deducted from spot exchange rate). For example, for US S and UK Pound Sterling, the difference between the spot rate and forward rate represents the difference in interest rates in USA and UK. The interest rate differential is added to the spot rate for low-interest yielding currency (representing forward premium) and vice versa.

3. Swap : Swap represents a combination of spot and forward transactions. Buying one currency in the spot market and selling the same currency for the same quantity in the forward market, constitutes a swap. Though swap is used for funding of requirements but at times there is some element of arbitrage.

Example XYZ Limited an exporter have with them $ 200000 today but they do not need foreign currency today. However, they will require the same amount of foreign currency at the end of the month from now. If the company sells the currency today in spot and buys the same amount 2 months' forward, today itself, it would be a swap transaction. By doing so, they will be able to hedge forex fluctuation risk.

4. Investment in forex surplus : The forex surplus arcing from (a) profits on treasury operations (b) profits from overseas branch operations (c) forex borrowings in overseas market (d) foreign currency convertible rupee deposits, are left at the disposal of the Treasury.

Banks are allowed to invest these surpluses in global money markets or short term securities.

(a) Inter bank loans: These loans arc of short term nature up to one year and many times, overnight lending to domestic or global banks.

(b) Short term investments: Banks invest in Treasury bills or gilt edged securities issued by the foreign govt. and other debt instruments.

(c) Balance in NOSTRO accounts: Banks also keep balances in these accounts, which do not earn interest. Some correspondent banks, however, offer the facility to invest automatically once the balance exceeds the floor limits.

5. Loans and advances : Though Treasury does not undertake the loan granting function, but consent of Treasury is obtained by the credit appraisal department and disbursement function regarding availability of foreign exchange funds or credit lines, prior to sanction of such loans by the Credit Function.

6. Rediscounting of bills : Rediscounting is an inter-bank advance and Treasury provides refinance for the foreign currency bills purchased or discounted by other banks. These are normally of a short term period ranging from 15 days to one year.

Products available in Money Market

Money market is the market where the banks raise and deploy (i.e. borrow & lend) short term funds ranging from one. day to one year These may be in the form of :

(a) Inter-bank money market such as Call money, Notice money and Term money, where investment are as per the ceiling imposed by RBI:

(I) Call Money : This is lending or borrowing for one day i.e. overnight Call money transactions reflect the liquidity availability on any particular day. Call money rate is indicated by Mumbai Inter-bank offered Rate (MIBOR).

(2) Notice money : Investment of funds for a period of more than one day but up to 14 days.
(3) Term money : Investment of funds for a period of 15 days or above up
to I year.

Prudential Limits fixed by RBI for inter-bank money market

(1) Borrowing : On a fortnightly average basis, borrowing outstanding should not exceed 100 per cent of capital funds (i.e., sum of Tier 1 and Tier II capital) of latest audited balance sheet. However, banks are allowed to borrow a maximum of 125 per cent of their capital funds on any day, during a fortnight.
(2) Lending: On a fortnightly average basis, lending outstanding should not exceed 25 per cent of their capital funds; however, banks are allowed to lend a maximum of SO per cent of their capital funds on any day, during a fortnight.
(b) Investments in Securities such as treasury bills, commercial paper, certificate of deposit, repo.
(1) Treasury bills : These are issued by Govt. through RBI for maturity of 91 days, 182 days and 364 days, for predetermined amount. The interest is allowed by way of discount which is called implicit yield. The prices are determined by way of Auction by RBI where the banks or primary dealers participate. Investment in Treasury Bills by the Treasury of a bank, is an opportunity to park surplus funds in zero-risk securities that yield low income (but more than call money lending) and is liquid (as these can be sold) in secondary market.
T-Bills are held in electronic form in a SGL account (or constituent SGL account) maintained by banks with RBI. The payment of T-bills is received through Clearing Corpn. of India.
(2) Commercial paper: CP is an unsecured usance promissory note (i.e. negotiable instrument) issued by rated companies or financial institution to raise short term money with a maturity period of 7 days to one year. It can be issued for a minimum amount of Rs.5 lac, in Demat form only, at a discount to face value. For a company to issue CP, it should have credit rating of P2 by CRISIL or equivalent from any other agency. Issuing of CP is regulated by RBI guidelines and market practices prescribed by Fixed Income and Money Market and Derivatives Association of India (FIMMDA). This instrument carries lower risk due to credit rating. Its sale and purchase can be made through depository participants. Treasury can make investment in CP and earn return better than T-Bills or call money operations. Being negotiable instrument, it also offers liquidity.
(3) Certificate of deposit: CD **is** an unsecured usance promissory note (i.e. negotiable instrument unlike a fixed deposit) issued by Banks and financial institutions to raise short term sources with a maturity of 7 days to one year. The minimum amount is Rs.1 lac. It is issued at a discount to face value, in demat form only. Treasury can make investment in CD and cam return better than T-Bills or call money operations. Being negotiable instrument, it also offers liquidity. Since it is issued by a bank or FI, it carries relatively lower risk.
(4) Repo : It refers to sale of a security (normally a Govt. security) with a commitment to repurchase of the same security at a later date. Whenever a bank is in need of short term funds?, it can enter into a repo transaction with other bank or RBI. The difference in the sale price and re-purchase price is similar to interest on cash advance. The effective rate on repo is marginally lower than the corresponding money market rate, as the lending bank has security in hand, till the loan is repaid. In the books of a bank, the transaction appears like a sale and purchase transactions.
Treasury of the respective bank can use the Repo transaction both for investment purpose and for the purpose of raising short term funds.
RBI makes use of Repo extensively as an instrument to control liquidity in the inter-bank market. In case of short term liquidity problem, the banks also make use of repo under Liquidity Adjustment Facility.
Whenever RBI wants to absorb liquidity from the inter-bank market, it resorts to purchase of govt. securities i.e. a Repo transaction. On the other hand to inject liquidity it makes use of Reverse Repo transaction and resorts to sale of govt. securities. The rate at which these transactions are undertaken is called Repo Rate and Reverse Repo Rate which keeps on changes. However, RBI maintains some spread in these rates.
(5) Bills rediscounting : Bills discounting provides an investment opportunity to the Treasury. These bills are of short term nature with maturity, generally, of 3-6 months which are already discounted by

other banks. The rediscounting is done at near market prevailing rates. The borrowing bank is able to maintain liquidity by getting these bills rediscounted. It also is in a position to reduce its capital requirement for capital adequacy purpose, as these bills are removed from credit portfolio and are added to the inter-bank liability**.**

Products available in Securities Market

Securities market offers an excellent opportunity for bank Treasury to invest surplus funds in (a) govt. securities and (b) corporate securities.

Govt. Securities: Major portion of investment in Govt. securities takes the form of investment for SLR purpose (SLR is fixed by RBI without any minimum but subject to Maximum of 40% as per provision of Section 24 of RBI Act).

Govt. securities are issued (in the form of Bonds) by Public Debt Office of RBI on behalf of Govt. of India of State governments. The securities are sold through auctions **conducted by RBI. Interest paid is called coupon rate.** During these auctions, RBI reaches the cut-off price, based on the bids received from banks or PDs_

Govt securities are actively traded in the secondary market. Hence, the market price of these securities keeps on changing depending upon demand and also the current interest rates prevailing in the market.

RBI issues bonds with a maturity period ranging from I to 30 years, with step-up coupon rates or coupon rates linked to inflation index or floating rate coupons.

Corporate Securities - Debt paper: These securities referred to as non-SLR investment, include the debenture and long term *bends* issued by companies and financial institutions. Tier-2 bonds such as Redeemable Cumulative Bonds issued by banks also fall in this category.

Yield on such securities is higher than the Govt. securities. Most of these securities are issued **in** Deposits, Companies issue these securities after getting them rated from rating agencies. When these securities are issued ie international market, the rating is obtained from international rating agencies.

corporate Securities - Debentures & bonds : These debt instruments are issued by companies as secured instruments by creating charge on their assets including floating charge or at times without any charge also (called unsecured debentures).

Conventionally, in India, the debentures are issued by companies and bonds by Public Sector Undertakings. PSUs may issue these bonds with or without govt. guarantee.

Debentures are governed by provisions of Companies Act and transferable by registration only. Bonds are negotiable instruments. Companies issues unsecured debentures and bonds have to comply with Companies Acceptance of Deposits Rule* 1975.

Both may be issued with different structures such as (a) structured obligations, with put I call option (b) convertibility options (c) Zero coupon bonds (d) floating rate bonds (e) deep discount bonds. These can be issued with redemption options in instalments (called period bonds).

The issuer of these securities appoints a Trustee where the bonds or debentures are secured. Such trustee functions in a fiduciary capacity to protect the interest of debenture I bond holders. The role of Trustee is governed by SEBI guidelines.

Corporate Securities - Convertible bonds : These bonds are a mix of debt and equity. In this arrangement, the bond holders are given an opportunity to convert the debt into equity on a pre-fixed date or during a fixed period. The advantage of such instrument is that the company has no debt repayment obligation and gets additional equity on conversion.

Bank'. can make investment in the corporate securities within the overall Capital Market Exposure ceiling prescribed by RBI. (Direct exposure 20% of net worth of previous year of a bank and aggregate exposure 40% - as on Mar of previous year).

Domestic & Global Markets-,Interaction

The securities mentioned above are available both for domestic and 'global market. The interaction between domestic and global markets has offered opportunity for Treasury transactions and this interaction takes place through various instruments ;products, the details of which are given as under:

Foreign Institutional Investment (FII): Foreign currency funds are converted into rupees for

portfolio investment. Later on the rupee funds are converted into foreign currency for repatriation purposes.

ADRs/GDRs by Indian Companies : Indian companies mobilize funds abroad in the form of American Depository Receipts or Global Depository Receipts by issue of equity shares in the international markets. The holders of these securities have the option to sell their securities in domestic market and receive the proceeds in foreign currency.

External commercial borrowing (ECB): Indian companies borrow in global markets to fund their domestic requirements. Such loans can be repaid by conversion of rupee funds into foreign currency funds.

Foreign currency funds of banks : Bank funds like FCNR deposits, can *be* invested in overseas or domestic market by banks. Banks can also borrow foreign currency funds from abroad within the ceiling fixed by RBI.

Funding and Regulatory Aspects

U/s 22 of RBI Act 1934, RBI is the sole authority in India to issue bank notes. RBI's Issue Deposits is responsible for issue of fresh notes against security which consists of gold coins, bullion, rupee coins foreign securities, eligible promissory notes and other approved securities (aggregate value of gold and foreign exchange reserves should not be less than Rs.200 crore out of which, gold (coins and bullion) should not be less than Rs.115 crore) (Sec 33).

Currency in circulation is controlled by RBI and it is the only cash components of the money in circulation and forms small part of the total money_ Cash deposited with banks is lent by banks that increases the money supply. Thus, there is chain of re-lending and re-deposit. The multiplier effect reduces the importance of currency in circulation and the note issuing role of RBI becomes a utility function.

The money in circulation is broadly covered under M3 also called 'Broad Money'.

Liquidity refers to surplus funds available with bank and the Monetary policy of RBI focuses on regulating the liquidity to control the rate of price rise (inflation) and ensure stability of financial markets.

What are reserve assets : Reserve assets refer to the cash deposit (CRR) by banks with RBI to comply the requirement of Section: 42 of RBI Act 1934 and also the statutory liquidity ratio (SLR) requirement u/s 24 of Banking Regulation Act 1949 Maintenance of CRR and SLR provides cushion to the banking operations_ If need be, RBI would come to the rescue of the bank.

Impact of increase and decrease of CRR: Increase in CRR leads to impounding of bank funds for specific purpose and amounts to absorption of liquidity. On the hand, decrease in CRR leads to release of impounded funds which amount to injecting liquidity in the inter-bank market. For example 0.5% reduction in CRR for a net demand and time liabilities base of say Rs.30,00,000 cr, amounts to release of liquidity of Rs.15000 cr in the inter-bank system_

CASH RESERVE RATIO

CRR refers to the ratio of bank's cash reserve balances with RBI with reference to the bank's net demand and time liabilities to ensure the liquidity and solvency of the scheduled banks.

Extent of CRR : Under RBI Act 1934 (Section 42(1) all scheduled banks are required to keep certain minimum cash reserves with RBI.

Important features are:

- Wef June 22, 2006 (as per RBI Amendment Act 2006), RBI has been empowered to fix CRR (without any floor or ceiling) at its discretion {instead of earlier 3 to 20% range by notification) of the net demand and time liabilities.
- It is to be maintained at fortnightly average basis *(Saturday to following Friday- 19 days)* on reporting Friday *(advised by RBI to banks at the commence of the year).*
- *On* a daily basis it should be minimum 70% of the average balance wef Dec 28, 2002_
- Non-scheduled banks maintain CRR (Sec 18 of Banking Regulation Act) by maintaining 3% of NDTLs as cash balances with themselves).

- Wef January 12, 2002, RRBs also to maintain same CRR as applicable for SCBs.

Demand liabilities: Demand liabilities mean Current deposits, Demand liabilities portion of saving fund deposits, margins held against LC/LG, Balances *in* overdue FD, cash certificate and RD, Outstanding TTs, MTs and DDs, Unclaimed deposits, Credit balances in CC accounts and Deposits held as security for advances which are payable on demand.

Time liabilities: Time Liabilities mean FDs, cash certificate, cumulative and RDs, time liabilities portion of saving bank deposits, staff security deposits, margins against LC not payable on demand, deposit held as securities for advances and India Dev Bonds.

Other demand and time liabilities: include interest accrued on deposits, bills payable, unpaid dividends, sundries account balances, participation certificates issued to other banks, net credit balance in branch adjustment account, margin held on bills purchased or discounted.

Liabilities not to be included for DTL/NDTL computation

a. Paid up capital, reserves, any credit balance in the Profit & Loss Account , amount availed of as refinance from RBI, and apex institutions like Exim Bank, IDBI, NABARD, NUB, SIDBI etc.

b. Provision for income tax in excess of actual estimated liabilities.

c. Amount received from D1CGC pending adjustments.

d. Amount received from ECGC by invoking the guarantee.

e. Amount received from insurance company on ad-hoc settlement of claims pending Judgment of the Court. Amount received from the Court Receiver Exempted Categories

Wef June 22, 2006, RBI has exempted the following liabilities from the CRR requirement of 5%:,

(I) Liabilities to the banking system in India as computed under Clause (d) of the Explanation to Section 42(1) of the RBI Act, 1934;

(ii) Credit balances in ACU (US $) Accounts;

(iii) Transactions in Collateralized Borrowing and Lending Obligation (CBLO) with Clearing Corporation of India Ltd. (CCIL); and

(iv) Demand and Time Liabilities in respect of their Offshore Banking Units (OBUs).

Interest payment : WEF Mar 31, 2007, no interest is payable by RBI on CRR balances (earlier 3.5% p.a. wef 18.09.04 on a monthly basis wef 01.04.2003).

Penalties: With effect from the fortnight beginning June 24, 2006 penal interest will be charged as under :

(i) in cases of default in maintenance of CRR on a daily basis (presently 70% of the total cash reserve ratio requirement), penal interest will be recovered for that day at the rate of 3% per annum above the bank rate on the
amount by which the amount actually maintained falls short of the prescribed minimum on that day and if the shortfall continues on the next succeeding day/s, penal interest will be recovered at a rate of 5% per annum above the bank rate.

(ii) in cases of default in maintenance of CRR on average basis during a fortnight, penal interest will be recovered as envisaged in sub-section (3) of section 42 of Reserve Bank Of India Ad, 1934.

Fortnightly return in Form 'A': Under section 42 (2) of RBI Act, 1934, SCEs are to submit to RBI a provisional return in Form 'A' within 7 days and final Form 'A' within 20 days from expiry of the relevant fortnight.

STATUTORY LIQUIDITY RATIO

Section 24 (2A) of Banking Regulation Act 1949 requires every banking company-to maintain in India equivalent to an amount which shall not at the close the business on any day be less than 25% of the total of its demand *and* time liabilities (to be computed as in case of CRR) in India, which is known as SLR.

RBI powers - RBI can change SLR *with minimum at its discretion and* maximum 40%. Presently it is 21.5% wef 07.02.2015

Components of SLR:

a cash in hand

b gold owned by the bank

c balance with RBI in excess of the ones u/s 42 of 8131 Act.
d Net balance in current account SBI, SBI associates or Nationalised Bank.
e investment in unencumbered approved govt. securities.
Classification of demand/time liabilities: Demand and time liabilities for SLR purpose are same as in case of CRR. When it is to be maintained ? SLR is to be maintained as at the close of business on every day i.e. on daily basis based on the DTLs as obtaining on the last Friday of the 2nd preceding Fortnight.
Penalties: Penal interest for that day at the rate of 3% per annum above the bank rate on the shortfall and if the default continues on the next succeeding working day, the penal interest may be increased to a rate of 5 percent per annum above Bank Rate for concerned days of default on shortfall.
Return in Form VIII: A return in form VIII showing the amounts of SLR held on alternate Fridays during immediate preceding month with particulars of their DTL in India held on such Fridays is to be submitted to RBI before 20th day of every month_ In addition, a statement as annexure to form VIII giving daily position of (a) value of securities held for the purpose of compliance with SLR and (b) the excess cash balances maintained by them with RBI is to be submitted.

CRR & SLR PROVISIONS AT A GLANCE

	C R R	**SLR**
Legal provisions	Sec 42 (1) RBI Act 1934	Sec 24 (2-a) Banking Regulation Act 1949
Min & Max	RBI discretion	Min RBI discretion Max 40%
Kept as	Cash balance with RBI	Cash in Hand, gold and investment in approved securities
Basis	As % of NDTL At fortnightly average basis	As % of NDTLs. On daily basis on DTL on last Friday of 2nd preceding fortnight.
Interest	No interest payable wef Mar 31, 2007	As per investment made in different securities.
Penalty	Penal intt. For the day on which not maintained at 3% p.a. above bank rate. For next	Penal intt. for the day on which not maintained at 3% p.a. above bank rate. For next
Return to RBI	Form A (fortnightly)	Form VIII (20th of every month)

LIQUIDITY ADJUSTMENT FACILITY
Liquidity Adjustment Facility (LAF) was introduced by RBI during June, 2000 in phases, to ensure smooth transition and keeping pace with technological upgradation. On recommendations of an RBI's Internal Group RBI revised the LAP scheme on March 25, 2004. Further revision has been carried wef Oct 29, 2004. The revised LAF scheme has the following features:
LAF is tending of funds by RBI to banks through REPO to meet their liquidity needs. While banks can also sell or buy Govt. securities amongst themselves, the <u>LAF refers exclusively to Repo transactions by RBI to banks.</u> In case of excess liquidity with banks, they can lend to RBI under Reverse Repo and get interest.
Objective : The funds are used by the banks for their day-to-day mismatches in liquidity_
Tenor : Reverse Repo auctions (for absorption of liquidity) and Repo auctions (for injection of liquidity) are conducted on a daily basis (except Saturdays). 7-days and 14-days Repo operations discontinued wef Nov 01, 2004.
Eligibility : All commercial banks (except RRBs) and PDs having current account and SGL account with RBI. Minimum bid Size : Rs. 5 cr and in multiple of Rs.5 cr
Eligible securities: Repos and Reverse Repos in transferable Central Govt. dated securities and

treasury bills.
Rate of Interest : The reverse repo rate will be fixed by R13I from time to time. The repo rate will continue to be linked to the reverse repo rate_ Repo rate is the upper band under LAF, while the reverse repo is the floor rate.

2nd Liquidity Adjustment Facility : RBI had also introduced 2nd LAF with effective from Nov 28, 2005. But later **on** the scheme was discontinued from Aug 2007_

PAYMENT AND SETTLEMENT SYSTEM

Payment Systems are the key component of any financial system as they facilitate the movement of money in the economy and provide a conduit, for effective transmission of monetary policy. World over, the payment systems have witnessed rapid changes due to developments in information and communication technologies. In India, the RBI has taken number of steps during the last few years to build a robust payments system that include building the necessary payments infrastructure and develop a strong institutional framework for the payment and settlement systems in the country.

NEGOTIATED DEALING SYSTEM

The system which became operational during Feb 2002, facilitates the submission of bids/applications for auctions/floatation of govt securities through pooled terminal facility located at Regional Offices of Public Debt Offices and through member terminals. The system can be used for daily Repo and Reverse Repo auctions under Liquidity Adjustment Facility_

Members : Banks, Primary Dealers and Financial Institutions having Subsidiary General Ledger and Current Accounts with RBI are eligible to become members.

Instruments ; Govt. dated securities, Treasury Bills, Re-purchase Agreements (Repos), call/notice/term money, commercial paper, certificate of deposit, forward rate agreements/interest rate swaps, etc. will be eligible instruments. Benefits : It provides an electronic dealing platform for primary and secondary market participants in govt. securities and also facilitate reporting of trades executed through exchanges for information dissemination and settlement, in addition to deals done through the system.

REAL TIME GROSS SETTLEMENT SYSTEM (RTGS)

In India, it has been implemented wef March 26, 2004 and its implementation places India at par with the best practices in the world in terms of payment systems. RTGS is a centralized payment system in which, inter-bank payment instructions are processed and settled, transaction by transaction (one by one) and continuously (online) throughout the day, as and when the instructions are received and finally accepted by the system. RTGS uses INFINET and SFMS platforms.
Features of RTGS:

- RTGS means simultaneous transmission, processing and settlement of the financial transactions
- Settlement Is on a gross *basis* instead of on net basis.
- Settlement is continuously rather than on batch system.
- RBI functions as settlement authority and IRDEfT as central processing agent;
- Message flow model adopted in India — Y shaped Model
- Risk taken care of Systemic risk and settlement risk.
- Settlement cyde — 2 hourly (presently). RTGS deadline 5 p.m.
- Size of Transactions : Above Rs.2 lac_ Up to Rs.2 lac at National EFT.

VARIOUS RATES AT GLANCE (As on 31.07.2015)		
Bank Rate	8.25%	02.06.2015
CRR	4.0%	09.02.2013
SLR	21.5%	07.02.2015
Repo Rate	7.25%	02.06.2015
Reverse Repo Rate	6.25%	02.06.2015
MSF Rate	8.25%	02.06.2015

VARIOUS RATES AT GLANCE (As on 31.10.2015)			
BANK RATE	7.75%	**Base Rate of major Banks**	9.30-9.70%

CRR	4.00%	FOREX RESERVES- Rs. (Billion)	22,826.9
SLR	21.5%	FOREX RESERVES US $ Million	353,069.0
REPO RATE	6.75%	SCB Total Deposits - Rs. in Cr.	91,638.2
Reverse REPO	5.75%	SCB Total Credit - Rs. Cr.	68,302.4
MSF	7.75%	CREDIT- DEPOSIT RATIO	74.53%

Treasury Risk Management

Treasury risk management is important for following reasons:
- Bank managements are very sensitive to treasury risk.
- Treasury profits are earned from market opportunities. Hence, bank is exposed to market risk
- Treasury is responsible for balance sheet management. It has to take care of market risk from other activities also.
- Treasury operations do not require much capital i.e. it is highly leveraged. To meet treasury losses, bank does not have much capital. lithe treasurer (dealer) commits an error of judgement, the consequent losses would be huge.
- Losses in treasury business materialize very quickly and confirmed transactions cannot be revoked.

Management of Treasury Risk : Following steps can be taken for management of treasury risk:
A. Organisational controls
B. Exposure ceilings
C. Limits on trading positions and stop loss limits.

(A) Organizational controls: It refers to internal checks and balances. For example, the deals (sales and purchases) are generated by the Front Office.
The Back Office settles the deals only after verification of compliances with internal regulations.
It obtains independent confirmation of each deal from each counterparty and settles the deal within the exposure limits. The verification of rates & prices is done by comparing to screen based (Reuter/Bloomberg) information about rates. The banks having larger operations, have also Middle Office that is responsible for overall risk management.
It maintains profile of treasury and monitors the liquidity and interest rate risk.

(B) Exposure ceiling limits : These limits are fixed for protecting the bank from credit risk (default and counterparty risk) that arises in treasury operations when the Treasury lends in money market to other banks. Though .the risk in lend in to other banks is low but it is not zero. Ceilings are also prescribed on inter-bank liabilities by RBI.
The counter-party risk arises due to failure of the counterparty (another bank) to deliver the securities or complete the settlement. The counterparty risk can be bankruptcy or inability of the counterparty for any reason to complete the transaction. By fixing the limits on inter-bank exposure and limits on counterparties, the banks are able to limit their losses. The ceilings can be with reference to time duration also say for overnight, I month, 3 months etc_ The ceilings are reviewed at least once in a year, by the banks.

(C) Internal controls: These are the position limits and stop loss limits which are imposed on the Dealers who trade in forex or securities. The trading limits are of 3 types (a) limits on deal size (b) limits on open positions (c) stop-loss limits.

(a) Limits on deal size: The limit fixes the maximum value of the buy or sell transaction and corresponds to the marketable size of the transactions.
Limits on open positions: The limits are also fixed on open positions i.e. balance payable or receivable

position. For example, the Treasury buys forex 1 million USD with a view to sell it when rate appreciates. If the rate declines, the bank is faced with potential loss in addition to carry cost, as it will have to pay interest on funds, involved in carrying on *with* the balance.

-The limits are higher for Day-light position.

- The limits are lower for over-night position.
- There are currency-wise position limits. For the purpose of aggregation, the positions are converted into US D and then to rupee.
- All forward transactions are revalued periodically and the outstanding positions in each time bucket are subjected to gap limit, which are approved by the management.

(c) Stop loss limits : It represents the final stage of the controlling a trading operation if adverse position emerges (for example, the rates are declining while the bank had purchased the forex at a higher rate). The stop loss limits prevent the dealer from waiting indefinitely and limits the loss level which is acceptable to the management. The loss limits are prescribed (a) per deal (b) per day (c) per month (d) aggregate loss limit per year.

Market Risk and Credit Risk

Treasury operations face both the credit risk and market risk.

Credit *risk* arises on **account** of default by the counter-party in which the bank may lose the principal and interest. Market risk arises on account of movements in the price of the security, interest rates or exchange rates in such a way

(a) Liquidity risk : This risk arises on account of mismatch that the Treasury could not cover. For example, Treasury purchases a 1-year Govt. security by borrowing in the call market, with a view to sell the security *next day* when there is increase in its value. If on the 2[14] day the value declines, the bank will face a liquidity position. To manage liquidity risk, the Treasury need to have a contingency plan.

(b) Interest rate risk : This risk exists in a transaction where there is mismatch_ In the above example, to square the call money transaction of the previous day, the Treasury have to borrow from alternate sources and pay interest. The total interest cost in this manner may be higher than the profits anticipated from the sale of Govt. security.

The Treasury may also

A. face exchange risk in case of forex transactions.

B. may be affected by equity risk (when the prices of shares decline and lead to liquidity problem) and

C. face commodity risk (if the Treasury has taken exposure in commodity futures).

Risk Measures : VaR & Duration

The uncertainty associated with the price movement of securities or foreign exchange (which cannot be predicted accurately), exposes the Treasury to Price Risk. To have some idea of the inherent risks and their effect on the position maintained by the Treasury, VaR and duration can be used.

Value at Risk (VaR): VaR is used to make assessment of possible loss or the worst case scenario, during the period, when a position in securities or forex is held by the Treasury. Hence, VaR refers to the most probable loss that the Treasury may incur *in* normal market conditions due to volatility of exchange rates, commodity prices or security prices, over a given period, at a given confidence level. It is expressed as a %age (say VaR at 98% confidence level, means a 2% probability of incurring loss). The loss is expressed in absolute amount for a given transaction value.

For example if there is confidence level of 95% (which means a VaR of 5%) for 30 days period, the rupee is likely to lose 5p in exchange value within 30 days, with 5% probability. Hence rupee is likely to depreciate maximum Sp on 1.5 days of the period (30 days x 5% = 1.5 days). Similarly, a VaR of Rs.I lac at 99% confidence level for one week, for a portfolio of Rs.100 lac means, that the value of the portfolio may drop by maximum Rs.1 lac with 1% probability over one week.

Calculation of VaR : It is derived from the statistical formula that are based on volatility of the market.

Volatility is the standard deviation from the mean observed over a period. There are 3 approaches to calculate VaR. i.e.

(a) Parametric approach which is based on sensitivity of various risk components (price of the a particular stock depends on its sensitivity to index change).

(b) Monte Carlo Model, where the no. of scenario are generated at random and their impact on the variable (stock price or exchange rate) is observed.

(c) Use of Historical data, where the historical data is used' to arrive at probable loss.

(d) **Duration :** It is used *in* all asset and liability positions where interest rate risk is prevalent

- Duration is weighted average measure of life of a bond, where the time of receipt of a cash flow is weighted by the present value of the cash flow.
- Duration is expressed in no. of years. For a longer duration, the sensitivity of price change is greater to change in interest rate.

Example : If the first cash flow (receipt of interest on bond) is after 6 months from date of investment, the period of 6 months is multiplied by the present value of the cash flow. If the 2' cash flow is after 12 months, it is multiplied by the present value of the cash flow. In this way, all the present value of all future cash flows is multiplied with the period of receipt of cash flows. The aggregate of these is divided by the total of weights, to work out the Duration. This is based on the formula given by Frederick Mecaulay and is called Mecaulay Duration.

Modified duration : It is arrived by dividing the duration with the interest rate (which is actually the principal + interest for 1 year expressed at Y+1, where the Y is yield). If the duration of bond yielding 5% is 2.5%, the MD = 2.5 / (1+0.5) or 1.66..

Any change in the yield multiplied by MD will give the likely percentage change in the price of the bond_ If the yield rises by **1%,** the change in price of the above bond will be 1.66% (1.66 x **1%).** The increase in yield of 1% give cause decline in price of bond by 1.66%, because the yield and price have inverse relationship.

YTM : To understand duration better, the understanding of the concept of Yield to Maturity (YTM) is essential. For example, the current price of a bond may be different from its face value and the value at which the bond was originally purchased, (due to current interest rate which is expected during the residual maturity of the bond). Hence, rn, the current price of bond, there may be premium (if the current interest rates are lower than the coupon rate) or discount (if the current interest rates are higher than the coupon), to face value.

YTM The effective return on a bond (based on coupon rate, current market price and residual maturity) is called Y ield. It should be noted that the yield is different from interest rate, which is a fixed amount. Yield depends upon the amount of investment made in the bond, its residual period and its coupon rate. The rate at which the the present value of a bowl equals the market price of the bond, is called YTM. The yield and price of bond, move in opposite direction, i.e. if yield rises, the price of the bond declines.

YTM can be calculated from bond tables or bond calculator. For example a bond carrying 5% coupon with balance maturity of 2 years is traded at a discount of 2% i.e. at Rs.98. Interest at 5% on a price of Rs.98 will work out to 5.1% which turns out to be YTM of 6.08%.

Derivative Products

Treasury makes use of derivative products for the purpose of

- Management of risk including the risk relating to ALM
- Catering to requirement of corporate customers
- Taking trade positions in derivative products;

What is a derivative? A derivative is a financial contract that derives its value frorn another financial product/commodity *(say spot rate)* which is called *underlying (that* may be a stock, stock

index, a foreign currency, a commodity). Forward contract in foreign exchange transaction, is a *simple form of a derivative.*
Objectives and instruments of derivates: The major purpose that is served by derivatives is to *hedge the risk.* Futures, forwards, options, swaps' etc. are the common derivative instruments. The derivatives do not have any independent existent and are based on the underlying assets that could be a stock index, a foreign currency, a commodity or an individual stocks. This means that derivatives relate to. future value.
Over **the** counter & exchange traded derivatives The derivative products that can be obtained from banks and investment institutions are called Over-the-counter (OTC) products. Some of the derivative products (called exchange traded derivatives) are traded in the stock exchanges including at International Monetary Exchange (IME) Chicago, London Financial Futures Exchange (LIFFE), Singapore Stock Exchange (SGX). Distinction between these two is as under:

Over the counter products — Forwards, currency & interest options, swaps etc.	**Exchange trade products such as currency, interest rate & commodity futures & options, stock / index**
• **Size of** the contract and its maturity can *be* according to requirement **of the customer.** • It is exposed to Counterparty (bank) risk. • Banks are the main players. - Option premium is **upfront** and the cost is agreed rates. • Market is not liquid. Cancellation or reversal is expensive.	• Only standardized contracts and with fixed maturity **Price** fluctuates according to market. • No Counterparty risk. These are exchange • Only members of the exchange can trade • Prices market driven. Members to contribute basis of daily marking to market • Market very liquid and prices are market determined.

Treasury makes use of OTC products such as forward contracts, options and swaps. Larger banks, which are market makers, cover their residual position in Futures traded in the exchanges.
Components of derivatives: The derivatives have components such as Options, Futures-forwards and Swaps.
Option
It is contract that provides a *right* but does not impose any obligation to buy or sell a financial instrument, say a share or security. It can be exercised by the owner. Options offer the buyers, profits from favourable movement of prices say of shares or foreign exchange.
It is important to note that option can be *exercised by the owner* (the buyer, who has the right to buy or sell), who has limited liability (to the extent, the premium, he pays) but possibility of realization of profits from favourable movement in the rates. Option writers on the other hand have high risk and they cover their risk through counter buying. The owner's liability is restricted to the premium he is to pay.
Example : XYZ Limited, a broking company makes an offer to A to purchase from it 10000 shares of a Blue Chip company during the month of March, at Rs.2000 per share. A shall not have obligation to purchase the shares, if he does not want to do so_ For this, A has to pay Rs.I0000 to XYZ Limited, as premium.
This is an option transaction. In this transaction XYZ Limited are the option seller, who have the obligation to sell, if A wants to buy. A is the Option buyer, who has the right to buy but not the obligation to purchase. Rs.10000 is the premium payable by A as cost of the option. Similarly, A may be given an option to sell, some quantity of shares, at a pre-fixed price during a pre-fixed period.
Variants of options: There are 2 variants of options.
1. European option where the holder can exercise his right on the expiry date and
2. American option where the right can be exercised anytime between purchase date and the expiry date:

Components of options: Options have two components i.e. *call option and pu: option_*
Call! option : The owner Le_ the buyer, has the right to purchase and the seller *has* to obligation to sell, a specified no. of
instruments say shares at a specified price during the time prior to expiry date (please refer to *the*

example above).
A call option protects the buyer from rise in the stock *price.*
Put option : Owner or the buyer has the right to sell and the seller has the obligation to buy during a particular period.
A put option protects the buyer from the fall in the stock price.
Premium : The cost of the option charged upfront, from the buyer is called 'premium'. In other words, it is the fee paid for option contract (just lace insurance premium).
Maturity date or expiration date in an option: It is the last day on which the option can be exercised.
`In the money' under an option : Where exercising the option provides gain to the buyer, it is called 'in the money'. It happens when the strike price is *below* the spot price, in case of a call option OR the strike price is *above* the spot price, in case of a put option_
`At the money' : Where exercising the option provides no gain or loss to the buyer, it is called 'at the money'.
`Out of the money' : Where exercising the option results into loss to the buyer, it is called 'out of the money'. It is better to let the option expire.
Embedded option : Where the buyer is given an option to repay before maturity period, in case of a structured credit product. A 10 year bond has been issued by a company in which an option is given to the investor to get back the money at the end of 7th year (which is a also put option).

Options and forward contract

Option	**Forward Contract**
1. Buyer has the option to buy or not to buy i.e. the contract or allow it to expire_ 2 Buyer can chose the price (called strike price) 3. , Price of the option (premium) is payable up 4. Option contract is tradable and it can be sold if not required.	1 Contract has to be settled on maturity_ It cannot expire 2. Buyer has to accept the forward rate that is market. 3. There is no price for the contract. Interest differentials of two 4. It cannot be sold but it can be rolled over or cancelled.

Futures

The futures are the contracts between *sellers and buyers* under which the sellers (termed 'short') have to deliver, a prefixed quantity (of currency or security or commodity), at a pre-fixed time in future, at a pre-fixed price, to the buyers (known as 'long'). It is a legally binding obligation between two parties to give/take delivery at a certain point of time in-future. The main features of a futures contract are that:

- these are traded in organised exchanges which means that these are bought and sold only through the members of the exchange,
- the buyers need to pay only the margin. These are marked to market on a daily basis and the members are required to pay margin equivalent to daily loss, if any This way the possibility of default on settlement date is avoided.
- these are regulated by institutions such as SERI. The exchange guarantees all trades. routed through its members and in case of default by the member, the payment obligation shall be met by the exchange from Trade Protection Fund.
- The future positions can be closed easily.
- these contract are made primarily for hedging, speculation, price determination and allocation of resources.
- Future contracts are of standard size with pre-fixed settlement dates.

Financial futures : Futures relating to exchange rates (currency futures), interest rates (bond futures) and equity prices
(stock / index futures), are called financial futures.
Currency futures issued by banks, serve the same purpose as the forwar• d contract. However, they being the standardized

contracts, can be sold on stock exchanges. The currency forward contracts are on-the-counter product only_ Currency futures are traded for major currencies such as Euro, Pound, Yen, Australian and Canadian Dollar.

For example a contract of Pound 10000 is traded at London Financial & Futures Exchange (LIFFE) for delivery on January 22 at 2.105 US S. This means that on Jaifuary 22, the seller shall deliver to the holder of the contract Pound 10000 against payment in US S at 2.105 per Pound. If on the settlement date, the market rate is higher, the seller shall pay to the holder, the difference in the contract price and spot price. If, on the other hand, the market rate is lower than the contracted price, the buyer of contract shall bear the loss. Being a futures contract, the contract has to be performed by both the parties.

Interest rate futures are the contracts made on the basis of fixed income securities (say Bonds or Treasury bill) of specified size. Contracts based on Bonds deal in medium or long term interest rates and the contracts based on Treasury Bills trade in short term interest. Interest rate futures help in hedging the interest rate risk.

For example, a futures contract of say US $ 10000, on 1-year Treasury Bond traded at 96 if the expected interest rate at the end of the period is 4% (100-4 = 96, the futures price).

Interest rates and Currency Swaps

A swap in a contract that binds two counterparties to exchange the different streams of payment over the specified period at specified rate_ In the context of foreign exchange, it means simultaneous sale and purchase of one currency to another. In the context of financial or derivatives, the swap means the exchange of two streams of cash flows, over a
definite period of time.

Swap in foreign exchange: Simultaneous purchase of forward currency on sale of spot currency or vice-versa. For example, an-exporter has. US $ 20000 available with him but he does not require the foreign currency now. He will need the currency after, say 3 months. He can sell $ 20000 in spot and simultaneously purchase S 20000 3-months forward.

Interest rate swap: It is exchange of different streams of interest structures (and not the principal amount). This means it is exchange of interest flows on an underlying asset or liability, the value of which notional amount of swap. This type of swap is shifting of the basis of interest rate calculation, from fixed rate to floating rate or vice versa or floating to floating or fixed to fixed.

For example, XYZ Limited is paying fixed interest at 10% on a 5-year debentures. The market interest rates have started showing decline. The company enters into an interest swap with its bankers exchanging the fixed rate to **a** floating rate with 6-months Treasury Bill rate as the bench mark rate. If the swap equivalent of 6-month T-Bill is 8%, the fixed talc will be swapped into a floating rate based interest of T-Bill 2%. After every 6 months, the bank pays to the company interest at 10% and the company pays to the bank interest at T-Bill + 2%. If the T-Bill rate moves down to 7Vo after 6 months, the company will pay T-Bill + 2% i.e. 9% (7+2 = 9%) and will get from bank 10%. Hence, the company will be able to save 1%. In the above case, the interest is calculated on a notional amount, which in the above case is equal to the amount of debenture_ The bank pays fixed interest as if has borrowed the funds from the company and company pays the floating rate as if it has borrowed from the bank. The notional amount is never exchanged. The actual payment of interest is netted out on the interest payment date.

Similarly, if the above company has been making interest payments on floating rate basis and expects the interest rates to increase, it may enter into a fixed interest rate swap.

The floating rate of interest is essentially linked to a benchmark rate. The bench mark rate is risk free interest rate, fixed by the market and accepted by the market players.

A floatine to floating rate swaps involves the change of benchmark rate. **If** a company has opted for a T-Bill linked at and later on prefers a MIBOR linked benchmark, it can agree to receive T-Bill rate and pay the MIBOR linked equivalent rate.

Forward rate agreement : In case of FRA, the interest payable for a future is committed under the

agreement. FRA is for a single payment in future, while the interest rate swap can for a series of periodical interest payments. For example, interest rate on a loan is fixed with reference to coupon rate on 182-day T-Bill on April 01 and next fixation will be done on October 0I (after 6 months) and the borrower wants that his cost should not increase substantially, if the 182-days T-Bill; coupon rate moves up In this situation, the borrower can buy a 6/12 months forward rate agreement for the next 6 months.

Currency swap When pre-determined streams of payments in different currencies are exchanged on a pre-fixed period at pre-fixed rate, this is called currency swap. The cash flow may relate to repayment of principal or interest under a loan obligation.

There are 3 variants of currency swap, principal only swap, interest only swap and P+I swap.

Principal only Swap: If repayment of only principal is involved this is called Principal Only Swap and if it is interest alone, it is called Interest Only Swap. If a company continues to pay interest in foreign currency but is able to use the funds in home currency.

Interest only swap : The currency swap is used when the loan is obtained in a different currency than from that in which it is to be used. Where the loan is used in the foreign currency but the interest on the foreign currency loan is swapped into rupee interest.

Example : A high rated UK company is in need of Rupee funds and can raise funds in UK at very competitive rate but it not well known in India. **If** it raises funds in India, it has to incur high cost. A high rated Indian company requires foreign currency (Pound) and if raises funds in UK, it has to incur higher cost because it is unknown in UK. These companies can raise loans in their domestic currencies and can swap the loans to meet their requirements_ An India company having higher international rating may borrow funds in Europe at a cheap cost and swap the loan into rupees to reduce the effective cost.

Developments in Indian Market and RBI guidelines on Risk Exposure

Forward contracts were the only available derivative product available in Indian market, till early 1990. Cross currency products were also allowed for hedging purpose, where rupee payments were not involved. Interest rate swaps and forward rate agreements were permitted by RBI in 1998. In its April 2007, RBI has allowed the following derivative products:

Permissible derivative instruments

Al present, the following types of derivative instruments are permitted, subject to certain conditions:

Rupee interest rate derivatives -

(a) Forward Rate Agreement (FRA)

A Forward Rate Agreement is a financial contract between two parties to exchange interest payments for a *notional principal' amount on settlement date, for a specified period from start date to maturity date. Accordingly, on the settlement date, cash payments based on contract (fixed) and the settlement rate, are made by the parties to one another. The settlement rate is the agreed benchmark/ reference rate prevailing on the settlement date.

(b) Interest Rate Swap (IRS)

An Interest Rate Swap is a financial contract between two parties exchanging or swapping a stream of interest payments for a 'notional principal' amount on multiple occasions during a specified period. Such contracts generally involve exchange of a 'fixed to floating' or 'floating to floating' rates of interest. Accordingly, on each payment date - that occurs during the swap period — cash payments based on fixed/ floating and floating rates, are made by the parties to one another.

(c) Interest Rate Futures (IRF)

Interest Rate Future is a **standardized,** exchange-traded contract with an actual or notional interest-bearing instruments) **as the** underlying asset.

Foreign Currency derivatives

(a) Foreign Exchange Forward

A foreign exchange forward is an over-the-counter contract under which a purchaser agrees to buy from the seller, and the seller agrees to sell to the purchaser, a specified amount of a specified currency on a specified date in the future - beyond the spot settlement date - at a known price denominated in another currency (known as the forward price) that is specified at the time the contract is entered into.

(b) Currency Swaps

A currency swap is an interest rate swap where the two legs to the swap are denominated in different currencies. Additionally the parties may agree to exchange the two currencies normally **at the** prevailing spot exchange rate with an agreement to reverse the exchange of currencies, at the same spot exchange rate, at a fixed date in the future, generally at the maturity of the swap.

(c) Currency Options

A currency option is a contract where the purchaser of the option has the right but not the obligation to either purchase (call option) or sell (put option) and the seller (or writer) of the option agrees to sell (call option) or purchase (put option) an agreed amount of a specified currency at a price agreed in advance and denominated in another currency (known as the strike price) on a specified date (Europe= option) or by an agreed date (American option) in the future.

(d) Interest Rate Caps and Floors

An interest rate cap is an interest rate option in which payments are made when the reference rate exceeds the strike rate. Analogously, an interest rate floor is an interest rate option in which payments are made when the reference rate falls below the strike rate.

Treasury & Risk Management

Banks accept deposits from customer the maturity of which ranges from 7 days to 10 years. The banks return these deposits on maturity for which the depositors have the comfort that banks will not default in repayment on time. These funds are partly invested in cash to meet CRR requirement, in Govt_ securities to meet the SLR requirements, and in loans and advances of various maturities. Banks however, do not have similar type of comfort for receiving these funds back, particularly from the borrowers.
For example, a bank raised a term deposit of 3-years at 7% and lends the amount repeatedly for a 3-months bills discounting at 9%. After every 3 months the bank will face the liquidity problem besides other risk. Similarly, if by that time there is decline in the interest rate (say it comes down from 9% to 8%), the bank will also face interest rate risk. Hence, the risk arises out of mismatch of assets and liabilities of the bank and the ALM manages such balance sheet risk.

Liquidity Risk vs Interest Rate Sensitivity Risk

Liquidity and interest rate risks: Banks are sensitive to liquidity risk because they cannot afford to default on their payment obligation towards the depositors as that may lead to a run on the bank. Banks have to roll over the deposits and advances on market determined terms. Any mismatch in the maturity profile will not only lead to liquidity risk but to interest rate risk.
Liquidity : Liquidity refers to a positive cash flow in the form of cash or cash like assets. The available cash resources are compared with the immediately due liabilities or liabilities in a given time range (called bucket). The difference between these sources and uses of funds in specific time buckets is the liquidity gap which may be negative or positive_ Hence the liquidity gap arises out of mismatch of assets and liabilities. RBI has prescribed 11 maturity time bands (called buckets) beginning from next day to more than 5 years for measuring and monitoring the liquidity gap.
Interest rate: Interest rate risk is measured by the gap between the interest rate sensitive assets and liabilities in a given time band.
Rate sensitive assets and liabilities: Assets and liabilities are called to be rate sensitive when their value changes in the reverse direction corresponding to a change in the market rate of interest. For example, if a bank has invested in a bond having 8% coupon and later on the market interest rate increases to 9%, the value of the bond would decline. The difference between rate sensitive assets¯

and liabilities in each time band, either in absolute amount or as sensitivity ratio, is indicative of the risk arising out of interest rate mismatch.

Role of Treasury in ALM

Treasury maintains the pool of funds of the bank and its core function is funds management. Hence its activities expose the bank to liquidity and interest rate risk. Treasury Head in a bank is normally an important member of ALCO. Risk management has become integral part of Treasury, due to the following reasons:

1. Treasury operates in financial market directly by establishing a link between the core banking functions (of collecting deposits 4: lending) and the market operations. Hence, the market risk is identified and monitored through Treasury.
2. Treasury makes use of derivative instruments and other means to bridge the liquidity and rate sensitive gaps which arise due to mismatch in the residual rnattuity of various assets and liabilities in different time buckets.
3. Treasury itself is exposed to market risk due to its trading positions in forex and securities market.
4. With development of financial markets, certain credit products are being substituted by treasury products (in place of cash credit, the emergence of commercial paper by large companies). Treasury products are marketable and help in infusion of liquidity in times of need.

Use of Derivatives in ALM

Derivative instruments are used to reduce the liquidity and interest risk or in structuring new product to mitigate market risk. These are used due to following reasons:

1_ Derivatives replicate the market movements and can be used to counter the risks inherent in regular transactions. For example, if stocks that are highly sensitive to market movement are purchased, the Treasury can sell the index futures as a hedge against fall in stock prices.

2. Derivatives require small capital as there is no funds deployment, except margin requirement.

3. Derivatives can be used to hedge high value individual transactions or aggregate risks as reflected in the assets liability mismatch. For example, if *a bank* is funding a term loan of 3 years (having higher rate of interest), with *a* deposit of 3-months duration (having very low rate of interest) by rolling over the deposit, it has to be rolled over 12 times and every time the bank is exposed to interest rate risk. To take care of this, the bank may swap the 3--month interest rate into a fixed rate of 3 years, so that interest cost is fixed and the spread on the loan is protected.

4. Treasury can also protect the foreign currency obligations of the bank from exchange risk by buying call options where it has to deliver foreign exchange and by buying put option where it has to receive the foreign currency payment The options help the bank to protect rupee value of the foreign currency receipts and payments.

5. Treasury helps the bank in structuring new products to reduce the mismatch in the balance sheet, such as floating rate deposits and loans, where the interest rate is linked to a bench mark rate. similarly, the corporate debt paper can be issued with call and put option. The option improves the liquidity of the investment. (A 5-year bond issued with a put option at the end of 3"[1] year is as good as a 3-year investment).

Treasury and Credit risk & Credit derivatives

Credit risk in Treasury business is largely contained in exposure limits and risk management norms. Treasury gets exposed to credit risk in the following ways:

Investment in treasury products such as corporate commercial paper and bonds (instead of lending, investing through these debt instruments). But, the credit risk in a commercial paper being similar to a cash credit advance, the commercial paper is tradable due to which it is a liquid asset. Hence bank has an easy exit route. Hence the non-SLR portfolio supplements the credit portfolio and at the same time is more flexible from ALM point of view.

2. The products like securitization convert the traditional credit into tradable treasury products. For example, the housing loans secured by mortgage, can be converted into pass through certificates

(PTCs) and sold in the market (which amounts to sale of loan assets).

3. Credit derivative instruments such as credit default swaps cr credit linked notes transfer the credit risk of the lending bank to the bank (called protection seller) which is able to absorb the credit risk, for a fee. Credit derivatives are transferable instruments due to which the bank can diversify the credit risk.

Treasury and Transfer Pricing

Transfer pricing refers to fixing the cost of resources and return on -assets of the bank in a rational manner. Treasury buys and sells the deposits and loans of the bank, notionally, at a price which becomes the basis of assessing the profitability of the banking activity. The price is fixed by Treasury on the basis of :

- market interest rate,
- cost of hedging market risk and
- cost of maintaining the reserve assets.

After implementation of transfer pricing, the Treasury takes care of the liquidity and interest rate risk of the bank.

Policy environment

For the ALM to be effective, the bank should have an appropriate policy in place.

1. It should be approved by Board of Directors.
2. It should comply with RBI & SEBI regulations
3. It should comply with current market practices and code of conduct evolved by FIMMDA or FEDAI.
4. It should be subject to periodical review.

Components of integrated Risk rated Risk management Policy

Policy	Component
ALM Policy	Composition of ALCO, operational aspect of ALM 'Such as risk measures, risk monitoring, risk neutralization, product pricing, MIS etc.
Liquidity policy	Minimum liquidity level, -funding of reserve assets, limits on money market exposure, contingent funding, inter-bank credit lines.
Derivative policy	Norms for use of derivatives, capital allocation, restrictions on derivative trading, valuation norms, exposure
Investment policy	Permissible investments, norms relating to credit rating, SLR and non-SLR investment, private placement, trading in securities and repos, accounting policy.
Transfer pricing	Methodology, spreads to be retained by Treasury, segregation of administrative cost and hedging cost, allocation of cost to branches etc.

TEST YOUSELF :MCQ

INTRODUCTION TO TREASURY MANAGEMENT

1. Which of the following are the functions of a Treasury?

a) Maintaining adequate Cash Balance
b) Deploying surplus funds
c) Meeting fund requirement in case of short fall d) All of these

2. The significance of Treasury management in case of Banks is:

a) To maintain CRR as per RBI guidelines
b) To meet SLR requirements
c) **It** is the function of liquidity management d) All of these

3. Treasury management was earlier classified as:

a) A service centre b) Fund management department
c) Investment centre d) Core Business Division

4. Which of the following activities of a Bank the Treasury management is more relevant?
a) Deposit function b) Asset liability management
c) (a) and (b) both d) None of these

5. Which of the following are integrated activities of Treasury management?
a) Investment in securities b) Foreign Exchange Business
c) (a) and (b) both d) None of these

6. The Treasury management operations mainly deals with:
a) Short term funds flows b) Long term fund flows
c) None of the above d) All of these

7. For which of the following activities the Treasury management also deals with the long term flows?
a) For the purpose of SLR requirements
5) Long term investments
c) Investment in Treasury Bills d) All of these

8. What is integrated Treasury management services?
a) Money Market operations b) Securities Market operations
c) Foreign Exchange operations d) Integration of all these

9. Which of the followings has given new dimension to Treasury management operations?
a) Financial Sector reforms b) Deregulation of interest rates
c) Convertibility of Rupee d) All of these

10.Which of the following foreign exchange operations have been useful in Treasury management operations?
a) Arbitrage b) Swaps c) (a) & (5) both d) None of these

11. Which of the followings are the sources of foreign currency funds for Banks?
a) NRI deposits b) Cash Balance in EEFC Accounts
c) External Commercial Borrowings d) All of these

12.What are The recent important development in financial market in India which have facilitated treasury management operations?
a) Instant payment and settlement system. -
b-). Easy transfer of funds from securities market to money market.
c) Transfer of funds from one currency to another. d) All of these

13. Integrated Treasury management can operate:
a) Across the sectors b) Across the currency
c) (a) & (b) both d) None of these

14. Integrated Treasury management helps in Integrated Risk management through:
a) use of derivatives b) Money market instruments
c) Capital Market instruments d) All of these

15. The functions of Derivatives are:
a) It is useful in providing flexibility to market products
b) It is an important tool for hedging market risk
c) (a) and (b)- both d) None of these

16.The Treasury Transactions with customers are known as:
a) Merchant Banking Finance b) Financial Market operations
c) Money Market operations d) none of these

17. Generally, Customers use Treasury services of a Bank for the following purposes:
a) To Hedge export receivables
b) To raise foreign currency loans
c) Overseas investments d) All of these

18.The driving forces of integrated Treasury management are:
a) Integrated cash flow management **b)** Interest arbitrage

c) Risk management d) All of these

19. The main functions of integrated Treasury management are:

a) To meet reserve requirements
b) Efficient Merchant Banking services
c) International cash flow d) All of these

20. Under the Treasury management services, profits can be optimized through the combination of:

a) Forex market b) Money market operations
c) Securities market operations d) All of these

21.Which of the following is the function of integrated Treasury management?

a) Asset liability management in Banks b) Risk management
c) (a) and (b) both d) None of these

22.The Treasury management comprises of:

a) Funds management b) Investment management
c) Trading in forex operations d) All of these

23. Globalization is the process of:

a) Free flow of services and goods
b) Free capital flows among the nations
c) A minimum regulatory intervention d) All of these

24. Which of the following statements is correct?

a) Foreign capital flows involve direct and indirect investment which facilitates repatriation of returns.
b) The RBI regulates the capital flows from abroad.
c) (a) and (b) both d) None of these

25.Which of the following Departments of RBI has been renamed since January 2004?

a) Exchange Control Department b) Foreign Exchange Department
c) (a) and (b) both d) None of these

26.The process of globalization in India has directly influenced:

a) Interest rate b) Exchange rate c) (a) and (b) both d) None of these

27.Which of the following organizations have supported the financial market in the recent past?

a) Clearing Corporation of India Ltd.
b) National Securities Depository Corporation Ltd.
c) (a) and (b) both d) None of these

28.The growth of new institutions has helped the development of Treasury management operations by the process of:

a) Widening and deepening the debt market.
b) Minimizing counterparty risk
c) (a) and (b) both d) none of these

29.Which of the following instruments have been used to hedge interest and currency risks?

a) Swaps b) Forwards c) Options d) All of these

30.The RBI has allowed the Banks to borrow or invest in foreign currency subject to a ceiling of:

a) 25% of their tier-I capital.
b) US Dollar 10 Million or 50% of their tier-I capital whichever is higher
c) (a) and (b) both d) All of these

31.Why Treasury activities are attractive?

a) These activities operate in a market which are almost free of credit risk. .b) It needsiess capital
c) (a) and (b) both d) None of these

32. Which of the following is not true regarding Treasury operations?

a) The operational cost is very low.
b) The activities can be managed by any of the staff.
c) It trades in narrow spreads. d) All of these

33.What is spread?
a) The difference between buying and selling rates is spread.
b) This is profit for the Bank.
c) It is a source of fee based income d) All of these

34.Which of the following is correct?
a) Banks buy foreign currency mainly from exporters.
b) Banks sell foreign currency in the Inter-Bank market
c) Banks also sell foreign currency to importers d) All of these

35. Which of the following is not correct? The Banks do not buy from Inter-Bank market.
a) Banks may use foreign currency in squaring up the foreign exchange transactions
b) Banks generally do not maintain large stock of foreign currency for merchant Banking activities.
c) The Banks prefer to buy and sell in the Inter-Bank market.

36. What is open position?
a) The overbought or oversold position at the end of the day.
b) When transactions are not backed by the proper securities
c) (a) and (b) both d) None of the above

37.The features of open position are:
a) It involves exchange risk
b) Banks maintain limited open position
c) The exchange rate may change overnight d) All of these

38.Investment opportunities available for a Bank consists of:
a) Govt. securities
b) Investment in strategic Assets such as subsidiary and associate companies
c) Corporate Debt market d) All of these

39.The Treasury profits in large quantity can be derived from the following market operations:
a) Buying and Selling b) Borrowing and Lending
c) Investment in Tradable Assets d) All of these

40. What is interest arbitrage?
a) A favourable position where interest rates are different across the overseas market.
b) The Treasury may buy or sell in the Inter-Bank market depending on the interest -rates in the Home Country and Foreign market.
c) (a) and (b) both d) none of these

41.Interest arbitrage can be done through:
a) Borrowing in money market and investment in short term securities
b) Borrowing in one currency and lending in another currency
c) (a) or (b) d) None of these

42.The features of Trading Activity are:
a) It is speculative activity.
b) The profit depends on favourable movements of price during the interval period of Buying and Selling.
c) The open position on Treasury is known as proprietary or trading position
d) All of the above

43. In which of the following conditions, the trading activity can be profitable if an investment is made in US Dollars?
a) When US Dollar is sold at higher rate.
b) When US Dollar is sold at lower rate.
c) When US Dollar price is equivalent to Rupee price. d) All of these

44.The Trading in currencies and securities are subject to the following Risks:
a) Price Risk b) Market Risk c) Exchange Risk d) Any of these
45.Banks may use Derivatives for:
a) Trading activities for treasury b) Risk management
c) (a) & (b) both d) none of these
46.The purpose of selling structured loans to corporate by treasury is:
a) Reduction in interest cost b) Minimising Exchange Risk
c) (a) and (b) both d) Any of the above
47.If a company buy a forward rate agreement to fix interest rate for an instrument, what can be the consequences?
a) The Treasury may offer a currency swap.
b) It will reduce the interest cost to the company.
c) Treasury will have a profit margin d) All of these
48.A specialized independent Bank branch for Treasury operations have the following .advantages:
a) It can act as authorized dealer.
b) It can participate in clearing and settlement system directly.
c) It can maintain own accounting system d) All of these
49.The Treasury operations may have the following departments:
a) Dealing Room b) Back office c) Middle office d) All of these
50. What is a dealing room?
a) It is a front office. b) It directly buys and sells in the market
b) The dealers are specialized in various transactions d) All of these
51.The categories of Dealers in the Dealing Room can be:
a) Chief Dealer (Incharge of the office) b) Corporate Dealer
c) Specialised Dealer d) All of these
52. Which of the following statements is correct regarding dealing room?
a) The securities dealer deals only in secondary market.
b) A dealer may also participate in the auction of government securities and Treasury Bills.
c) The primary market comprises of new issues of non govt. debt paper
d) All the above
53. The functions of Back office are:
a) It verifies and settles the deals
b) It maintains proper record of Book Keeping
c) It submits financial returns of RBI d) All of these
54.Which of the following accounts are maintained by the Back Office?
a) Nostro Account b) Security Account with RBI
c) Demat, Account with Depository participant d) All of these
55. Which of the following is foreign currency account with correspondent bank?
a) Nostro Account b) Vostro Account c) Loro Account d) All of these
56.The Treasury is required to maintain adequate margin for settlement with the
e) RBI b) Clearing corporation c) Foreign Department d) None
57.What is settlement?
a) It is the process of receipts and payments for the deals made by the dealers
b) All payments and receipts should take place on value date
c) (a) and (b) both d) None of these
58.A delay in settlement would result in:
a) Financial loss to the Bank b) Default by the Bank
c) Adverse affect on Banks reputation d) All of these
59. Middle office is responsible for:
a) It provides management information

b) It also implements risk management system
c) It monitors exposure limits and stop loss limits d) All of these
60. How the arbitrage is beneficial?
a) When the traders play in different markets simultaneously taking advantage of exchange rate or interest rate differentials
b) Profit accrue as market are imperfect
c) (a) and (b) both' d) All of these
61.A Derivative is a financial contract:
a) To buy or sell at a future date
b) The price is based on market price of an underlying Asset
c) It can be with or without obligation to exercise the contract. d) All of these
62.The underlying asset may be:
a) Financial Asset b) Real Asset c) (a) or (b) both d) None of these
63.Which of the following is not a Real Asset?
a) Commodity b) Bonds c) Metals d) Oil
64.What is Leveraging?
a) It is the process of building up large volume of Business on relatively small eapitai.
b) A difference between income and cost of funds
c) It is like spread d) None of these
65.Which of the following are tradable Assets?
a) Govt. securities b) Commercial paper c) Derivatives d) All of these
66. What is short sale?
a) When volume of sale is relatively less.
b) Selling on Asset which is yet to be purchased.
c) It is a speculation d) None of these
67.The features of a D-mat Account are:
a) It is a process of holding securities in electronic (de-materialised) form
b) Transfer of securities can be affected by credit or debit the D-mat Account directly
c) There is no physical movement of documents. d) All of these
68. What is integrated activities in the Treasury operations?
a) Use of derivatives
b) Participation in money market
c) Merchant Banking activities
d) A combination of the above

TEST YOURSELF : TREASURY PRODUCTS

1) Which of the following currency is not fully convertible?
a) USD b) EURO c) INR d) GBP
2) What are the Spot Trades?
a) It is the process of settlement where payment and receipts of funds are settled in respective currencies.
b) The settlement takes place within 2 working days from the trade date.
c) Currency may be bought or sold with settlement on the same date i.e. To day (TOD)
d) The settlement can be on the -next day he. Tomorrow (TOM)
3) Which of the following is significant about spot trade?
a) All rates quoted on the screen are for spot trade unless otherwise mentioned
b) TOD and TOM rates are generally quoted at a discount to the spot rate.
c) TOD and TOM rates are less favourable to buyer d) All these
4) What is forward contract?
a) It is a contract for purchase and sale of currency at a future date.
b) The exchange rate for a future contract is quoted on the day of contract.
c) The contract between buyer and seller is called forward contract.
d) All the above

5) Which of the following is true regarding a forward contract?
a) Treasury may have forward contracts with customers or Banks as counterparties.
b) Customers cover currency risk through forward contract.
c) Treasury may cover its customer exposure by taking reverse position in Inter-Bank market.
d) All the above
6) The features of forward rates are:
a) They are not projected on the basis of exchange rate movement in the market
b) Forward rates are decided on the basis of interest rate differential of two currencies.
c) The interest rate differential is added to the spot rate for low interest yielding currency and deducted from the spot rate for high interest yielding currency
d) All the above
7) Which of the following are True?
a) Forward rate reflects interest rate differential only in prefect markets.
b) Perfect markets are where currency is fully convertible and highly liquid.
c) When currency is not fully convertible the demand for forward contract influences the forward exchange rate d) All these
8) The features of a swap are:
a) A combination of spot and forward transactions is called a swap.
b) Buying in the spot market and selling same amount in forward market or vice-versa is swap.
c) Swap is mainly used for funding requirements_ d) All these
9) A Bank may have foreign exchange surpluses from the following sources:
a) Profit from overseas Branch operations
b) Forex Borrowing in foreign domestic market
c) Foreign currency and convertible rupee deposits with branches
d) All the above
10) A Treasury may have surplus forex from the following sources:
a) Surpluses net of Bank's -lending in foreign currency
b) Floating funds on account of customer transactions
c) EEFC funds maintained in current account d) All these
11) The surplus forex can be invested by a Treasury in:
a) Inter-Bank loans b) Short term investments c) Nostro Account
d) Any or all of these
12) Which of the followings are the sources for short-term investments?
a) Treasury Bills issued by foreign governments
b) Commercial paper
c) Other debt instruments issued by multi lateral institutions
d) All the above
13) What is a Nostro Account?
a) This is a current account denominated in foreign currency maintained by a Bank with the correspondent Bank in the home country of the currency.
b) Nostro Account does not attract any interest.
c) Many correspondent Banks provide automatic investment facility for funds held overnight which earn nominal interest. d) All these
14)What is Money Market?
a) It is place for raising and deploying short term resources where maturity does not exceed one year.
b) Inter-Bank market is divided as call money and term money.
c) Call money market is also overnight market where borrowed funds are repaid on the next working day.
d) Notice money market is where funds are placed beyond overnight and upto 14 days.

15) The participants in call/notice money market are:
a) The major players are Banks and primary dealers.
b) Non-Banking financial companies can only lend the surplus funds upto specified limit_
c) NBFC can not participate in this market d) Both (a) and (c)
16) Which of the followings are the features to Treasury Bills?
a) The T-Bills are issued by the RBI on behalf of central govt. for pre-determined amount.
b) The interest is by way of discount.
c) The price is determined through an auction process d) All these
17) The maturity period of T-Bills is:
a) 91 days b) 364 days c) (a) and (b) both d) None of these
18) Which of the followings is relevant to T-Bills?
a) Each issue of 91 days T-Bill is for Rs_ 500 crore and auction is conducted weekly on Wednesday.
b) Each issue of 364 days is for Rs. 1000 crore and it is auctioned fortnightly
c) The Banks park short term funds in T-Bills d) All these
19) The Benefits of T-Bills are:
a) It is Risk free investment
b) It yields interest higher than the call money market.
c) It is possible to trade T-Bill in secondary market d) All these
20) Which of the followings is correct regarding T-Bill?
a) It is in the Electronic form and held in SGL Account maintained by Banks with RBI.
b) Depository participants can also operate through SGL Account.
c) The settlement of T-Bills is through Clearing Corporation of India d) All these
21) If a T-Bill is of 91 days is priced at 99.26, what does it signify?
a) It will yield interest at 2.99%
b) This is known as implicit yield.
c) (a) and (b) both d) None of these
22) The_ features of the commercial paper are:
a) It is an unsecured money market instrument issued in the form of promissory note.
b) The highly rated corporate Borrowers can raise short term funds through this instrument.
c) It is an additional instrument to the investing community d) All these
23) -The time limit for issuing a CP is:
a) Minimum maturity 7 days b) Maximum maturity one year
c) (a) and (b) both d) None of these
24) The requirements for issuing a commercial paper are:
a) The company issuing CP should have minimum credit rating of P2.
b) Banks can invest in CP only if it is issued in D-mat form
c) The minimum amount of CP is Rs. 5 lac d) All these
25) Who issues guidelines for issue of CP?
a) RBI
b) Market practices prescribed by FIMMDA (Fixed Income and Money Market and Derivatives Association of India)
c) (a) and (b) both d) None of these
26) A company issuing CP must satisfy the conditions:
a) Tangible Net worth of the company should not be less than Rs. 4 crore
b) The company should be enjoying working capital limit with Bank/financial institution
c) The Borrowal Account should be classified as standard Asset d) All these
27) How does Tangible Net Worth is arrived at?
a) Capital b) Free Reserves c) (a) + (b) — Intangible Assets if any

d) None of these
28) Which of the following is relevant about commercial paper?
a) It is issued for discounted amount i.e. less than face value
b) The price is quoted for face value
c) It is negotiable instrument d) All these
29) Which of the following statements regarding commercial paper is not correct?
a) CP is a substitute to working capital
b) Interest rates are at par with PLR
c) It should be compulsory in D-mat form
d) Purchase and sale of CP is effected through the depository participants
30) Banks prefer to invest in CP through Treasury because :
a) Credit Risk is relatively low.
b) Yield on CP is higher than inter-bank money market.
c) There is no liquidity risk d) All these
31) Which of the following- Credit Rating Agencies have been authorized by RBI for Rating?
a) ICRA b) CRISIL c) CARE and FITCH Ratings India Ltd. d) All these
32) The provisions for issue of commercial paper are:
a) Maximum period for subscription to an issue of CP is two weeks from the date of opening of issue.
b) CPs can be issued on a single date or in parts on different dates.
c) The same issue of CP should have the same date of maturity d) All these
33) The process of issue a CP involves:
a) The Bank is appointed as issuing and paying agent.
b) The Bank would assess the requirement and the extent to which the CP issue is linked with credit limit.
c) The potential investors are given a copy of IPA certificates d) All these
34) The features of certificate of Deposit are:
a) It is a debt instrument issued by Bank against deposit of funds
b) It is a negotiable instrument
c) It bears interest rate higher than regular deposits of the Bank. d) All these
35) The requirements of certificate of Deposit are:
a) Minimum amount of deposit is Rs. 1 lac
b)_ The maturity period may range from 7 days to one year
c) It is an additional source for investment to Banks and corporates d) All these
36) What is a Reverse Repo?
a) It is a contract to buy securities and then to sell them back at an agreed future date and price.
b) It provides opportunity for short term investments of surplus funds
c) (a) and (b) both d) None of these
37) What is Repo?
a) It is an instrument of borrowing funds for a short period.
b) It involves selling a security and simultaneously agreeing to repurchase it at a future date for a slightly higher price.
c) The price difference is called interest d) All these
38) The significance of Repo is:
a) It is a tool used by RBI for open market operations.
b) It affects liquidity in the system.
c) None of these d) Both (a) and (b)
39) The commercial Banks participate in Repo transactions because of:
a) To meet short fall of CRR --

b) To meet short fall in SLR
e) The interest on Repo is lower than call market d) All these
40) Repo transactions are regulated by:
a) RBI b) Securities Contracts Regulations Act c) (a) and (b) both d) None
41) Which of the following statements is correct?
a) Repo is a short term money market instrument
b) The Repo Rate and period is announced by RBI
c) (a) and (b) both d) None of these
42) What is the Repo Rate with effect from 16th Sept 2010?
a) 5% b) 5.25% C) 5.75% d) 6% e) None of these
43) What is the Reverse Repo Rate with effect from ISept 2010?
a) 4% b) 4.25% c) 4.75% d) 5% e) None of these
44) The process of Repo transaction is:
a) A Bank may sell securities to the counterparty with an agreement to repurchase the same securities after a certain period at pre determined price.
b) The bank gets cash in exchange of securities and pays back the cash after a certain period and get back the securities.
c) The difference between sale price and repurchase price is interest d) All these
45) The advantage to the counterparty under a Repo transaction is:
a) It earns interest on secured [ending.
b) It holds securities which serves the purpose of meeting SLR requirements.
c) The value of securities is higher by a margin to cover price Risk. d) All these
46) Which of the following statements is correct? .
a) The margin maintained on Repo securities is called hair cut as principal amount exchanged against securities is lower than the market value of securities
b) RBI uses Repo to control liquidity
c) Banks and primary dealers sell govt. securities to RBI and avail liquidity d) All these
47) Which of the following statements is not correct?
a) RBI uses Repo Transactions under liquidity adjustment facility
b) Liquidity is not affected through lending to Banks under a Repo Transaction.
c) Absorption of liquidity is done by accepting deposits from Banks.
d) Absorption of liquidity by accepting deposits from Banks is known as Reverse Repo.
48) Which of the following statements is correct?
a) RBI has commercial repo auctions on overnight basis.
b) Repo and Reverse Repo Rates have been pre-fixed.
c) RBI has full discretion to change the frequency of auction. d) All these
49) The process of Bill Re-discounting is:
a) Treasury will discount Bill of Exchange of short term nature which are already discounted with the banks.
b) Rediscounting is done at money market rates.
c) The rediscounting rates are negotiable between the lending Bank and borrowing Bank.
d) All the above
50) The advantage to the lending Bank is:
a) The surplus funds are invested at term money rate_
b) Credit Risk is low as lending Bank has recourse to the discounting Bank
c) (a) and (b) both d) None of these
51) The benefits to borrowing Bank is :
a) It is able to infuse liquidity from out of existing Assets
b) Its capital adequacy ratio is improved or rediscounted bills are added to Inter-Bank liability
c) (a) and (b) both d) All these

52) Which of the followings is significant regarding government securities?
a) They are issued by Public Debt Office of RBI.
b) State govts. Issue state development Bonds.
c) Govt. securities are sold through auction conducted by RBI d) All these
53) Which of the followings is correct?
a) Interest is paid on face value of the bond at coupon rate.
b) RBI arrives at a cut off price based on bids submitted by Banks and primary dealers.
c) The price may be higher or lower than the face value d) All these
54) Price movement of Bond depends on:
a) Demand of the Bond which depends on liquidity in the system.
b) The yield on Bond is different from coupon rate.
c) (a) and (b) both d) None of these
55) If 10 years G. sec. at 7.37 per cent is priced at 104.80, what would be the yield'
a) 6.67% b) 5.42% c) 6.15% d) None of these
56) The interest rates in the economy depends on:
a) Rate of inflation b) GDP growth c) Other economic indicators
d) A combination of all these
57) The variety of Bonds may include:
a) Step up coupons b) Coupons linked to inflation c) Floating rate coupons
d) Any of these
58) What is STRIPS:
a) Separately registered interest and principal securities
b) Under this process principal and interest are treated as separate zero coupon securities
c) (a) and (b) both d) None of these
59) What is corporate debt paper?
a) It includes medium and long term bonds and debentures issued by corporates and financial institutions
b) Yield on Bonds is higher than the govt. securities
c) They are called non-SLR securities where banks can invest d) All these

60) Which of the following statements is not correct?
a) Tier-2 capital Bonds issued by Banks fall under the category of corporate debt paper.
b) Bonds issued by corporates are not that liquid_
c) The bonds are issued in D-mat form.
d) Bank Treasury finds an attractive investment in corporate debt paper.
61) Which of the following statements is correct regarding corporate debt paper?
a) Higher the credit risk higher is the yield.
b) Global ratings are necessary if the debt paper is issued in International market.
c) Treasury can invest FCNR deposit funds and other forex surpluses in global debt paper.
d) All the above
62) Which of the followings is correct?
a) Debentures are issued by private companies.
b) Bonds mainly issued by public sector companies.
c) Government does not provide guaranter on PSU Bonds d) All these
63) The material difference between debentures and bonds is:
a) Debentures are governed by relevant provisions of company law.
b) Debentures are transferable on registration_
c) Bonds are negotiable instrument governed by Law of Contract. d) All these
64) The Bond can be:
a) Zero Coupon Bond b) Floating Rate Bond c) Deep Discount Bond

d) Any of these

65) Which of the followings is not correct?

a) Debenture and Bonds can be issued with redemption in instruments over a period.

b) They can be issued with a premium or redemption.

c) There are no Bonds with put and call option

d) Bonds secured by stocks or other collateral are called collaterised obligations

66) Which of the followings is relevant regarding issue of Bonds and debentures?

a) The holders have prior legal claim over the equity and preference stock holders.

b) The Trustee appointed by issuing company protects the rights of debenture holders.

c) The Trustee can initiate legal action against the company in case of any default.

d) All of the above

67) Companies issuing unsecured debentures and bonds have to comply with the provision of:

a) Companies Acceptance of Deposit Rules 1975 b) SEBI

c) (a) and (b) both d) None of these

68) What is a convertible Bond?

a) It is a mix of Debt and Equity.

b) Bond holder has an option to convert debt into equity on a fixed date.

c) The conversion price is pre-determined d) All these

69) The advantages of convertible Bonds are:

a) If the stock price is higher than prefixed conversion price, the investor would convert debt into Equity.

b) Company will have no debt repayment

c) The Equity of the company will be strengthened d) All these

70) Which of the followings are derivative products treated on stock exchange?

a) Index features b) Index options c) Stock futures and options d) All these

71) Provisions to invest in Equities are:

a) Banks can invest in Equities upto 20% of their net owned funds

b) Stock prices are highly volatile

c) Banks prefer low risk investments d) All these

72) The provision on FII investments are:

a) Foreign currency funds are converted into rupee for portfolio investors.

b) Rupee funds with profits are converted into foreign currency for repatriation

c) FIIs are allowed to invest in debt market d) All these

73) What is External Commercial Borrowings?

a) Indian companies can borrow on global market through Bank loan or issue of debt paper.

b) The debt can be repaid by reconversion of rupee funds into foreign currency

c) (a) and. (b) both d) None of these

74) The guidelines for investment of foreign currency funds of Banks are?

a) FCNR deposits can be invested in overseas market and for domestic lending :n foreign currency.

b) Banks are permitted to borrow/invest in overseas market 50% of Tier-I Capital.

c) (a) and (b) both d) None of these

75) What is Export Earners Foreign Currency Account?

a) Exporters are allowed to hold 100% export proceeds in a Current Account. wtth

b) No interest is paid on such deposits

c) (a) and (b) both d) None of these

76) What is Gilts?

a) Securities issued by government or Treasuries.

b) They do not have any credit Risk

c) (a) and (b) both d) None of these

77) SGL Account is:

a) Subsidiary General Ledger
b) It is maintained by public debt office of RBI
c) Banks maintain exclusively government Securities Accounts d) All of these
78) Which of the followings is correct?
a) Counterparty is the other party to a Transaction
b) Yield is internal rate of return where interest is also reinvested at original coupon rate.
c) Foreign currency deposits are denominated in foreign currency d) All of these
79) The features of FCNR deposit are:
a) They are denominated either in USD, GBP, JPY or EURO, Can- Dollar and Aus Dollar.
b) The deposits are maintained by non-resident Indians.
c) Interest on FCNR deposits is regulated by RBI d) All of these
80) Broad money or **M3** consists of :
a) Currency in circulation b) Demand and time deposits with Banks
c) Deposits of Banks and other deposits with RBI d) All of these
81) Monetary policy of RBI aims at:
a) Controlling rate of inflation b) Ensuring stability of financial market
c) Regulating money supply d) All of these
82) The tools in the hands of RBI for direct control of money supply are:
a) CRR b) SLR c) (a)-and (b) both d) None of these
83) CRR is calculated on net Demand and Time liabilities which contain:
a) Demand deposits and Time deposits
b) Overseas Borrowings
c) Foreign outward remittances and other demand and time liabilities d) All of these
84) The Demand deposits include:
a) Current and Savings Deposits b) Margin Money for Letter of Credits
c) Overdue Fixed Deposits d) All these
85) Other Demand and Time Liabilities include:
ayAccrued Interest b) Credit Balance in Suspense Account
c) Any other liability d) All these
86) In which of the following categories only 3% minimum CRR is required to be maintained?
a) Net Inter-Bank call borrowing/deposits where maturity does not exceed 14 days,
b) Credit Balance in ACU (Asian Currency Unit) Accounts
c) Demand and Time liabilities in respect of off shore Banking units d) None of these
87) Banks need not maintain CRR on :
a) Paid up capital, reserves, retained profits, refinance from apex institutions.
b) Excess provision for Income tax .
c) Claims received from DICGC/ECGC d) All these
88) Which of the followings is correct?
a) CRR need not be maintained on Inter-Bank term deposits of original maturity upto one year
b) RBI does not pay interest on CRR Balance
c) The Demand and Time liabilities as on the reporting Friday of second previous fortnight will be basis for CRR calculation d) All these
89) SLR can be maintained in the form of following Assets:
a) Cash Balance in excess of CRR requirements
b) 'Gold at current market price
c) Approved securities valued as per RBI norms d) All these
90) What is Liquidity Adjustment Facility?
a) It is the mechanism whereby RBI lends funds to Banking sector through repo instrument

b) This is used to monitor day to day market liquidity
c) This is exclusively applicable to repo and reverse repo transactions with RBI
d) All these

91) The features of Negotiated Dealing System are:
a) This is a system where securities clearing against assured payment is handed by Clearing Corporation of India.
b) Physical delivery of cheques are not required.
c) All Inter-Bank Money Market deals are done through Negotiated Dealing System
d) All the above

92) The feature of Real Time Gross Settlement System are:
a) All Inter-Bank payments are settled instantly.
b) Banks' Accounts with all the Branch offices of RBI are also integrated.
c) Since it is instant payment system, Banks need to maintain adequate funds throughout the day.
d) All the above

93) Which of the following is correct?
a) Asian currency unit is a mechanism for payment to/from members of Asian clearing union.
b) Off shore Banking units render special Banking services only to overseas customers.
c) SWIFT is a secure worldwide financial messaging system exclusive to Banks.
d) All the above

94) What is DVP?
a) Delivery vesus Payment system where one account is debited and another account is credit at the same time.
b) In case of securities purchase funding account is debited and securities account is credited.
c) This facilitates prompt settlement of security transactions. d) All these

FUNDING & REGULATORY ASPECTS

CRR: Scheduled Commercial Banks are required to maintain CRR as per section 42 of RBI Act. In terms of this section banks are required to maintain certain percentage of Net Demand & Time Liabilities as cash with RBI.

1. As per amendment to sub-section (1) of Section 42 of the RBI Act 1934, with effect from 1[5t] April 2007, the RBI can prescribe the Cash Reserve Ratio (CRR) for Scheduled Commercial Banks without any floor rate or ceiling rate. Accordingly, there is no minimum or maximum CRR as per RBI Act and RBI will fix CRR.
2. With effect from 24th April 2010, CRR was increased to 6% of NDTL. Banks are required to maintain the prescribed CRR based on their NDTL as on the last Friday of the second preceding fortnight. Banks are required to maintain minimum CRR balances up to 70 per cent of the total CRR requirement on all days of the fortnight.
3. RBI: will not pay any interest on the CRR balances with effect from 31[s'] March 2007, in view of the amendment carried out to RBI Act 1934, omitting sub-section (1B) of section 42.
4. From the fortnight beginning June 24, 2006 in cases of default in maintenance of CRR requirement on a daily basis, penal interest will be recovered for that day at the rate of three per cent per annum above the bank rate on the amount by which the amount actually maintained falls short of the prescribed minimum on that day and if the shortfall continues on the next succeeding day/s, penal interest will be recovered at a rate of five per cent per annum above the bank rate. Reserve Bank of India has prescribed statutory returns i.e. Form A return (for CRR) under Section 42 (2) of the RBI, Act, 1934

SLR: As per amendment to section 24 of the Banking Regulation Act, the provision relating to maintenance of minimum SLR of 25% of **DTL** has been withdrawn. Thus, RBI is free to fix minimum SLR. However, it can be increased to maximum of 40% of DTL. At present it is 24% of **NDTL.** SLR can be kept in the form of cash or in gold valued at a price not exceeding the current market price, or c) in unencumbered approved securities

valued at a price as specified by the RBI from time to time. For calculation of SLR, banks are required to send statement on Form **VIII** under Section 24 of the B R Act. For calculation of SLR & CRR, the following are not to be included in the DTL: (a) Paid up capital, reserves, any credit balance in the Profit & Loss Account of the bank, amount availed of as refinance from the RBI, and apex financial institutions like Exim Bank, NABARD, NHB, SIDBI etc. (b) Amount of provision for income tax in excess of the actual/estimated liabilities. (c) Amount received from DICGC towards claims and held by banks pending adjustments thereof. (d) Amount received from ECGC by invoking the guarantee. (e) Amount received from insurance company on ad-hoc settlement of claims pending Judgment of the Court. (f) Amount received from the Court Receiver. For calculation of CRR, inter-bank term deposits / term borrowing liabilities of original maturities of 15 days and above and upto one year are also not to be included in DTL. Further, banks are exempted from maintaining CRR on the following liabilities: (a) Liabilities to the banking system in India as computed under Clause (d) of the Explanation to section 42(1) of the RBI Act, 1934. (b) Credit balances in ACU (US$) Accounts. (c) Demand and Time Liabilities in respect of their Offshore Banking Units (OBU's). Now banks are required to maintain CRR on CBLO was earlier exempt.

Objective Type Questions

1. Requirements relating to CRR to be maintained by a banking company are given in :
(a) Section 24 of RBI Act, 1934 (b) Section 42 of Banking Regulation Act, 1949
(c) Section 24 of Banking Regulation Act 1949 (d) Section 42 of RBI Act (e) None of these

2. The Banks are required to maintain CRR on the NDTL of last Friday of the: .
(a) preceding fortnight (b) third preceding fortnight (c) second preceding fortnight
(d) preceding month (e) second fortnight of last month

- 3. Under provisions of RBI Act, 1934, a scheduled commercial bank has to maintain cash reserve ratio (CRR) at prescribed percentage of its net demand and time liabilities. Such liabilities do no include
(a) overdue time deposits with banks (b) deposits at call
(c) refinance availed by a bank from RBI/NABARD/SIDBI (d) all above (e) only (a) & (c) above

4. Which of the following is/are exempted from provisions relating to CRR :
(a) NRE balances (b) NRNR balances (c) FCNR (B) balances
(d) deposit liabilities of off-shore banking units (e) all above

5. As per present guidelines of RBI, banks are required to maintain a minimum ofpercent of required CRR amount on a daily basis during a fortnight which is applicable to all days of the reporting fortnight.
(a) 80% (b) 50% (c) 35% (d) 70% (e) none of these

6. At present RBI allows interest on eligible cash balances maintained by the banks on:
(a) quarterly basis (b) monthly basis (c) half yearly basis (d) annual basis (e) none of these

7. Statutory Return prescribed by RBI for SLR under Section 24 of the Banking Regulation Act,1949 is:
(a) Form A return (b) Form VIII return (c) Form SDF return (d) Form X (e) None of these

8. Net demand and time liabilities in respect of offshore banking units are exempt from :
(a) minimum CRR requirement (b) maintaining average CRR balances
(c) minimum SLR requirement (d) maintaining prescribed current SLR (e) both (b) & (c) above

9. Under Section 24 of the Banking Regulation Act,1949 all SCRs are required to maintain maximum 40%
of their demand and time liabilities as SLR in the form of :
(a) cash (b) gold valued at a price not exceeding the current market price
(c) unencumbered approved securities valued at a price as specified by the RBI
(d) one or more of the above (e) only (b) or (c) above

10. Which of the following is/are excluded from computation of NDTL for CRR but not for SLR purposes?
(a) Amount received from SIDBI under CGFTSI by invoking the guarantee
(b) Amount received from the Court Receiver
(c) Inter bank term deposits/term borrowing liabilities of original maturity of 15 days and above and upto one year
(d) Deposits held as securities for advances (e) none of these

TREASURY RISK MANAGMENT

1) Leverage means ability of a business concern:
a) To with stand pressures in the times of crisis
b) To meet its liabilities in time
c) To borrow or build up assets on the basis of given capital d) none of these
2) In case of banks, lev-erage is expressed by:
a) Return on Assets b) Net NPA ratio c) Capital adequacy ratio
d) Capital to outside liabilities e) None of these
3) Treasury deals are normally done over phone or over a dealing screen_ The deal terms are con-firmed in writing by
a) Front office b) back office c) middle office d) any of these
4) Delivery versus payment means one account is debited and another is credited:
a) on the same day b) by next day c) at the same time d) none of these
5) Ih Treasury Operations, the term 'carry' means
a) Interest cost of funds locked in a trading position
b) Carrying forward the contract to next trading period
c) Carrying forward the settlement to next day d) none of these
6) "Marked to Market" means valuation of trading positions applying
a) Purchase price b) current market value
c) current market value or purchase price whichever is lower d) None of these
7) Mismatch refers to:
a) Difference in interest rates paid and received
b) Difference in sale and purchase price
c) Difference in duration of assets and liabilities d) all of these a) None of these
8) Which of the following is a reason for importance of Treasury risk management
a) Adverse market movements may result in instant losses
b) Treasury transactions are of high value needing relatively low capital
c) Large size of transactions done at the sole discretion of the Treasurer
d) Both (a) & (b) only e) All of these
9) High leverage means:
a) Very low capital requirement
b) Very high capital requirement
c) Very high profits compared to capital
d) Very high productivity e) None of these
10) Which of the following is/are not a conventional tool of management control on a treasury function
a) Back office which checks all transactions of dealers
b) Exposure limits for counterparties avoiding concentration risk
c) Intra day and overnight ceiling on open positions and stop loss limits
d) Value at risk and duration techniques e) None of these
11) Which of the following is not a function of Back office of a treasury
a) Generating deals i.e. purchase and sale of foreign exchange, securities etc.
b) Settling the trade after verifying internal controls
c) Obtaining independent confirmation of deal from the counterparty
d) Verifying that rates / prices mentioned in the deal slip are conforming to the market rates at the time of the deal e) None of these
12) Which of the following is responsible for ensuring compliance with various risk limits imposed by the Management and RBI as well as accuracy and objectivity of the transaction?
a) front office b) back office c) middle office
d) both (a) & (b) only e) All of these
13) Middle office in a treasury is responsible for:

a) Validating deal wise information from accounting point of view
b) Overall risk management and MIS
c) Both (a) & (b) d) None of these

14) Default risk in Treasury means:
a) Failure of the borrowing bank in the call money market to repay the amount on due date to the lending bank
b) Possible failure of the counterparty to the transaction to deliver I settle their part of transaction
c) Both (a) & (b) d) None of these

15) The exposure limits for counterparties are fixed on the basis of counterparty's
a) net worth b) market reputation c) track record
d) size of treasury operations e) all of these

16) The Exposure limits for counterparties are:
a) Vary in relation to period of exposure
b) Remain same irrespective of period
c) Fixed only as per net worth irrespective of period d) none of these

17) In which of the following areas trading limits are not fixed by management?
a) limits on deal size b) limits on open position c) stop loss limits
d) all of these e) None of these

18) Open Position refers to:
a) Trading positions where the buy / sell positions are not matched
b) Trading positions where the securities are bought in the open market
c) Open market operations d) none of these

19) Limit on open positions are fixed because
a) There may be loss if there is adverse movement in rates
b) There is 'carry' cost
c) Both (a) & (b) d) None of these

20) Which of the following is incorrect regarding open position in forex?
a) Position limits are prescribed currency wise as also for aggregate position in Rupees
b) There are separate limits for 'day light' and 'over night' c) None of these

DERIVATIVE PRODUCTS

1) Under the Treasury operations the derivatives are used:
a) To manage Risk as including ALM Risk.
b) To meet the requirements of corporate customers.
c) For taking trading position in derivative products d) All the above

2) The kinds of Derivatives are:
a) Cross currency derivatives b) Rupee derivatives
c) (a) and (b) both d) All these

3) The features of a Derivative are:
a) It does not have independent value.
b) The value of a Derivative is derived from an underlying market_
c) Derivatives are used in both the financial and commodity markets d) All the above

4) Financial market consists of:
a) Foreign Exchange b) Debt Instruments c) Equities d) All the above

5) Which of the followings are not derivatives?
a) Forward Contract b) Corporate Bonds c) Swaps d) Options

6) Forward contracts are used by:
a) Exporters b) Importers c) Banks d) All of these

7) Derivative is an instrument where:
a) Value is derived from spot prices in an underlying market.
b) Price depends upon future market conditions

e) (a) and (b) both d) None of these

8) A derivative product can be structured based on the following criteria:

a) Risk Appetite b) Size of Transactions

c) Maturity Requirements d) All of these

9) What is an over the counter product?

a) An instrument which can be directly negotiated and obtained from Banks and investment institutions.

b) An instrument which is settled over the counter.

c) (a) and (b) both d) None of these

10) Which of the followings are over the counter product?

a) Forwards b) Currency and interest rate options

c) Swaps d) All of these

11) Which of the followings are Exchange Traded Products?

a) Currency b) Stock/Index options c) Futures d) All of these

12) The features of over the counter product are:

a) Contracts of any size and maturity can be structured.

b) The product has counterparty risk.

c) Banks are the major players in the OTC market. d) All of these

13) Which of the following is not a feature of OTC product?

a) Cost of option is to be paid up front.

b) Cost is not loaded in the agreed rates.

c) Market is not liquid.

d) Cancellation of contract may become expensive.

14) The features of Exchange traded product are:

a) The contract is of standard size

b) Delivery dates are fixed

c) Price fluctuates according to market. d) All of these

15) The Exchange Traded products have the following features:

a) There is no counterparty Risk.

b) Only members of Exchange can Trade.

c) Minimum margin is maintained d) All of these

16) Which of the following is not correct regarding Exchange Traded products?

a) Positions are marked to market daily

b) Market is illiquid

c) The prices are determined by the market.

d) All Trades are exchange protected.

17) Which of the followings is not correct?

a) Banks mostly use OTC products

b) Volume of Trade in OTC products is much lesser

c) Options and futures are Exchange Traded Products d) All these

18) The contract of an option is:

a) Where the Buyer of an option has a right but no obligations to exercise a contract.

b) The price fixed in advance is called strike price

c) Specified time is known expiry date d) All of these

19) The features of an option are:

a) The option can either be a put option or call option

b) Call option gives a right to the Holder to buy on underlying product at a pre fixed rate and time.

c) Put option gives a right to the holder to sell the Asset at a specified rate and date.

d) All the above

20) Which of the followings is correct regarding option contract?

a) An option which can be exercised any time before the expiry date is known as

American option

b) An option which can be exercised only on expiry of date is called European option.

c) (a) and (b) both d) None of these

21) Suppose a Dollar put option on JPY for USD 1 million with strike price at 105 and expires after 3 months: What is the course available to Holder?

a) The Holder has right to sell USD at the rate of 105 JPY per dollar on expiry date.

b) On expiry date if market rate is 108, the option holder will not exercise the put option.

c) If the market rate is below 105, the option Buyer will exercise the option on expiry date.

d) All the above

22) Which of the followings is correct?

a) If strike price is same as the spot price of the currency the option is known at the money.

b) If strike price is less than the forward rate in a call option, it is called in the money.

c) If strike price is more than forward Rate in case of a put option, the option is called out of the money d) All these

23) What is intrinsic value?

a) The difference between the strike price and current forward rate of the currency is known as intrinsic value.

b) At the money and out of the money contracts do not have intrinsic value

c) The option price less than the intrinsic value is the time value of option

d) The Time value is maximum for an At the money option.

24) Which of the followings is correct?

a) As the Buyer of the option has the right but no obligation to exercise option at the strike price, he has more profit opportunities.

b) The seller of the option is obliged to Buy/Sell to the Holder of option at the strike price, he may incur unlimited loss.

c) (a) and (b) both d) None of these

25) The feature of an option are:

a) The option is based on an amount which is only notional. .

b) When Holder exercises the option, the Seller of option -pays only the difference between the strike price and market price.

c) Payment of difference as per*(b) is known as cash settlement. d) All these

26) What is option premium?

a) It is the price of the option payable to the option seller upfront.

b) The premium amount depends on market volatility expiry date and strike price.

c) The longer the maturity, higher is the option premium.

d) Option premium increases with the volatility of market.

27) Suppose a put option for 1000 Reliance shares at Rs. 500 with expiry on 31[51]-Jufyr-— 2005. What a strike option holder will do?

a) If Reliance shares are trading below Rs. 500 on expiry date, the option holder can sell the shares at Rs. 500.

b) If the market price is above the strike price of Rs. 500, the option holder would prefer to sell in the market and hence would not exercise the option

c) (a) and (b) of the above d) None of these

28) The features of a stock index are:

. a) A put option provides protection to the Holder against a fall in the index.

b) A call option on the index protects a Buyer from rise in the index.

c) (a) and (b) both d) None of these

29) Which of the following statements is not correct?

a) in India we have European type of option.

b) Options do not cover hedge against price fluctuations.

c) A person who sells USD put option to the exporter and a USD call option to the importer would be mitigating mutual Risk.
d) Option is like a insurance against adverse movement of prices.
30) The features of a forward contract are:
a) Settlement of a contract on maturity is essential.
b) Holder of a forward contract can not benefit if market rate is better on day of settlement
c) There is no price for a forward contract — interest differentials of two currencies is loaded into the forward rate. d) All these
31) What is an embedded option?
a) When a call option gives issuer the right to repay the debt before specified date.
b) A convertible option may give bond holder option of converting debt into equity on specified terms.
c) (a) and (b) both d) None of these
32) The features of futures contract are:
a) It is a forward contract where Seller agrees to deliver to the Buyer a specified security on a specified date.
b) Futures contracts are of standard size with pre-fixed settlement date.
c) The contracts are traded in a futures exchange d) All these
33) Which of the followings are financial futures?
a) Currency futures b) Interest Rate Futures
c) Stock/Index futures d) All of these
34) In which of the following currencies futures are traded in terms of US Dollar?
a) Euro b) GBP and Japanese Yen
c) An Australian and Canadian Dollar d) All of these
35) Suppose there is a contract of GBP 25000 traded at the Exchange for delivery on 30th June at 1.8650 as against spot exchange rate of 1.80. What does this contract imply?
a) The contract implies that seller would deliver to the holder of contract, GBP 25000 against payment of equivalent USD at 1.8650.
b) On the settlement date, if market rate of GBP is more than 1.8650, the seller will pay to the holder the difference in contracted price and spot price.
c) If the market price is less than the contracted price, the Buyer of the contract will bear the loss. d) All these
36) Which of the followings is essential in a futures contract?
a) The contract must be executed by both the parties.
b) The Trading is done through the members of the Exchange.
c) The Exchange is the counterparty for each transaction d) All of these
37) Which of the followings is a distinct feature of a futures contract?
a) The contract are marked to market daily.
b) The members are required to pay margin equivalent to daily loss.
c) In case of default by any member the Exchange will meet the payment obligation.
d) All the above
38) Which of the following statements is correct?
a) Futures are issued by Banks in Foreign Exchange Business.
b) Exporters and Importers prefer forward contracts as they can cover risk in terms of size and duration.
c) Futures are traded by traders and speculators with large volumes. d) All these
39) What are the Interest Rate Futures?
a) These are the contracts written on fixed Income securities of a specified size.
b) The interest rates can be of a short term, medium term and long term
c) They are used to hedge interest rate risk d) All these
40) Which of the followings are relevant to interest futures?
a) T. Bill futures are traded with US Treasury Bills and notes.

b) Euro Dollar bonds are traded on the basis of LIBOR or Inter-Bank deposit Rate.
c) The contract size, delivery terms and Trading practices differ from Exchange to Exchange.
d) All the above

41) The Hedging of interest rates Risk depends on:
a) It is based on inverse relationship between interest rates and bond prices.
b) If the interest rate goes up the bond price comes down.
c) Bond price would move up if interest rates decline. d) All these

42) What is an interest rate swap?
a) It is a process where interest flows on an underlying assets or liability are - exchanged
b) The value is the notional amount of swap.
c) The interest is changed according to requirement of a lender or borrower d) All these

43) Interest rate swap are shifted as under:
a) Floating rate to fixed rate b) Fixed rate to floating rate
c) Floating rate to floating rate d) Any of these

44) Flow the interest rates are calculated?
a) Interest rates are calculated on notional amount which is equal to face value of debt instrument.
b) The notional amount is not exchanged.
c) The actual payment of interest is netted out on interest payment date d) All these

45) What are the features of Benchmark rate?
a) it is a Risk free interest rate determined by the market.
b) It is objective and transparent.
c) The issuer of debt paper and the lending bank link interest rate to a benchmark rate
d) All the above

46) The following is the Benchmark Rate:
a) For US dollars, it is LIBOR
b) For Indian Rupee Market, it is MIBOR
c) MIFOR for foreign currency Borrowings swapped in to Rupee d) All these

47) Which of the followings is correct?
a) LIBOR is a rate charged by US federal Reserve for lending to banks.
b) MIBOR is announced by NSE.
c) MIFOR is announced by Reuters d) All these

48) What is significant about MIBOR?
a) It is one day money market rate in the Inter-Bank market being announced by NSE daily ate 9.50 a.m.
b) NSE Pool the rate from various participating Banks and averages out after extreme top and bottom rates.
c) It is a base rate for short term and medium term lending also. d) All these

49) What is a floating to floating rate swap?
a) It involves change of benchmark rate.
b) If a corporate has opted for T-Bill linked rate and later prefers to have MIBOR, it can enter a swap and receive T-Bill rate and pay MIBOR linked equivalent rate
c) (a) and (b) both d) None of these

50) Which of the following statements is correct?
a) Under the Quanta swaps, payment of interest in home currency at rates applicable to foreign currency are allowed.
b) In the coupon swaps floating rates in one currency are exchanged to fixed rate of another currency.
c) Swaptions are swaps which collapse at a knock out level of market rates and swaps with built in options d) All these

51) What is IRS (Interest Rate Swaps)?
a) It is an OTC instrument generally issued by a Bank.
b) This facilitates conversion-of floating rate into fixed and vice-versa.
c) IRS is also used in Treasury operations to fill the Asset-Liability mismatch
d) All the above
52) The feature of currency swap are:
a) It is a process of exchanging cash flows in one currency with that of another currency.
b) The cash flows may be in connection with repayment of principal or interest of a loan.
c) It can be either principal only or interest only swap. d) All these
53) The process of currency swap is:
a) The currency swap arises when loan raised in one currency is actually required to be used in another currency.
b) The different corporates can raise the loan relatively at a lower rate in their home currency and both can exchange the proceeds
c) On due date, payment will be made by each-other d) All these
54) Suppose 'A' company raises a loan of USD 100 million for 5 years at 4% p.a. (interest payment — semi-annual) with bullet payment and swaps the loan into rupee with the Banker **'B'.** Thus 'A' pays 'B' USD 100 million and receive Rs. 450 crore from 'B'. What would be the further process?
a) B will service the interest on USD loan pays interest at 4% to A who pays interest to the lending Bank.
b) A pays interest on rupee loan half yearly to B at swap rate of 6.5%
c) On maturity date A and B exchanges principal amount and reverse :.he exchange.
d) All the above
55) The kinds of currency swaps are:
a) Principal only swap b) Interest only swap
c) Principal plus interest swap d) Any of these
56) What is ISDA master agreement?
a) Ms a standardized agreement formulated by international swap and derivatives association.
b) The agreement has been approved by FEDAI.
c) Master agreement coves all the transactions between two counterparties globally
d) All of these
57) Which of the following terms of the contract are covered under ISDA master agreement?
a) Valuation norms b) Netting out c) Cross default d) All these
58) What are the RBI guidelines for the development of interest rate swaps (IRS)
a) Banks can use IRS for hedging and Trading both
b) MIFOR is a benchmark for IRS
c) Under ISDA agreement Banks can opt for dual jurisdiction i.e. Indian as well as common law
d) All the above
59) The features of MIFOR are:
a) It combines LIBOR and forward premium
b) It is based on active forex market dealings
c) It is linked to domestic and global markets d) All these
60) Which of the following statements is correct?
a) Exporters and importers can use forward contracts for the trade transactions
b) Contracts can be booked on declaration basis

c) Options and forwards booked to hedge loans, once cancelled can not be rebooked
d) All the above
61) Which of the following is correct?
a) Margin is like a security for credit Risk_
b) Plain vanilla swaps are currency and interest rate swaps with basic structure without inbuilt options
c) Managing market Risk inherent in the Assets and Liabilities of a Bank is called Balance Sheet Management d) All these

TREASURY & ASSET LIABILITY.MANAGEMENT

1 The significance of Treasury operations in Asset Liability management is:
a) It operates in financial markets directly.
b) Treasury is a link between core banking functions and market operations
c) Treasury identifies and monitors the market risk d) All of these
2_ How the Treasury operations are useful in minimizing Asset Liability mismatch?
a) Through uses of derivatives
b) Use of new products
c) Through Bridging the liquidity and rate sensitivity gaps d) All of these
3 Which of the following statements is correct?
a) Trading in securities is exposed to market risk
b) At times the Risks are compensatory in nature and help to minimize the mismatches.
c) Options can be economic only in marketable size d) All of these
4. Treasury operations also help in effective monitoring and implementation of Asset Liability management process in view of the:
a) Credit instruments can be replaced by Treasury instruments
b) Treasury products are more liquid.
c) Treasury operations monitor exchange rate and interest rate movements
d) All of these
5. Which of the following statements is not correct regarding Treasury operations in Asset Liability management process?
a) Derivatives can be widely used in Treasury operations
b) Derivatives increases liquidity risk
c) The capital requirement for derivative operations is small.
d) Derivatives replicate market Movements.
6. Asset Liability mismatches can be reduced through use of derivatives in Treasury operations because:
a) Derivatives can be used to hedge high value transactions
b) It can also minimize aggregate risk in Asset liability mismatches
c) (a) and (b) both d) None of these
7 Suppose a Bank is funding medium term loan of 3 years with deposits having average maturity of 3 months as short term deposits or borrowings are cheaper than 3 years deposits. what would be the consequences and what a bank should do?
a) Bank would resort to short term resources to increase the spread.
b) The (a) above will have liquidity risk
c) This will also have interest Risk since every time the deposits would be priced.
d) The Bank should swap 3 month interest rate into a fixed rate for 3 years.
8. Suppose a Bank prices the 3 month deposit at 91 day T-Bill + 1% and swap rate of the loan yield T-Bill+3%. What is the impact?
a) Fixed interest of the loan is swapped into floating rate
b) Bank has a spread of 2%
c) The Risk is protected during the period of loan. d) All of these
9. Suppose a Bank borrows US dollars at 3% and lends in domestic market at 8.5%.

The Bank pays forward premium of 1.5% to cover exchange Risk. What is the overall impact?
b)
c)
a) The Bank earns a spread of 2% without any exchange Risk.
b) A bank through Treasury operations can supplement domestic liquidity.
c) The above process is known as arbitrage. d) All of these
20.
a)
b)
10. A Bank under the Treasury operations can buy call options to protect foreign currency obligations as under:
a) This will help the Bank to protect rupee value of foreign currency receipts and payments
c)
21.
a)
b)
c)
b) The Bank will gain if the spot rate of call option on the exercise date is more favourable than the strike price of the option.
c) (a) and (b) both d) none of the above
11. Which of the followings is relevant when interest rate is linked to the rate of inflation?
a) Index linked Bonds b) Treasury Bonds
c) Corporate Debt Instruments d) All of these
12. The significance of index linked bonds is:
a) It provides protection against inflation rate rise.
b) It is inbuilt in the process.
c) (a) and (b) both d) None of these
13. Suppose a Bank- issues 7 year Bond with a put option at the end of 3[1-6] year. What does it signify?
a) It is as good as 3 year investment
b) The investment becomes more liquid
c) (a) and (b) both d) None of these
14. The limitations of Derivatives are:
a) If interest rate on deposits and loans are not based on benchmar-k rates interest rate swaps may not be that useful.
b) The product prices may not move in line with market rates.
c) The Treasury operations may not provide perfect hedge. d) All of these
15'. Which of the followings is correct?
a) Treasury operations are concerned with market risk
b) Treasury operations has no link with the credit risk
c) Credit risk in Treasury operations are contained by exposure limits
d) All the above
16. Why the corporate prefer to issue debt paper than to Bank credit?
a) The cost of debt paper is much lower
b) The procedure is easy
c) (a) and (b) both d) None of these
17. A Bank may prefer to invest in corporate Bonds because:
a) Bbnd is more liquid Asset
b) Bond has an easy exit
c) Bond can be sold at discount d) All of these
18. Which of the following is not credit substitute?
a) Commercial paper b) Mortgage loan
c) Corporate bond d) Certificate of Deposit
19. The difference between a Bond and loan is:
a) The loan has normally fixed rate of interest. Bond price is dependent on Market interest rate movements.
Bonds are more liquid
Yield to maturity value can be known easily in a bond d) All of these
What is securitization?
A process which converts conventional credit into tradable Treasury Assets.

Credit receivables of the Bank can be converted into Bonds i.e. .pass through certificates
These certificates can be traded in the market
The advantages of securitization for a Bank is:
It provides liquidity to the issuing Bank
The Bank capital does not get blocked
Securitization proceeds can be used for fresh lending
22. Which of the following loans cannot be securitized? d) All of these
a) Long term loans b) Short term loans
c) Medium term loans d) Retail loans d) All of these
23. Which of the followings is true?
a) Surplus funds with the banks can be invested in pass through certificates
b) This will be indirect expansion of credit portfolio
c) (a) and (b) both d) None of these
24. The features of credit derivatives are:
a) It segregates credit Risk from loan
b) The Risk is transferred from the owner of the Asset to another person for a fee.
c) The instrument is known as credit linked certificates d) All of these
25. The constituents of a credit Derivatives are:
a) Protection Buyer b) Protection Seller
c) Reference Asset d) All of these
26. The process of credit Derivative involves:
a) The protection seller guarantees payment of principal and interest or both of the Asset owned by the protection Buyer in case of credit default.
b) The protection Buyer pays a premium to the protection Seller
c) (a) and (b) both d) None of these
27. The advantages of credit Derivatives are:
a) It helps the issuer to diversity the credit risk
b) The capital can be used more efficiently
c) Credit Derivative is a transferable instrument d) All of these
28. What is transfer pricing under Treasury operations?
a) It is the process of fixing the cost of resources and return on Assets of a Bank in rational manner.
b) The Treasury buys and sells deposits and loans of Bank. -
c) The price fixed by the treasury becomes the basis for assessing profitability of a Bank
d) All the above
29. The parameters for fixing price by a Treasury are:
a) Market interest rate
b) Cost of hedging market Risk
c) Cost of maintaining reserve assets of the Bank d) All of these
30. Which of the following statements is correct regarding transfer pricing under Treasury operations?
a) If Bank procures deposit at 7% but the Treasury buys at a lower cost, the difference being the cost would be borne by the Bank.
b) If the Bank lends at higher rate and sells the loan to Treasury at lower rate, the Balance being risk premium would be the income for the Bank.
c) (a) and (b) both d) None of these
31. An integrated Risk management policy under Asset Liability management should focus on: a) Risk measurement and monitoring b) Risk Neutralisation, c) Product pricing d) All of these
32. Liquidity policy survival prescribe: a) Minimum liquidity to be maintained b) Funding of Reserve

Assets c) Exposure limit to money market d) All of these

33. The derivative Policy should consist:

a) Capital Allocation b) Restrictions on Derivative Trading
c) Exposure limits d) All of these

34. The investment policy should contain:

a) Permissible investments b) SLR and non SLR investments
c) Private placement d) All of these

35. The investment policy need not contain:

a) Derivative Trading b) Trading in Securities and Repos
c) Valuation and Accounting policy d) Classification of Investments

36. The composite Risk policy under Treasury operations should include the following:

a) Norms for Merchant and Trading positions b) Securities Trading
c) Exposure limits d) All of these

37. Composite Risk policy should also contain the following:

a) Intra-day and overnight positions b) Stop loss limits
c) Valuation of Trading positions d) All of these

38. Transfer pricing policy shduld prescribe:

a) Spread to be retained by the Treasury
b) Segregation of Administrative and Hedging cost
c) Allocation of cost d) All of these

39. According to RBI, policy of Investment and Risk should be supplemented with:

a) Prevention of money laundering policy
b) Hedging policy for customer Risk_ c) (a) and (b) d) None of these

40. Which of the following are essential requirements for formulation of policy guidelines?

a) It should be approved by the Board
b) It should comply with the guidelines of RBI and SEBI
c) It should follow current market practices d) All of these

41. Which of the followings is correct?

a) All policies should be reviewed annually
b) A copy of the policy guidelines needs to be filed with RBI
c) (a) and (b) both d) None of above

42. A Run of the Bank signifies:

a) A situation where depositors lose confidence and start withdrawing their balances.
b) A Bank running in continuous loss
c) A Bank where non-performing Assets level is high. d) All of these

43. Liquefiable securities are:

a) Securities that can be readily sold in the secondary market.
b) Securities that have easy liquidity
c) Short term securities d) All of these

44. What is Sensitivity Ratio?

a) Extent of interest sensitive Assets
b).Ratio of interest rate sensitive Assets to interest rate sensitive Liabilities
c) -(a) and (b) both d) All of these

45. Risk appetite is:

a) The capacity and willingness to absorb losses on account of market Risk.
b) The extent of Risk involved in securities c) (a) & (b) d) All of these

46. Which of the followings is correct?

a) Special purpose vehicle is formed exclusively to handle securities paper on behalf of sponsoring Bank.
b) Hedging policy is a document which specifies extent of coverage of foreign currency obligations.

c) Self regulatory organizations formulate market related code of conduct
d) All of the above

47. Liquidity policy of a Bank should contain:
a) Contingent funding
b) Inter-Bank committed credit lines
c) (a) and (b) both d) All of these

ANSWER

INTRODUCTION TO TREASURY MANAGEMENT

1	D	2	D	3	A	4	B	5	C	6	A	7	A	8	D	9	D	10	C
11	D	12	D	13	C	14	A	15	C	16	A	17	D	18	D	19	D	20	D
21	C	22	D	23	D	24	C	25	B	26	C	27	C	28	C	29	D	30	B
31	C	32	B	33	A	34	D	35	A	36	A	37	D	38	D	39	D	40	C
41	C	42	D	43	A	44	D	45	C	46	C	47	D	48	D	49	D	50	D
51	D	52	D	53	D	54	D	55	A	56	B	57	C	58	D	59	D	60	C
61	D	62	C	63	B	64	A	65	D	66	B	67	D	68	D				

TREASURY PRODUCTS

1	C	2	A	3	D	4	D	5	D	6	D	7	D	8	D	9	D	10	D
11	D	12	D	13	A	14	A	15	A	16	D	17	C	18	D	19	D	20	D
21	C	22	D	23	C	24	D	25	A	26	D	27	C	28	D	29	B	30	D
31	D	32	D	33	D	34	D	35	D	36	C	37	D	38	D	39	D	40	C
41	C	42	D	43	D	44	D	45	D	46	D	47	B	48	D	49	D	50	C
51	C	52	D	53	D	54	A	55	A	56	D	57	D	58	C	59	D	60	B
61	D	62	D	63	D	64	D	65	C	66	D	67	C	68	B	69	D	70	D
71	D	72	D	73	C	74	D	75	C	76	C	77	D	78	D	79	D	80	D
81	D	82	C	83	D	84	D	85	D	86	D	87	D	88	D	89	D	90	D
91	D	92	D	93	D	94	D	95											

FUNDING AND REGULATORY ASPECTS

1	D	2	C	3	C	4	D	5	D	6	E	7	B	8	B	9	D	10	C

TREASURY RISK MANAGEMENT

1	C	2	C	3	B	4	C	5	A	6	B	7	C	8	E	9	A	10	D
11	A	12	D	13	B	14	C	15	E	16	A	17	E	18	A	19	C	20	C

DERIVATIVES

1	D	2	C	3	D	4	D	5	B	6	D	7	C	8	D	9	A	10	D
11	D	12	D	13	B	14	D	15	D	16	B	17	B	18	D	19	D	20	C
21	D	22	D	23	A	24	C	25	D	26	A	27	C	28	C	29	B	30	D
31	C	32	D	33	D	34	D	35	D	36	D	37	D	38	D	39	A	40	D
41	D	42	A	43	D	44	A	45	D	46	D	47	D	48	D	49	C	50	D
51	D	52	D	53	D	54	D	55	D	56	D	57	D	58	D	59	D	60	D

TREASURY & ASSET LIABILITY MANAGEMENT

1	D	2	D	3	D	4	D	5	B	6	C	7	D	8	D	9	D	10	C
11	A	12	C	13	C	14	D	15	D	16	A	17	D	18	B	19	D	20	D
21	D	22	B	23	C	24	D	25	D	26	C	27	D	28	D	29	D	30	C
31	C	32	D	33	D	34	D	35	D	36	D	37	D	38	D	39	C	40	D
41	C	42	A	43	A	44	B	45	A	46	B	47	C						

CASE STUDIES ON CRR Sr COMMERCIAL-PAPER

Case- 1

International Bank has following assets and liabilities in its balance sheet as on Mar 31, 2010:
Capital — Rs. 4400 cr, Reserves — Rs. 8600 cr, demand deposits — Rs. 26000 cr, Saving Bank deposits — Rs. 82000 cr, Term deposits — Public Rs. 123200 cr, Term deposits — Banks Rs. 5200 cr; Borrowing from financial institutions — Rs. 800 cr, NABARD refinance — Rs. 600 cr, Bills payable Rs. 200 cr, Interest accrued Rs. 80 cr, Subordinated debt Rs. 800 cr and suspense account Rs. 120 cr. Total liabilities Rs. 252000 cr. Based on this information, and assuming CRR to *be* 5%, answer the following questions.

01 What is the amount of liabilities that will not be included in net demand and time liabilities for the purpose of CRR calculation:
a) Rs. 13000 cr b) Rs. 13600 cr
c) Rs. 18200 cr d) Rs. 18800 cr

02 What is the amount of Net demand and time liabilities (NDTL), on which the CRR is to be maintained:
a) Rs. 233200 cr b) Rs. 238600 cr
c) Rs. 248300 cr d) Rs. 252000 cr

03 At 5% of NDTL rate prescribed by RBI, what will be the average balance to be maintained by the bank with RBI:
a) Rs. 10960 cr b) Rs. 11660 cr
c) Rs. 11860 cr d) Rs. 12960 cr

04 What is the minimum balance in the CRR account with RBI, in the above situation which should be available:
a) Rs. 8712 cr b) Rs. 8514 cr
c) *Rs.* 8162 cr d) Rs. 8092 cr

05 While calculating the net demand and time liabilities, *for* CRR purpose, which of the following liability is to be excluded:
a) Capital and reserves
b) Refinance from NABARD, NHB, SIDBI
c) Inter-bank deposits with original maturities of 15 days or above
d) All the above

Answers: 1-d 2-a, 3-b 4-c 5-d

Explanations:

Que-1: Capital Reserves -I- term deposit from banks + refinance from NABARD are not to be taken. Hence 4100 + 8600 + 5200 + 600 = 18800 cr.

Que-2: Total liabilities — exempted liabilities (Capital + Reserves + term deposit from banks + refinance from NABARD). Hence 252000 — 18800 = 233200 cr

Que-3: 233200 x 5% = 11660 cr

Que-4: Minimum balance is 70% of the average balance *i.e.* 11660 x 70% = 8162.cr

Que-5: The given answer is correct. It does not require any explanation

Case - 2

International Bank has maintained following balance with RBI in its CRR account for the fortnight ended Feb 12, 2010.
1st 10 days — Minimum balance of 70%
11th and 12th day — Rs. 1600 cr
The average balance required to be maintained *is* Rs. 700 cr. Based on this information, answer the following questions:

01 On product basis, what is the CRR balance for fortnight, to comply with the CRR-requirement:
a) Rs. 10500 cr *b)* Rs. 9800 cr

c) Rs. 6880 Cr d) Inadequate information

02 On product basis, what balance has been maintained by the bank, during the first 10 days of the fortnight:

a) Rs. 4900 cr *b)* Rs. 5600 cr

c) *Rs.* 6300 cr d) Rs. 7000 cr

03 On product basis, what balance has been maintained by the bank on 11th and 12th day:

a) Rs. 1600 cr b) Rs. 3200 cr

c) Rs. 3600 cr d) Rs. 4800 cr

04 On product *basis*, what balance has been maintained by the bank for 1st [2 days of the fortnight:

a) Rs. 3200 cr b) Rs. 4900 cr

c) Rs. 8100 cr d) Rs. 9800 cr

05 How much minimum balance the bank will be required to maintain on 13th and 14th day> to ensure compliance of CRR requirement during the fortnight:

a) Rs. 700 cr b) Rs. 760 cr

c) Rs. 810 cr d) Rs. 850 cr

Answers: 1-b 2-a 3-b 4-c 5-d

Explanations:

Que-1: 700 x 14 = 9800 cr

Que-2: 70% of the required Rs. 700 cr i.e. 490 cr (700 x 70%). Hence total balance for 10 days = 490 x 10 = 4900 cr

Que-3: 1600 x 2 = Rs. 3200 cr

Que-4: (490 x 10 = 4900 cr) f (1600 x 2 = Rs. 3200 cr) = 8100 cr

Que-5: Balance required to be maintained on product basis = 9800 cr minus balance already maintained = Rs. 8100 = 1700 cr. Hence for 2 days, the average balance = 1700/2 = 850 cr.

Case – 3

Pune branch of International Bank (With HQ in Mumbai) has received an investment proposal for investing in commercial paper issued by a company known as XYZ Limited. The bank has received the request for subscribing to the CP up to Rs.50 cr for 182 days at 8% p.a. rate of interest and submitted the following information/ documents on Feb 10, 2010:

a. Copy of credit rating certificate (PRI) issued by CARE which is dated Jan 25, 2010

b. Coy of resolution passed by Board of Directors of the company to this effect which restricts issued of CP up to Rs.100 cr, with a maximum tenure of 182 days.

c. The company has submitted the letters from two non-bank finance companies subscribing to the commercial paper up to Rs.50 cr in the first tranche on Feb28, 2010. On the basis of above information, answer the following questions:

01 Which of________the following other information/confirmation is not required by the bank to ensure that company fulfils the eligibility criteria:

a) proof of sanction of working capital limits by a bank or financial institutions

b) Copy of latest audited balance sheet to ensure that company has required net worth of at least Rs.4 cr.

c) proof that their loan accounts with other banks are standard loan account

d) none of the above

02 Which of the following steps will be initiated by the branch:

a) the branch will immediately subscribe the commercial paper

b) the branch will decline, the subscription, as banks cannot invest in commercial papers

c) the branch will refer the proposal to Treasury Department of the bank in HO, as it is an investment proposal

d) the branch will refer this case to its Regional Head, as case is to be sanctioned in the form of a loan.

03 What is the amount as balance amount, the company can get subscribed as commercial paper?

a) Rs.100 cr b) Rs.50 cr

c) Rs.10 cr d) none of the above

04 If the bank decides to subscribe the commercial paper to the extent of Rs.10 cr, what amount will be bank pay to the company?

a) Rs.10 lac b) Rs.961538

c) Rs.958276 d) 952945

05 If the bank subscribes the CP on Feb 14, 2010, the company shall repay back the amount of commercial paper on :

a) August 13, 2010 b) August 14, 2010

c) August 15, 2010 d) August 16, 2010

Ans. 1-d 2-cq 3-b 4-b 5-b Explanations: —

Que-1: As per RBI guidelines, the eligibility criteria include (a) sanction of working capital limits by a bank or Fl (b) credit rating of at least P2 from CRISIL or equivalent from other rating agency (c) loan accounts are

standard accounts (d) net worth is at least Rs.4 cr.
Que-2: Investment in commercial paper, is an investment decision and the evaluation of the proposal and decision to invest, shall be taken by the Treasury Deptt, of the bank.
Que-3: Rs.100 cr– Rs.50 cr (already subscribed) = Rs.50 cr.
Que-5: The discounted value = P/1+r = 10 lad 1.04 = 961538 (rate of interest of 8% for 6 months will be half of 8%.
Que-5: The maturity date is Aug 15. But it being a holiday, the company shall have to pay on the preceding day i.e. Aug 14.

CASE STUDIES ON DERIVATIVES

Case-1 : CREDIT DERIVATIVES

01 A corporate client has requested the bank for sanction of a term loan of Rs. 200 cr for setting up a project. The loan will be repaid within 5 years. Due to industry exposure ceiling, the bank is unable to undertake the exposure. In view of the long standing relationship with the customer, the bank wants to accommodate the customer. If this loan is sanctioned, to hedge the loan concentration, which of the following will be used by the bank:
a) Credit default swap
b) Total return swap
c) Credit linked notes
d) Credit spread options

02 A corporate needs a corporate loan of Rs. 1000 cr to be withdrawn immediately and availed for one year. Among other banks, Universal Bank is also approached for this. The bank is ready to sanction a loan up to -Rs. 250 cr (due to exposure ceiling), while the company has requested for a loan of Rs. 500 cr, as the balance part has been managed by the company, from other banks. In order to retain the customer, for accommodating the party to the extent of Rs. 500 cr, which of the following will be used by the bank:
a) Credit default swap
b) Total return swap
c) Credit linked notes
d) Credit spread options

Answers: 1-b 2-a

Explanations:

1. In this case, the total return swap (TRS) would be appropriate. (TRS represents an off balance sheet replication of a financial assets such as a loan). The bank, after extending the loan, can arrange a TRS with a hedge fund investor. The bank in this way will receive a spread for 5 years, can retain the customer, hedge the risk of the loan and reduce the amount of regulatory capital.
2. The bank can sanction a loan of Rs. 500 cr and go for credit default swap (CDS) of Rs. 250 cr and can sell this amount to a protection seller (particularly those banks that are at a disadvantages so for as credit risk origination is concerned) under CDS. In this transaction, the loan will continue to be with the originating bank and will not be required to be transferred to the bank.

Case- 2 : OPTIONS

X is the seller of an option and Y is the buyer of the option. As per the option, the option buyer can buy USD 100000 at a strike price of Rs. 45 per USD with expiry at the end of 3 months.

01 According to this contract:
a) Y has the right to sell USD 100000 to X
b) Y has the right to buy USD 100000 from X
c) X has the right to buy USD 100000 from Y
d) Y has the obligation to buy **USD** 100000 from X

02 In the above case (i.e. call option), if the spot price of USD is. Rs. 45.50 on the expiry *day, it is an:*
a) At-the-money option
b) Out-of-money option
c) In-the-money option
d) American option

03 In the above case (i.e. call option), if the spot price of USD is Rs. 44.50 on the expiry day, it is an:
a) At-the-money option
b) Out-of-money option
c) In-the-money option
d) American option

04 In the above case (i.e. call option), if the shot price of USD is Rs. 45.00 on the expiry day, it is an:
a) At-the-money option

b) Out-of-money option
c) In-the-money option
d) American option

Answers: 1-b 2-b 3-c 4-a Explanations:

1. From buyer's view point, this is a call option as the buyer can purchase USD 100000 without any obligation to purchase. In case the transaction does not turn out to be profitable he may choose not to exercise the option.
2. When the strike price = spot price of the currency, it is at the money option. When the strike price < spot price in a call option and strike price > spot price in a put option, it is called out of the money option. When the strike price > spot price in a call option and strike price < spot price in a put option, it is called in the money option.
3. When the strike price = spot price of the currency, it is at the money option. When the strike price < spot price in a call option and strike price > spot price in a put option, it is called out of the money option. When the strike price > spot price in a call option and strike price < spot price in a put option, it is called in the money option.
4. When the strike price = spot price of the currency, it is at the money option. When the strike price < spot price in a call option and strike price > spot price in a put option, it is called out of the money option. When the strike price > spot price in a call option and strike price < spot price in a put option, it is called in the money option.

Case -3: FUTURES

A futures contractof USD 10000 is traded at National Stock Exchange for delivery on Aug 28, 2011 at one USD = Rs. 45.00 as against the spot rate of Rs. 44.30.

01 *The* contract implies that:

a) Buyer would deliver the holder of the contract USD 10000 against payment of equivalent rupees at the agreed rate of Rs. 45.00
b) Seller would deliver the holder of the contract USD 10000 against payment of equivalent rupees at the agreed rate of Rs. 45.00
c) Seller would deliver to the buyer of the contract USD 10000 against payment of equivalent rupees at the agreed rate of Rs. 44.30
d) Buyer would deliver to the seller of the contract USD 10000 against payment of equivalent rupees at the agreed rate of Rs. 44.30

02 In the above case, if the market rate of USD is Rs. 45.90

a) The seller will pay to the holder, the difference in contract price and spot price on that date
b) The buyer will pay to the holder, the-difference in contract price and spot price on that date
e) The seller will pay to the buyer, the difference in contract price and spot price on that date d) The seller will pay to the buyer, the amount of contract price

03 In the above case, if the market price is less than the contract price:

a) The buyer of the contract will get the profit
b) The buyer of the contract will bear the loss
c) The seller of the contract will bear the loss
d) The profit or loss, if any, will be shared between the buyer_and the seller

Answers: 1-b 2-a 3-b Explanations:

1. A futures contract is traded at an Exchange. Under the contract, the seller delivers the holder of the contract, the agreed currency (USD 10000) against payment of equivalent rupees at the agreed rate of Rs. 45.00.

• **2.** The seller will pay to the holder, the difference in contract price and spot price on that date, to settle the contract.

3. The buyer will pay to the holder, the difference in contract price and spot price on that date.

BANK FINANCIAL MANAGEMENT

CASE STUDIES ON RATING MIGRATION

Case- 1

You are provided the following information about the no. of loan accounts with different rating, in international Bank as on Mar 31 2009 and Mar 31 2010.

Rating	Mar 31, 2009	Mar 31, 2010							
		AAA	AA+	AA	A+	A	BBB	C	Default
AAA	100	70	16	4'	4	.2	2	2	-
AA+	100	10	60	14	10	-	2	2	2
A A		-	-		-	-	-	_	-
A+	-	-	-	-	-	-		-	-
A	200		-	-	20	160	12	4	4

BBB	400	-	-	-	20	-	240	60	80-
C	60	-	-	-	-	-	10	40	10
Default	-								

Based on this information, answer the following question.

01 What is the %age of AAA rated borrower that remained at the same rating level during the observation period:
a) 70%© b) 65%
C) 60% d) 55%

02 What is the no. of AAA rated accounts as at the end of observation period:
a) 100 b) 80
c) 70 d) 60

03 What is the percentage of migration of borrowers from A and BBB category to default category:
a) 1% 20 b) 2%, 20
c) 1% 10 d) 2%, 10

04 What is the percentage of migration of loan accounts from C rated to default category:
a) 10% b) 12.50%
c) 15.5% d) 16.7%

05 What is the total no. of borrower in the default category at the beginning and end of the observation period:
a) Nil, 80 b) Nil, 90
c) Nil, 96
d) Inadequate information to answer the question

06 Calculate the percentage for migration of AA+ account to AA category:
a) 10% b) 125
c) 14% d) 16%

07 What is the percentage of BBB category accounts, that did not change their category during the observation period:
a) 70% b) 60%
c) 50% d) 40%

08 What is the percentage of A category accounts that were upgraded to A+ category:
a) 10% b) 12.5%
c) 15% d) 17.5%

Answers: 1-a 2-b 3-b 4-d 5-c 6-c 7-b 8-a

Explanations:

Que-1: Mar 2010 = 70 accounts. Mar 2009 = 100 account. Hence 70/100x100 = 70%

Que-2: 70+10 = 80

Que-3: For A category = 4/200x100 = 2%. For BBB category = 80/400x100 = 20%

Que-4: 10/60x100 = 16.7%

Que-5: At beginning — nil At end = 2+4+80+10=96

Que-6: 14/100x100 = 14%

Que-7: 240/400x100 = 60%

Que-8: 20/200x100 = 10%

Case -2

You are provided the following information about the no. of loan accounts with different rating, in International Bank as on Mar 31, 2009 and Mar 31 2010.

Rating	Mar 31, 2009	Mar 31, 2010							
		AAA	AA+	AA	A+	A	BBB	C	Default
AAA	200	150	10	12	14	8	6	-	4
AA+	-	-	-	-	-	-	-	-	-
A A	50	-	-		-	-	-	_	-
A+	100	-	1	16	80	-	-	3	-
A	-		-	-	-	-	-	-	-
BBB	400	-	-	-	20	20	330	20	10
C	100	-	-	-	-	-	20	60	20
Default	-								

01 What is the percentage of AA rated and BBB rated account that retained their existing rating:
a) 64%, 85% b) 64%, 82.55
c) 65.5%, 80% d) 60%, 78%
02 What is the no. A+ account at the end of observation period:
a) 100 b) 110
c) 118 d) Inadequate information
03 What is the change percentage in no. of accounts in AAA category:
a) 20% increase b) 22.5% decrease
c) 24% decrease d) 25% decrease
04 What is the percentage of account in all categories that have been shifted to default category:
a) 5.4% b) 6.2%
c) 6.8% d) 7.5%
05 What is the %age of AAA category accounts that *has been* shifted to BBB and AA category:
a) 3%, 6 b) 3%, 5%
c) 4%, 6 d) 4%, 5%
06 What is the percentage change *in AA* category accounts:
a) 15% b) 17.5%
c) 20% d) 25%
07 In which category of accounts, the migration has been highest (in %age terms) during the observation period:
a) AAA b) AA
c) BBB d) C
08 In which category of accounts, the migration has been lowest, during the observation period:
a) C b) BBB
c) A+ d) AA
Answers: 1-b 2-c 3-d 4-a 5-a 6-c 7-d 8-c
Explanations:
Que-1: AA=32/50x 100=64% BBB=330/400x100=82.5%
Que-2: 14+4+80+M = 118
Que-3: 50/200x100 = 25% dedine
Que-4: 36/850x 100= 5.4%
Que-5: To BBB = 6/200X100 = 3% To AA category = 12/200x100 = 6%
Que-6: (Change 60-50 = 10) 10/50x100 = 20%
Que-7: In C category — 40%. In AA category — 36%. In other categories it is lesser than in these categories.
Que-8: A +. It is 20%. In other categories it is higher

CASE STUDIES ON COMPUTATION OF EXPOSURE ON A BORROWER

Case — 1

Credit facility	I Sanctioned amount	Outstanding amount	Credit — [1] conversion factor for non-fund
Cash credit	500	300	
Bills	100	50	
Export loans	200	100	
Term loan	300	100	
Financial guarantees	100	80	100%
Performance Guarantee	100	100	50%
Standby LC	100	50	100%
Documentary LC	400	300	20%
Unconditional take out finance	100	100	100%
Conditional take out finance	100	100	50%
Total	2000	1280	

Balance amount of 200 of term loan to be withdrawn as under: Within one year 100 and after 1 year 100. In case of un-drawn portion, the exposure is to be taken as under:
Cash credit = 20%; Term Loan to be withdrawn within one year = 20%; Term Loan to be withdrawn after one year

= 50%
01 The exposure for undrawn amount of fund based limits other than term-loans to be taken at:
a) 20 b) 50
c) 70 d) 140
02 The exposure for undrawn amount of term loans to be taken at:
a) 20 b) 50
c) 70 d) 140
03 The amount of exposure for undrawn amount for fund based limit does not match in which of the following:
a) Cash credit, bills and export loans 70
b) Term loan to be withdrawn in one year 20
c) Term loan to be withdrawn after one year 20
d) Total amount for non-withdrawn amount 140
04 What is the credit equivalent of non-fund based exposure in respect of letter of credit:
a) 130 b) 110
c) 150 d) 390
05 What is the credit equivalent of non-fund based exposure of bank guarantees:
a) 130 b) 110
c) 150 d) 390
06 What is the credit equivalent of non-fund based exposure in respect of take out finance:
a) 130 b) 110
c) 150 d) 390
07 What is the credit equivalent of total non-fund based exposure
a) 130 b) 110
c) 150 d) 390
08 What is the total exposure on account of the borrower:
a) 2000 b) 1280
c) 1080 d) 900
Answers: 1-c 2-c 3-c 4-b 5-a 6-c 7-d 8-c
Explanations:
1. Undrawn amount under fund based limits-other than term loan = 800-450= 350 at 20% = 70
2. Exposure for undrawn amount of term loan as per RBI guidelines: within one year 100 @ 20% = 20 and after 1 year 100 @ 50% = 50. Total = 20 + 50 = 70.
3. Undrawn amount under fund based limits other than term loan = 800-450 = 350 at 20% = 70
Undrawn amount of term loan = within one year 100 @ 20% = 20; after 1 year 100 @ 50% 50. Total exposure for non-withdrawn amount = 70 + 20 + 50 = 140.
4. Letter of credit standby - 50 x 100% = 50.
Documentary 300 x 20% = 60. Total = 50 + 60 = 110.
S. Bank guarantees - Financial guarantee = 80 x 100% = 80,
Performance guarantee = 100 x 50% = 50. Total 80 + 50 = 130.
6. Take out financing for unconditional = 100 x 100% = 100.
For conditional 100 x 50% = 50. - Total = 100 + 50 = 150.
7. Letter of credit = 50 x 100% = 50, 300 x 20% = 60, Total = 50 + 60 = 110.
Bank guarantees = 80 x 100% = 80, 100 x 50% = 50, Total = 80'+ 50 = 130. Take out financing = 100 x 100% = 100, 100 x 50% = 50, Total = 100 + 50 =150. Total = 390
8. FB Based drawn = 550, FB undrawn = 140, Non-fund based = 390, Total = 1080

Case -2
Popular Bank has a credit exposure of Rs. 80 cr which is secured by financial collateral security of A+ rated bonds of Rs. 40 cr issued by a Public Sector Undertaking of Govt. of India. The period of this exposure is 4 years and the residual maturity of the financial collateral is 3 years. The financial collateral is an eligible credit risk mitigant. There is no currency mismatch. (As per RBI guidelines the haircut applicable to this collateral is 6% and the haircut on account of currency mismatch is 0 if no currency mismatch is there and 0.08, if there is currency mismatch).
01 Based on the above information, calculate the haircut adjusted collateral value:
a) Rs. 40.00 cr b) Rs. 37.60 cr c) Rs. 27.57 cr d) Rs. 12.43 cr
02 On the basis of above information, what is value of haircut adjusted collateral after adjustment on account of maturity mismatch:
a) Rs. 40.00 cr b) Rs. 37.60 cr c) Rs. 27.57 cr d) Rs. 12.43 cr
03 On the basis on the above information, calculate the value of exposure at Risk:
a) Rs. 40.00 a b) Rs. 37.60 cr c) Rs. 27.57 cr d) Rs. 12.43 cr

Answers: ***1-b*** **2-c 3-d**
Explanations:

1. In this case the residual maturity of collateral is less than the residual maturity of the loan, hence there is maturity mismatch. There is no currency mismatch as stated in the problem. To find out the net exposure qualifying for capital adequacy purpose, at the first stage, the hair cut of the collateral will be calculated and then value of hair-cut adjusted collateral will be calculated, taking into account the adjustment on account of maturity mismatch.

Stage 1- Haircut adjusted collateral value or C = C x (1 - H,
C = 40 x (1 - 6% - 0%) = 40 x 94% = Rs. 37.60 Cr.
(Here, C is original value of collateral. I-l_c is haircut appropriate to the collateral-security (as per RBI guidelines it is 6%) and H_u is the haircut for currency mismatch (0% if exposure and collateral are in the same currency and 0.08% if the exposure and collateral are in the different currency).
State 2 - Value of haircut adjusted collateral after adjustment on account of maturity mismatch:
P = C x (t - 0.25) / (T - 0.25) = 37.60 x (3-0.25) / (4-0.25) = 37.60 x 2.75 / 3.75 = 27.57.
(P = value of credit risk mitigant adjusted for maturity mismatch, t *is* minimum of T and residual maturity of credit protection expressed in years and T is minimum of 5 years and residual maturity of the exposure expressed in years). The value of exposure at risk (E) = Max {0, (current value of the exposure - value of the adjusted collateral for any hair cut and maturity mismatch)} = Max {0, (40 - 27.57) = 12.43 cr

2. As above
3. As above

Case - 3

A company *has raised* a loan of Rs. 100 cr and collateral in this account is a bank term deposit of Rs. 40 cr. Calculate the net exposure qualifying for capital adequacy purpose, if there is not maturity mismatch

a) Rs. 100 b) Rs. 60 cr
c) Rs. 40 cr d) Inadequate information

- **Answer:**

Solution: 100 - 40 = Rs. 60 cr. The haircut in respect of collateral of bank deposit is Zero as per RBI guidelines. Hence the full Value of Rs. 40 cr would be deducted from the exposure, without any haircut. .

Case — 4

01 Bank has an exposure of Rs. 100 cr (residual maturity 3 years) which is collaterally secured by RBI relief Bonds of Rs. 20 cr with a residual maturity mismatch. The applicable haircut as per RBI guidelines for relief honds is 7% and frr Pa. rated bonds 4%. What is the adjusted collateral vaiue of this security for the purpose of risk mitigation:

a) Rs. 100 cr b) Rs. 50 cr
c) Rs. 49.20 cr d) Rs. 50.80 cr

02 Bank has an exposure of Rs. 100 cr (residual maturity 3 years) which is secured collaterally by RBI relief Bonds of Rs. 20 cr with a residual maturity of 3 years and AA rated bonds of Rs. 30 cr. There is no maturity mismatch. The applicable haircut as per RBI guidelines for relief bonds is 2% and for AA rated bonds 4%. Calculate the value of exposure at risk for the purpose of risk mitigation:

a) Rs. 100 cr b) Rs. 50 cr
c) Rs. 49.20 cr d) Rs. 50.80 cr

Answers: 1-c 2-d
Explanations:

1. The weightage of the collateral is 20% for relief bonds and 30% for AA rated bonds.
The HC = (20% x 2%) + (30% x 4%) = 0.4 + 1.2 = 1.6% The
value of hair cut adjusted collateral C = C x (1 ¯1̄1, — C = 50 x (1
— 1.6% - 0%) = 50 x 98.40% = Rs. 49.20 Cr.

2. The weightage of the collateral is 20% for relief bonds and 30% for AA rated bonds.
The HC = (20% x 2%) + (30% x 4%) = 0.4 + 1.2 = 1.6% The
value of hair cut adjusted collateral C = C x (1 —
C = 50 x (1. — 1.6% - 0%) = 50 x 98.40% = Rs. 49.20 Cr.
The value of exposure at risk (E) {0, (current value of the exposure — value of the adjusted collateral for any hair cut and maturity mismatch)} = Max {0, (100 — 49.20) = Rs. 50.80 cr

Module: D

Balance Sheet Management

Prudential norms-Capital Adequacy. Implementation of Basel-II guidelines: RBI guidelines. Banks Balance Sheet - Components of assets / Liabilities / ALM Implementation - RBI Guidelines - Gap Analysis - Mechanics, Assumptions, and Limitations - Illustrations of Actual Gap Reports - The Relationship Between Gap and Income Statement - Funding Liquidity - Trading / Managing Liquidity - Contingency Funding - Business Strategies : Profit and profitability analysis, Asset Classification - provisioning - effect of NPA on profitability, Shareholder value maximization

Components of Assets and liabilities in Bank's Balance Sheet and their Management

Section 29 of Banking Regulation Act 1949 stipulates that every banking company shall prepare financial statements comprising Profit &. Loss Account and Balance Sheet as at the close of March 31 every year on the format prescribed for this purpose. RBI has prescribed Form A for balance sheet and Form B for Profit and loss account as per 3rd Schedule. With effect from the year ended March 31, 2002 onwards, the balance sheet has to be prepared on the revised form.

The balance sheet of a bank has following components on the liabilities and assets side:

Components of liabilities (also known as sources of funds):

1 Capital
2 Reserves & surplus
3 Deposits
4 Borrowings
5 Other liabilities and provisions
6 Contingent liabilities (not included in the aggregate of liabilities and are shown as a separate item)

Components of assets (also known as *use* of funds):

1 Cash & balances with RBI
2 Balances with banks and money at call and short notice
3 Investment
4 Advances
5 Fixed Assets
6 Other assets

Description of Liability Components

Capital Capital includes the capital provided by Govt. and public issue in case of public sector banks. In case of private banks, it comes from the promoters and through public issue. The capital can come from Indian promoters or from abroad in the form of Foreign Institutional Investors (FII) and Foreign Direct Investment(FDI). There are restrictions on RI and FDI, both in case of public and private banks.

Reserve: Reserve include reserves such as statutory reserve, capital reserve, share premium reserves etc.

Statutory Reserve: it is created as per provisions of Section 17 of Banking Regulation Act at 20% (by transfer form profits) of the profits before dividend.

Capita! reserve: These are the reserves which are created by the amount other than free for distribution through the profit and loss account. Surplus on revaluation is taken as capital reserves.

Share premium : Premium on issue of share capital is included under this head.

Revenue and other reserves : it include any reserve other than capital reserve_ It includes those which are not classified elsewhere separately.

Balance of profit : It include the balance of profit after appropriations_ If there is loss, it is shown as deduction from the balance.

Demand deposits : These include deposits from banks and from others. These also include credit balance in overdraft or cash credit accounts, deposits payable at call, overdue deposits, inoperative accounts, matured time deposits or cash certificates or certificate of deposits etc.

Term deposits : Term deposits include fixed deposits, cumulative and recurring deposits, cash certificates, certificate of deposits, annuity deposits, deposits mobilized under various schemes, ordinary staff deposits, foreign currency nonresident deposit account etc.

Deposits from banks : It include the deposits from banking system in India, cooperative banks, foreign banks. Borrowing : It include borrowing from RBI including refinance, borrowing from

other banks including cooperative banks. Borrowing or refinance obtained from other banks such as EXIM Bank or NABARD is also included underthis. Inter-office transactions are not shown as borrowing.

Other liabilities and provisions : ft include the amount of bank drafts or other such remittance not encashed and outstanding and is shown as bills payable. Besides, the difference on account of incomplete recording of transactions
between branches, interest accrued and not due on deposits and borrowings, is included. In addition, the provisions such as on income tax, provisions on bad debts, unclaimed deposits, outstanding expenses etc. are included under this head. Contingent liabilities : It include claims against bank not acknowledged as debts, liability for partly paid shares, liability on account of outstanding forward exchange contracts, guarantees give on behalf of constituents, acceptances and other items such as arrears of cumulative dividends, bills rediscounted etc.

Description of Assets Components

Cash balances and balances with banks : It include cash in hand (including foreign currency notes), balance with RBI in current or other accounts, balances with other banks in currency or other deposit accounts or money at call and short notice. The call loans are repayable at any time while the short notice advances are repayable within 24 hours. The maximum period of notice period is usually of 14 days.

Investments: Investment include in Govt. securities such as Central and State Govt. treasury bills or loans, investments in other approved securities, investment in shares of companies and corporations and also in debentures and bonds. Besides the investment include, investment in subsidiaries/joint ventures, in gold, commercial paper etc. In addition, the investments abroad are included.

Advances : Advances are categorized as (a) bills discounted and purchased, (b) cash credit, overdrafts and loans payable on demand and (c) term loans. In additions, these are categorized as (a) secured by tangible assets and (b) those by govt. guarantees and (c) as unsecured.Further these are classified as (a) priority sector, (b) to public sector and (c) banks and others. The gross amount of advances include the refinance and rediscounts.

Fixed assets : These include premises and other fixed assets and are shown at cost on close of previous year, additions and deductions during the year and depreciation till close of the year.

Other assets : These include inter-office adjustments, interest accrued, tax paid in advance, stationery and stamps, non-banking assets acquired in satisfaction of claim etc.

Bad debts and provisions for doubtful debts — With effect from April 1991, the amount is to be charged to `provisions and contingencies' in profit and loss account. In the balance sheet, the advances are shown after deducting both, the bad debts and provisions for bad debts.

Provisions for taxation : It is charged to profit and loss account under provisions and contingencies and in the balance sheet, it is shown as 'Other liabilities and Provisions':,
Rebate on bills discounted : It is unexpired discount which is to be shown as rebate on bills discount by debiting the discount account.

PROFIT & LOSS ACCOUNT

Profit and loss account of the bank has components of

A Income that include interest income and non-interest income

Expenses that include interest expanded, operating expenses and provisions and contingencies.
Income = Interest income + non-interest income. Expenditure = Interest expenditure + non-interest expenditure.

Description Of income Components

Interest Income: Interest income is the major income component. This comes from :

(a) loans and advances including bills purchased, discounted and negotiated_

(b) investments made by the bank in SLR. and non-SLR bonds / loans / securities.

(c) interest from funds lent to other banks under call money, notice money or term money

transactions

(d) Any other type of interest or discount not included above.

After reducing the interest expenditure from the interest income, bank gets spread. (Spread = interest received — interest paid)

Non-interest income:

(a) Commission / exchange / brokerage: This include commission of bills collection, issue of remittance
instruments like demand drafts, commission on non-fund based credit limits like letter of credit or bank guarantees, commission earned on govt. business. Besides, bank gets brokerage on securities, rent on locker, safe-deposit charges etc.

(b) Profit on sate of investments / assets : Banks undertake lot of trading in securities and eam substantial profits which is included here. In addition, banks also book profit or loss on sale of fixed asset items like fixture & furniture, vehicles etc.

(c) Profit on revaluation of investments: Banks make investments in securities the value of which keeps on fluctuating. Any notional increase or decrease in the value of these investments can result into profit or loss. When it is a loss it is shown as a deduction.

(d) Profit on sale of land, building, exchange transactions.

(e) Income earned by way of dividends on the investment in securities made by the bank

(f) Misc. income that include income from recoveries of charges from customers, income from properties of the bank etc.

Description Of Expenditure Components

Expenses include interest expenses, operating expenses and provisions and contingencies.

Interest expenses:

(a) Interest on deposits : Interest paid by the bank on various types of deposits from public or hanks etc. is part of this item.

(b) Interest on refinance or borrowing : Interest paid to RBI or banks for borrowing is included.

(c) Other interest : Interest paid to refinancing institutions Interest expenses:

(a) Payments and provisions for employees
(b) Rent, taxes and lighting
(c) printing and stationery
(d) advertisement and publicity
(e) Depreciation on bank's property
(f) Directors' fees, allowances and expenses
(g) Auditors' fees and expenses (including branch auditors)
(h) Law charges
(i) Postage, telegrams, telephones etc.
(j) Repairs and maintenance
(k) Other expenditure such as licence fee, donations, entertainment expenses, subscriptions, travel expenses

MANAGEMENT OF ASSETS AND LIABILITIES

Asset Liability Management (known as [4]ALM'), is one of the important element, of risk management. As long as the interest rates were regulated till 1993 when RBI used to prescribe most of the interest rates for deposits as well as advances, there was not much risk to bank But with deregulation of interest rates, the position has undergone change leading to pressure on spreads.

Due to discriminate policies being followed by banks in the area of interest rates, the matching of maturities of assets and liabilities has become very important. The risk profile of the banks has also seen transition as the interest rate risk, liquidity risk, industry risk, exposure risk etc. have become real.

Profit has become the key parameter of performance of the banks due to which banks are required to move away from asset management (loans and advances and investment) alone to liability

management (deposits and borrowings).

- ALM is associated with management of the balance sheet with a view to take care of interest rate risk, Liquidity risk, exchange rate risk, credit risk etc.
- ALM can also be termed as the act of planning, acquiring and directing the flow of funds within a bank with the objective to generate adequate and regular earnings while taking calculated risk_
- Accordingly, the ALM is the management of net interest margin (NINO so that its level is with the risk / return target of the bank. In summary, it can be said that ALM is a coordinated effort for managing balance sheet.

WHY ALM IS SIGNIFICANT

ALM is expected to match the residual maturity of assets and liabilities so that the bank should not face a temporary liquidity crisis. For example if 30% of liabilities are maturing within 6 months and only 10% of assets are maturing within the same period, the bank will not be able to meet the liabilities on time due to which a situation of temporary insolvency would arise. ALM ensures that for maturing liabilities, there are maturing assets, so that there is no liquidity crisis within the bank_
ALM is significant on account of following reasons:

Volatility : Due to opening up of Indian economy, the flow of money from abroad and also the deregulated interest environment causes volatility in the flows of money and the cost at which it flows. The position of money market is changed from time to time that affects the net interest margin of banks_

2 Product innovation : Banks have introduced a variety of products to meet the competition. These products have different types of feature including relating to interest rates. These products have effect on risk profile of the bank.

3 Regulatory guidelines : RBI has from time to time, issued regulatory guidelines taking into account the capital adequacy requirement and for meeting these guidelines, banks have to conduct their business within the framework one relating to guidelines on ALM.

OBJECTIVES OF ALM

Basic objective of ALM is profitability through matching of the price (interest cost) by ensuring liquidity. The Price matching ensures maintenance of spreads deploying the funds (liabilities) at a price higher than their cost. This can help a bank to examine whether the bank will benefit from rising interest rates (by having positive gap i.e. assets > liabilities) or will benefit from declining interest rates (by having a negative gap i.e. liabilities > assets).

Liquidity can be ensured by a bank by taking steps to keep the maturity profile of assets and liabilities, matched. This can be done by placing the residual maturity of assets and liabilities in different maturity buckets.

ALM aims at managing the (a) volume (b) mix (c) maturity profile (d) rate sensitivity and (e) liquidity of assets and liabilities, with a view to achieve the targeted risk / reward ratio. Achievement of this objective requires few important actions on the part of the bank, as under:

1 Review of the interest rate structure to match it to the interest / product pricing of assets and liabilities.

2 Review the investment and credit portfolio in the light of possible liquidity and foreign exchange risk

3 Review the actual performance of the bank against the projected performance and analyse the reasons for effect, if any, on the net interest margin.

PARAMETERS FOR STABILISATION OF ALM

There are 3 important parameters that help in stabilizing the ALM within a bank (a) net interest margin (b) net interest income (c) economic equity ratio.

1 Net Interest Margin : Known as 'spread' on the earning *assets,* it is calculated as net interest income divided by average total assets (NIII / average total assets).

Net interest income comes from the total interest income less total interest expenses. This means, higher the difference, higher the 'spread' or NIM. At the same time, higher the NIM, higher is likely to

be the risk.
2 *Net* Interest income : It is calculated as total interest income less total interest expenses. For stabilizing the net interest income, the banks have to minimize the fluctuation in NII.
3 Economic equity ratio : It is calculated as a ratio of shareholders' funds to total assets.
It helps to measure the change in ratio of owned funds to total funds and in understanding the capacity of a bank to sustain.

ALM AS COORDINATED BALANCE SHEET MANAGEMENT

ALM process can be disintegrated into two different stage-wise functions (a) specific balance sheet management function and (b) income-expenditure function. •

Specific Balance Sheet Management Function	
Asset Management 1. **Investment /** security management Loan 2. management 3, Fixed assets management	**Liability Management** 1.Liability Management 2.Reserve Position 3.Management Capital 4.Management 5.Long term loans management
Income-Expenditure Function	**(Profit= income—expenditure)**
Income Management 1. Interest income 2. Non-interest income	**Expenditure Management** 1. Interest expenses 2. non-interest expenses 3.Provisions 4.Taxes

IMPORTANT TERMS IN ALM

- **Asset-liability Management (ALM):** A function of planning, acquiring and directing the flow of funds in a bank with a view to stablise / improve the spread (NIM).
- Components of balance sheet : There are two components i.e. (a) assets (b) liabilities
- **Components of profit & loss account :** There are-two components i.e. (a) income (b) expenditure
- **'Operating expenses :** Expenses relating to cost of running the banking activity such as employees' payment, rents, taxes, printing & stationery etc.
- Income : Comprises interest income and non-interest income
- Expenses : Comprise interest expenses, operating expenses, provisions and taxes.
- Net interest income : Surplus of interest income over interest expenditure
- Net interest margin : Net interest income / total assets.
- Economic equity ratio : Ratio of shareholders' funds to total assets which measures the change in the ratio of owned funds to total funds.
- Sources & use of **funds :** Sources are represented by liabilities and uses are represented by assets.

Capital Adequacy — Basel II Overview

Basel-1: The attempts at harmonising the capital adequacy standards internationally, started during 1988,' when the "Basel Committee on Banking Regulations and Supervisory Practices", released a capital adequacy framework, known as Basel I. This initiative set out the first internationally accepted framework for measuring capital adequacy and a minimum ratio to be achieved by the banks. This norm was widely adopted in over 100 countries.

Implementation in India: With a view to adopting the Basel Committee on Banking Supervision (BCBS) framework on capital adequacy which takes into account the elements of credit risk in various types of assets in the balance sheet *as* well as off-balance sheet business and also to strengthen the capital base of banks, Reserve *Bank* of India decided *in* April 1992 to introduce a

risk asset ratio system for banks (including foreign banks) in India as a capital adequacy measure. Under the system the balance sheet assets, non-funded items and other off-balance sheet exposures are assigned prescribed risk weights and banks have to maintain unimpaired minimum capital funds equivalent to the prescribed ratio on the aggregate of the risk weighted assets and other exposures on an ongoing basis *(Capital fund / risk weighted assets x 100).*

RBI issued guidelines to banks in June 2004 on maintenance of capital for market risks (called capital charge on market risk) on the lines of 'Amendment to the Capital Accord to incorporate market risks' issued by the BCBS in 1996. Limitations of Basel-1 : The Basel f framework can be seen as a "one size fits all" model which measures risk broadly. (The risk weights are uniform for all banks *in* case of different *assets.* A PMRY loan which is high risk prone, has the same weightage as in case of a high rated corporate i.e. 100%)

Over the years the Basel I framework was found to have several limitations such *as:*

(a) approach to credit risk,

(b) its narrow coverage confined to only credit and market risks, and

(c) non-recognition of credit risk mitigants, which encouraged capital arbitrage through structured transactions_

The rapid advances in risk management, information technology, banking markets and products, and banks' internal processes, during the last decade, had far outpaced the simple approach of Basel I to measuring capital_ A need was, therefore, felt to replace this Accord with a more risk-sensitive framework, which would address these shortcomings. Basel-II : The BCBS released the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" on June 26, 2004. The Revised Framework was updated in November 2005 to include trading activities and the treatment of double default effects and a comprehensive version of the framework was issued in June 2006 incorporating the constituents of capital and the 1996 amendment to the Capital Accord to incorporate Market Risk.

The Revised Framework seeks to arrive at significantly more risk-sensitive approaches to capital requirements. It provides a range of options for determining the capital requirements for credit risk and operational risk to allow banks and supervisors to select approaches that am most appropriate for their operations and financial markets.

It capitalises on the modern risk management technique's and seekt to establish a more risk-responsive linkage between the banks' operations and their capital requirements. It also provides a strong incentive to banks for improving their• risk management systems. The risk sensitiveness is sought to be achieved through the now-familiar three mutually reinforcing Pillars.

Important features of Basel II : These are

- it is more risk sensitive;
- it recognizes developments in risk measurement and risk management techniques employed in the banking sector and accommodates them within the framework;
- it aligns regulatory capital closer to economic capital.

These elements of Basel II take the regulatory framework closer to the business models employed in banks.

Three Pillars

There are three important aspects of Basel II called 3-Pillars:
Pillar-1 : Minimum Capital Requirement
Pillar- 2 : Supervisory Review process
Pillar- 3 : Market discipline

The Pillar I stipulates the minimum capital ratio and requires allocation of regulatory capital not only for credit risk and market risk but additionally, for operational risk as well, which was not covered in the previous Accord (Basel I). The Pillar I, unlike the Basel I, provides a different approaches, from the simplified to the advanced otres, for determining the capital charge for each of the 3 categories of risks. The credit risk mitigants used by the banks have been specifically recognised to provide

appropriate capital relief.

Pillar- 1: Minimum Capital Requirements

Type of Risk	Approach for capital
Capital for credit risk	(a)Standard Approach (b)Internal Rating Based approach • Foundation Approach • Advance approach
Capital for Market risk	(a) Standard Method • Maturity method • Duration method (b) Internal models method
Capital for Operational risk	(a)Basic Indicator Approach (b)Standardised approach (c)Advance measurement approach

The Pillar 2 of the framework deals with the 'Supervisory Review Process' (SRP). This makes the revised framework very comprehensive. It requires the banks to develop an Internal Capital Adequacy Assessment Process (ICAAP) which should encompass their all risk situations — by addressing all those risks which are either *not fully* captured or not *at all* captured under the other two Pillars — and assign an appropriate amount of capital, internally, for all such ticks, commensurate with their risk profile and control environment. Under the Supervisory Review, the supervisors (101' in India) would conduct a detailed examination of the ICAAP of the banks, and if warranted, could prescribe a higher capital requirement, over and above the minimum capital ratio envisaged in Pillar I _

Under Pillar-2 following aspects will be part of the supervisory review:

- Evaluation of risk management RBI
- Ensure soundness and integrity of bank's internal processes to assess the adequacy of capital•
- Ensure maintenance of minimum capital with prompt corrective action (PCA) for shortfall.
- Prescribe differential capital, where necessary i.e. where internal processes are slack.

The Pillar 3 of the framework, Market Discipline, focuses on the effective public disclosures to be *made* by *the barth.s,* and is a critical complement to the other two Pillars. It recognises the fact that apart from the regulators, the banks are also monitored by the markets and that the discipline exerted by the markets (may be *in* the form of volatile share price movements at the stock market OR disregard of the follow-on public issues) can be as powerful as the sanctions imposed by the regulator. It is premised on the basic principle that the markets would be quite responsive to the disclosures made and the banks would be duly rewarded or penalised, in tune with the nature of disclosures, by the
market forces.
Under Pillar-3 following aspects will be
important: Enhance the disclosures

- Core disclosures and supplementary disclosures
- Timely at least semi-annual disclosures.

Scope of Application

The revised capital adequacy norms is applicable uniformly to all Commercial Banks (except Local Area Banks and Regional Rural Banks), both at the solo level (global position) i.e. bank as entity, as well as at the consolidated level. *A Consolidated bank* is defined as a group of entities where a licensed bank is the controlling entity_ A consolidated bank will include all group entities under its control, except the exempted entities. A consolidated bank may exclude group companies which are

engaged in insurance business and businesses not pertaining to financial services. A consolidated bank should maintain a minimum Capital to Risk-weighted Assets Ratio (CRAR) as applicable to a bank on an ongoing basis.

Approach to implementation, Effective date and Parallel run

Keeping in view Reserve Bank's goal to have consistency and harmony with international standards, RBI has decided that all commercial banks in India (excluding Local Area Banks and Regional Rural Banks) shall adopt :

Standardised Approach (SA) for credit risk

- ***Basic Indicator Approach (BIA) for operational risk***
- **continue to apply *the Standardised Duration Approach*** (SDA) for computing capital

requirement for market risks. ***Effective Date:*** Foreign banks operating in India and Indian banks having operational ***presence*** outside India to migrate to the above selected approaches under the Revised Framework with effect from March 31, 2008. All other commercial banks (except Local Area Banks and Regional Rural Banks) are encouraged to migrate to these approaches under the Revised Framework in alignment with them but in any case not later than March 31,2009.

Parallel run: With a view to ensuring smooth transition to. the Revised Framework and with a view to providing opportunity to banks to streamline their systems and strategies, banks were advised to have a parallel run of the revised Framework. The Boards of the banks should review the results of the parallel run on a quarterly basis.

Migration to other approaches under the Revised Framework

Banks are required to obtain the prior approval of the Reserve Bank to migrate to the Internal Rating Based Approach (1RBA) for credit risk and the Standardised Approach (TSA) or the Advanced Measurement Approach (AMA) for operational risk. Banks that propose to migrate to these approaches are encouraged to undertake an objective and strict assessment of their compliance with the minimum requirements for entry and on-going use of those approaches as prescribed in the International Convergence of Capital Measurement and Capital Standards (comprehensive version of the Revised Framework published by the Basel Committee on Banking Supervision in June 2006). These banks may also assess their compliance with the various processes relevant to these approaches_ The above assessments would help these banks in preparing a realistic roadmap indicating the specific milestones, timeline, and plans for achieving smooth and meaningful migration to the advanced approaches.

Capital funds

Banks in India are required to maintain a minimum Capital to Risk-weighted Assets Ratio (CRAR) of 9% on an ongoing basis as per RBI prescription. (Basel has recommended the minimum at 8%). The Reserve Bank will take into account the relevant risk factors and the internal capital adequacy assessments of each bank to ensure that the capital held by a bank is commensurate with the bank's overall risk profile. The Reserve Bank will consider prescribing a higher level of minimum ***capital*** ratio for each bank under the Pillar 2 framework on the basis of their respective risk profiles and their risk management systems. In terms of the Pillar 2 requirements of the New Capital Adequacy Framework, banks are expected to operate at a level well above the minimum requirement.

Banks are encouraged to maintain, at both solo and consolidated level, a Tier 1 CRAR of at least 6%. Banks which are below this level must achieve this ratio on or before March 31, 2010. A bank should compute its Tier 1 CRAR and Total CRAR in the following manner:

Tier 1 CRAR = Eligible Tier I capital funds

Credit Risk RWA + Market Risk RWA + Operational Risk RWA

Total CRAR = Eligible total capital funds

Credit Risk RWA Market Risk RWA + Operational Risk RWA

RWA = Risk weighted Assets

Capital funds are broadly classified as Tier 1 and Tier 2 capital. Elements of Tier 2 capital will be reckoned as capital funds up to a maximum of 100% of Tier I capital.

Elements of Tier 1 capital

For Indian banks, Tier I capital would include the following elements:

i) Paid-up equity capital, statutory reserves, and other disclosed free reserves, if any;

ii) Capital reserves representing surplus arising out of sale proceeds of assets;

iii) Innovative perpetual debt instruments eligible for inclusion in Tier 1 capital which comply with the regulatory requirements.

iv) Any other type of instrument generally notified by the Reserve Bank from time to time for inclusion in Tier 1 capital.

For foreign banks in India, Tier I capital would include the following elements:

(i) Interest-free funds from Head Office kept in a separate account in Indian books specifically for the purpose of meeting the capital

adequacy norms.

(ii) Statutory reserves kept in Indian books.

(iii) Remittable surplus retained in Indian books which is not repatriable so long as the bank functions in India.

(iv) Capital reserve representing surplus arising out of sale of assets in India held in a separate account and which is not eligible for repatriation so long as the bank functions in India.

(v) Interest-free funds remitted from abroad for the purpose of acquisition of property and held in a separate account in Indian books.

(vi) Head Office borrowings in foreign currency by foreign banks operating in India for inclusion in Tier I capital which comply with the regulatory requirements.

(vii) Any other item specifically allowed by the Reserve Bank from time to time for inclusion in Tier 1 capital.

Limits on eligible Tier 1 capital: The Innovative perpetual debt instruments and also the perpetual non-cumulative preference shares, to be reckoned as Tier I capital, will be limited to 40% of total Tier I capital as on March 31 of the previous financial year

Elements of Tier 2 capital

I Revaluation *reserves:* These reserves often serve as a cushion against unexpected losses, but they are less permanent in nature and cannot be considered as 'Core Capital'. Revaluation reserves arise from revaluation of assets that are undervalued on the bank's books, typically bank premises. The extent to which the revaluation reserves can be relied upon as a cushion for unexpected losses depends mainly upon the level of certainty that can be placed on estimates of the market values of the relevant assets, the subsequent deterioration in values under difficult market conditions or in a forced sale, potential for actual liquidation at those values, tax consequences of revaluation, etc. Therefore, it would be prudent to consider revaluation reserves at a discount of 55 percent while determining their value for inclusion in Tier 2 capital. Such reserves will have to be reflected on the face of the Balance Sheet as revaluation reserves.

2 General provisions and loss reserves: Such reserves, if they are not attributable to the actual diminution in value or identifiable potential loss in any specific asset and are available to meet unexpected losses, can be included in Tier 2 capital. Adequate care must be taken to see that sufficient provisions have been made to meet all known losses and foreseeable potential losses before considering general provisions and loss reserves to be part of Tier 2 capital. Banks are allowed to include the 'General Provisions on Standard Assets', Floating Provisions 'Provisions held for Country Exposures', and 'Investment Reserve Account' in Tier 2 capital. However, these four items

will be admitted as Tier 2 capital up to a maximum of 1.25 per cent of the total risk-weighted assets.

Floating Provisions held by banks, which is general in nature and not made against any identified assets may be treated as part of Tier 2 capital if such provisions are not netted off from gross NPAs to arrive at disclosure of net NPAs.

3 Hybrid debt capital instruments: In this category, fall a number of debt capital instruments, which combine certain characteristics of equity and certain characteristics of debt (such as perpetual cumulative preference shares, redeemable cumulative preference shares, redeemable non-cumulative preference shares). Each has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier 2 capital. Banks in India are allowed to recognise funds raised through debt capital instrument which has a combination of characteristics of both equity and debt, as Upper Tier 2 capital. •

4 Subordinated debt: To be eligible for inclusion in Tier 2 capital, the instrument should be fully paid-up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and should not be redeemable at the initiative of the holder or without the consent of the Reserve Bank of India. They often carry a fixed maturity, and as they approach maturity, they should be subjected to progressive discount, for inclusion in Tier 2 capital. Instruments with an initial maturity of less than 5 years or with a remaining maturity of one year should not be included as part of Tier 2 capital.

Limits on Tier 2 Capital

Upper Tier 2 instruments along with other components of Tier 2 capital shall not exceed 100% of Tier I capital. The above limit will be based on the amount of Tier 1 after deduction of goodwill, .DTA and other intangible assets but before deduction of investments.

Subordinated debt instruments eligible for inclusion in Lower Tier- 2 capital will be limited to 50 percent of Tier capital after all deductions.

Deductions from capital

1 Intangible assets and losses in the current period and those brought forward from previous periods should be deducted from Tier I capital
2 The DTA computed as under should be deducted from Tier I capital: i) DTA associated with accumulated losses; and ¡ii) The DTA (excluding DTA associated with accumulated losses), net of DTL. Where the DTL is *in* excess of the DTA 4eiCaidiiiiDTA associated with accumulated losses), the excess shall neither be adjusted against item (i) nor added to Tier I capital.
3 Any gain-on-sale arising at the time of securitisation of standard assets, should be deducted from Tier I capital. In terms of guidelines on securitisation of standard assets, banks are allowed to amortise the profit over the period of the securities issued by the SPV. The amount of profits thus recognised in the profit and loss account through the amortisation process need not be deducted.

4 Banks should not recognise minority interests that arise from consolidation of less than wholly owned banks, securities or other financial entities in consolidated capital to the extent specified below:

i) The extent of minority interest in the capital of a less than wholly owned subsidiary which is in excess of the regulatory minimum for that entity.

ii) in case the concerned subsidiary does not have a regulatory capital requirement, the deemed minimum capital requirement for that entity may be taken as 9 per cent of the risk weighted assets of that entity.

5 Securitisation exposures, shall be deducted from regulatory capital and the deduction must be made 50% from Tier I and 50% from Tier 2, except where expressly provided otherwise. Deductions from capital may be calculated net of any specific provisions maintained against the relevant securitisation exposures.

6 In the case of investment in financial subsidiaries and associates, the treatment will be as under for the purpose of capital adequacy:

(i) Investment above 30 per cent in the paid up equity, i.e. equity shares, *offinancial entities which*

are not consolidated for capital purposes (including insurance entities) with the bank and investments in other instruments eligible for regulatory capital status in **those entities** shall be entirely deducted at 50% from Tier I and 50% from Tier 2 capital.

(ii) Banks should ensure that majority owned financial entities that are not consolidated for capital purposes and for which the investment in equity and other instruments eligible for regulatory capital status is deducted, meet their respective regulatory capital requirements. In case of any shortfall in the regulatory capital requirements in the de-consolidated entity, the shortfall shall be fully deducted at 50% from Tier 1 capital and 50% from Tier 2 capital.

7 Banks' investment in the following instruments will be included in the prudential limit of 10%:

a) Equity shares;
b) Preference shares eligible for capital status;
c) Subordinated debt instruments:
d) Hybrid debt capital instruments; and
e) Any other instrument approved as in the nature of capital.

Pillar 2 & 3 Supervisory Review & Market Discipline

The Basel **II** Framework gives significant importance to 3 pillars. While the pillar i relates to maintenance of minimum standards of capital by banks, the pillar 2 describes the role which the Supervisors are to play and pillar 3 indicates, the requirements to be fulfilled by banks to ensure that market gets the adequate information about a bank.

2 Pillar— Supervisory Review Process

Importance of supervisory review:

1. The supervisory review process ensures that banks have adequate capital to support all the risks in their business and also encourages banks to develop and use better risk management techniques in monitoring and managing their risks.
2. Supervisors (RBI in India) are expected to evaluate how well banks are assPcsing their capital needs relative to their risks and to intervene, where appropriate. When deficiencies are identified, prompt and decisive action are to be taken to reduce risk or restore capital.
3. The increasing capital can not be regarded **as** a substitute for addressing fundamentally inadequate control or risk management processes. Other means for addressing risk, such as strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls, must also be considered_ There are 3 main areas that are suited to treatment under r[d] Pillar:

- risks considered under Pillar 1 are not fully captured by Pillar I process (e.g. credit concentration risk);
- factors not taken into account by the Pillar 1 process (e.g. interest rate risk in the banking book, business and strategic risk); and
- factors external to the bank (e.g. business cycle effects).

A further important aspect of 2" Pillar is the assessment of compliance with the minimum standards and disclosure requirements. Supervisors must ensure that these requirements are being met, both as qualifying criteria and on a continuing basis.

Key principles of supervisory review

Principle 1: Banks should have a **process for assessing their overall capital adequacy in relation to *their*** risk profile and a strategy for maintaining their capital levels.

A sound risk management process is the foundation for an effective assessment of the adequacy of a bank's capital position. Bank management has the primary responsibility for ensuring that the bank has adequate capital to support its risks.

The five main features of a rigorous process are as follows:

- Board and senior management oversight;
- . Sound capital assessment;

-Comprehensive assessment of risks;
• Monitoring and reporting; and
Internal control review.

Principle 2 Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies and ability to monitor and ensure their compliance with regulatory capital ratios and take appropriate supervisory action if they are not satisfied with the result of this process. The periodic review can involve some combination of on-site examinations or inspections, off-site review; discussions with bank management; review of work done by external auditors (provided it is adequately focused on the necessary capital issues); and periodic reporting.
The important aspect during the review include:
I. Review of adequacy of risk assessment
2. Assessment of capital adequacy
3. Assessment of the control environment
4_ Supervisory review of compliance with minimum standards
5. Supervisory response '

Principle 3: Supervisors should expect banks to operate *above the minimum regulatory capital ratios* and should have the ability to require banks to hold capital in excess of the minimum.
Pillar I capital requirements will include a buffer for uncertainties that affect the banks as a whole. Bank-specific uncertainties will be treated under Pillar 2. Such buffers under Pillar I will be set to provide reasonable assurance that a bank with good internal systems and controls, a well-diversified risk profile and a business profile well covered by the pill$_a$r I regime, and which operates with capital equal to Pillar 1 requirements, will meet the minimum goals for soundness embodied in Pillar I. Supervisors will encourage banks to operate with a buffer, over and above the Pillar I standard. Banks should maintain this buffer for a combination of the following:
(a) pillar 1 minimums are anticipated to be set to achieve a level of bank creditworthiness in markets that is below the level of creditworthiness sought by many banks for their own reasons.
(b) In the normal course of business, the type and volume of activities will change, as will the different risk exposures, causing fluctuations in the overall capital ratio.
(c) It may be costly for banks to raise additional capital, especially if this needs to be done quickly or at a time when market conditions are unfavourable.
(d) For banks to fall below minimum regulatory capital requirements is a serious matter. It may place banks in breach of the relevant law and/or prompt non-discretionary corrective action on the part of supervisors.
(e) There may be risks, either specific to individual banks, or more generally to an economy at large, that are not taken into account in Pillar I.

Principle 4: Supervisors should take actions at an early stage to prevent capital from falling below the minimum levels and should require rapid remedial action if capital is not maintained or restored. Supervisors should consider a range of options if they become concerned that a bank is not meeting the requirements embodied in the supervisory principles. These actions may include intensifying the monitoring of the bank, restricting the payment of dividends, requiring the bank to prepare and implement a satisfactory capital adequacy restoration plan, and requiring the bank to raise additional capital immediately. Supervisors should have the discretion to use the tools best suited to the circumstances of the bank and its operating environment.

Specific issues to be addressed under the supervisory review process
There are a number of important issues that banks and supervisors should particularly focus on when carrying out the supervisory review process. These issues include some key risks which are not directly addressed under Pillar 1 and important assessments that supervisors should make to ensure the proper functioning of certain aspects of Pillar 1.
A. Interest rate risk in the banking book
B. Credit risk
1. Stress tests under the IRB approaches
2. Definition of default
3. Residual risk

4. Credit concentration risk
5. Counterparty credit risk

C. Operational risk:

D. Market risk

1. Policies and procedures for trading book eligibility
2. Valuation
3 Stress testing under the internal models approach

3rd Pillar – Market discipline

The purpose of Market discipline is to complement the minimum capital requirements and the supervisory review process and to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution.

Achieving appropriate disclosure: Market discipline can contribute to a safe and sound banking environment. Hence, non-compliance with the prescribed disclosure requirements would attract a penalty, including financial penalty. Where disclosure is a qualifying criterion under Pillar Ito obtain lower risk weightings and/or to apply specific methodologies, there would be a direct sanction (not being allowed to apply the lower risk weighting or the specific methodology).

Scope and frequency of disclosures: Banks should provide all Pillar 3 disclosures, both *qualitative and quantitative,* as at end March each year along with the annual financial statements. With a view to enhance the ease of access to the Pillar 3 disclosures, banks may make their annual disclosures both in their annual reports as well as their respective web sites**.**

Banks with capital funds of Rs.100 crore or more should make interim disclosures on the quantitative aspects, on a stand alone basis, on their respective websites as at end September each year.

Qualitative disclosures that provide a general summary of a bank's risk management objectives and policies, reporting system and definitions may be published only on an annual basis.

All banks with capital funds of Rs_ 500 crore or more, and their significant bank subsidiaries, must disclose their Tier 1 capital, total capital, total required capital and Tier 1 ratio and total capital adequacy ratio, on a quarterly basis on their respective websites. The disclosure on the websites should be made in a web page titled Basel II Disclosures". Each of these disclosures pertaining to a financial year should be available on the websites until disclosure of the third subsequent annual (March end) disclosure is made. *(For example:* Disclosures for the financial year ending March 31, 2009 (i.e., June/ September/ December 2008 and March 2009) should be available until disclosure as on March 31, 2012).

'Validation: The disclosures should be subjected to adequate validation. (For example, since information in the annual financial statements would generally be audited, the additional material published with such statements must be consistent with the audited statements).

Effective date of disclosures: The first of the disclosures as per these guidelines shall be made as on the effective date viz. March 31, 2008 or 2009, as the case may be. Banks are, however, encouraged to make the Pillar 3 disclosures at an earlier date.

The disclosure requirements: The following are the disclosure requirements under Pillar 3. I. Scope of application

2. Capital structure
3. Capita! Adequacy
4. Credit risk : general disclosures for all banks
5. Credit risk: disclosures for portfolios subject to the standardised approach
6. Credit risk mitigation: disclosures for standardised approaches
7. Securitisation: disclosure for standardised approach
8. Market risk in trading book
9. Operational risk

10. Interest rate risk in the banking book (IRRBB)

Liquidity Management

Bank liquidity or liquidity *means* the ability of a bank to accommodate decline in liability and to fund increase in assets. when a bank is able to get sufficient funds by increasing liabilities or by converting its assets quickly, **it** is said that the bank has adequate liquidity. in a period of 2 months, the bank is to repay, a deposit liability of Rs.2000 cr and it has to give fresh loans of Rs.3000 cr. It has maturity assets of Rs.4000 cr and expects flow of fresh deposits worth Rs.2000 en The bank will be said to have adequate liquidity.

Liquidity Management & Risk Management

Effective liquidity management helps in :

1.Demonstrating that the bank has the capacity to repay its borrowings.
2 Meeting prior loan commitments towards its borrowers
3 Avoiding the unprofitable sale of its assets for meeting the urgent liquidity requirements
4 Decreasing the default risk premium, as a bank with a strong balance sheet is perceived to be liquid and safe due to which it can raise funds at lower premium.

Parameters for assessing the adequacy of liquidity position of the bank

1.Funding requirements based on past trends (called historical funding requirement)
2 Current liquidity position
3 Expected funding needs for future
4 Options available to decrease the funding requirements
5 Asset quality — present and anticipated
6 Earning capacity — present and future

Factors affecting the liquidity position of a bank:

1. Decline in profits
2 Increase in NPAs
3 Downgrading of the bank by rating agencies
4 Expanded business opportunities
5 Acquisitions

How can a bank provide funds for its requirement

I Sale of liquid assets
2 Sale of less liquid assets
3 Increase in short term borrowings
4 Increase in long term liabilities
5 Increase in capita! funds

Liquidity Risks

Risk can be internal, external or of other category:

I **Internal** risk — These risks are institution specific. These are as per perception of a bank in respect of various market segments such as local market, regional market, national market and international market.
2 **External risk —These** risks are geographic risks, systemic *risks* or product specific risk
3 **Other** *risks* — These include funding risk, time risk and call risk

- **Funding** risk stands for need to replace the net outflow of funds due to unanticipated withdrawals or non-renewal of deposits as a result of frauds causing substantial loss, systemic risk, loss of confidence of the clients or liabilities in foreign exchange.
- Time risk stands for need to compensate for non-receipt of anticipated inflows of funds as a result of deterioration in the asset quality, loan account becoming NPA, temporary problem in recovery of loans
- **Call risk** stands .for crystallization of contingent liabilities or inability to undertake profitable business opportunities when desirable as a result of conversion of non-fund based limits into fund based.

Popular Bank faced a no. of internal and external frauds recently due to which (a) it has not been able to make payment of its liabilities. (b) In addition, due to this fraud, the confidence of the customers has shaken and resultantly, they have started withdrawing their deposit or have resorted to non-renewal of

maturing term deposits. (c) Due to bank's failure to make certain payment that are due to other banks, those banks have not been able to meet their obligations.

ASSETS CLASSIFICATION

NON PERFORMING ASSETS

The prudent guidelines were first issued by RBI in the year 1991 implemented wef 01.04.1992 on recommendations of Narasimham committee covering, income recognition, asset classification and provisioning. Prudential norms prescribed by RBI include norms relating to Accounting, Exposure, and Capital Adequacy. Prudential accounting norms are income recognition, asset classification and provisioning.

CLASSIFICATION AS NPA

Term Loan	If Interest and/ or instalment of principal remain overdue for aperiod of more than 90 days
CC/ Credit/overdraft	if the account remains 'out of order or the limit is not renewed/reviewed within180 days from the due date of renewal. Out of order means an account where (i) the balance is continuously more than the sanctioned limit or drawing power OR (ii) where as on the date of Balance Sheet, there is no credit in the account continuously for 90 days or credit is less than interest debited OR (iii) where stock statement not received for 3 months or more. if the bill remains overdue for a period of more than 90 days from due date .
Bills	
Agricultural accounts	(I) if loan has been granted for short duration crop: interest and/or instalment of principal remains overdue for two crop seasons beyond the due date. (ii) if loan has been granted for long duration crop: interest and/or instalment of principal remains overdue for one crop season beyond due date. 1. Decision about crop duration to be taken by SLBC.
Loan against FD, NSC, KVP, LIP	Advances against term deposits, NSCs eligible for surrender, IVPs, KVPs and life policies not treated as NPAs provided sufficient margin is available. Advances against gold
	ornaments, govt securities and all other securities are not covered by this exemption
Loan guaranteed by Government	Loan guaranteed by Central Govt not treated as NPA for asset classification and provisioning till the Government repudiates its guarantee when invoked. Treated as NPA for income recognition. Advances guaranteed by the State Government classified as NPA as in other cases
Consortium advances	Asset classification of accounts under consortium should be based on the record of recovery of the individual member banks.

· **DISTRESSED ASSETS:**

- Identify incipient stress by creating a sub-category viz., Special mention accounts (SMA) before a loan Account turns into an NPA.
- Early formation of lender's committee with timeline to agree a plan of resolution.
- Incentives for lenders to agree collectively and quickly to plan.
- Improvement in current restructuring process.
- More expensive future borrowing for borrowers who do not co-operate with lenders.
- More liberal regulatory treatment of asset sales.

SPECIAL MENTION ACCOUNTS:

SMA SUB CATEGORY	BASIS FOR CLASSIFICATION

SMA 0	Principal or interest payment not overdue for more than 30 days but account showing signs of incipient stress.
SMA 1	Principal or interest payment overdue between 31 – 60 days.
SMA 2	Principal or interest payment overdue between 61 – 90 days.

SMA-0: IDENTIFIED AREAS

- Delay of 90 days or more in
- Submission of stock statement/ other statements such as QOS, HOS and ABS.
- Credit monitoring or financial statements or
- Non renewal of facilities based on audited financials.
- Actual sales/operating profits falling short of projections accepted by 40% or more.
- A single event of non co-operation /prevention from conduct of stock audits.
- Reduction of Drawing Power (DP) by 20% or more after a stock audit.
- Evidence of diversion of funds for unapproved purpose.
- Drop in internal risk rating by 2 or more notches in a single review.
- Return of 3 or more cheques (or electronic debit instructions) issued by borrowers in 30 days, on grounds of non availability of balance / DP.
- Return of 3 or more bills/cheques discounted or sent under collection.
- Devolvement of Deferred Payment Guarantee (DPG) installments or LCs or invocation of BGs and its non payment within 30 days.
- Third request for extension of time either for creation or perfection of securities or for compliance with any other terms and conditions of sanction.
- Increase in frequency of overdrafts in current accounts.
- The borrower reporting stress in the business and financials.

Promoter(s) pledging/ selling their shares in the borrower Company due to financial stress.

ASSET CLASSIFICATION

1. Asset Classification to be borrower-wise and not facility-wise
2. Assets classified into Standard, Sub standard, Doubtful, Loss. Except standard all others are NPAs.
3. When an account becomes NPA it is called Sub standard asset.
4. An account remains sub standard up to 12 months from the date of becoming NPA
5. Doubtful Assets : An asset is to be classified as doubtful, if it has remained NPA or sub standard for a period exceeding 12 months.
6. Loss Assets : A loss asset is one where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly.
7. When an account is classified as Doubtful or Loss without waiting for 12 months: If in an account which was secured in the beginning, the realizable value of tangible security falls below 10% of the outstanding, it should be.classified loss asset without waiting for 12 months
8. If the realizable value of security is 10% or above but below 50% of the outstanding, it should be classified as doubtful irrespective of the period for which it has remained, NPA.

PROVISIONING NORMS

1. Provisioning is made on all types of assets i.e. Standard, Sub standard, Doubtful and loss assets.

2, Standard Assets :

a. Direct advance to agriculture or Micro and Small Enterprise (Not medium): 0.25% of outstanding; Commercial Real Estate: 1% of outstanding and CRE – Housing – 0.75%

b. Housing Loans with teaser interest rates: 2% of outstanding; All others: 0.4% of outstandinj.

c. The provisions on Standard Assets is shown as 'Contingent Provisions against Standard Assets' under 'Other Liabilities and Provisions Others' in Schedule 5 of the balance sheet.

3. Sub Standard Assets:

a. Secured sub standard: 15% of outstanding balance without considering securities available.
b. Unsecured sub standard: if the loan was unsecured from the beginning: 25% of outstanding balance.
c. If unsecured sub standard for infrastructure: 20% of outstanding balance.
d. Unsecured exposure means exposure where the realisable value of the security, as assessed by the bank/approved valuers/Reserve Bank's inspecting officers, is not more than 10 percent, ab-initio, of the outstanding exposure.

4. **Doubtful Assets:**

1. Unsecured portion:100 %
2. Secured ortion: 20% to 100% depending on the period for which account is doubtful

Age of Doubtful Asset	Provision as % of secured portion
Doubtful up to 1 year D1	25% of RVS (Realisable value of security)
Doubtful for more than 1 year to 3 years; D2	40% of RVS
Doubtful for more than 3 years; D3	100% of RVS

5. **Loss Assets**: 100% of the outstanding amount.
6. If loan is guaranteed by ECGC, CGFT or CGFLHS, provision not on guaranteed portion
7. Provision on advance against FD, NSC, LIP, KVP as per their asset classification.
8. Overall provisions: Provisioning coverage ratio, including floating provisions, should not be less than 70 per cent. Banks should achieve this norm not later than end-September 2010.
9. Provisioning coverage ratio is the ratio of provisioning to gross NPAs.
10. Provision on Standard account to be kept as part of Other Liabilities in Schedule-5 of bank's balance sheet
11. Provision on Standard accounts to be done on Global balance and for NPA accounts on Gross Balance
12. For Doubtful accounts, provision to be done separately for secured portion and unsecured portion of total balance in the account.
13. In case of standard and sub standard assets, provision is on outstanding balance without bifurcating the balance into secured or unsecured.
14. Floating provisions can be deducted from Gross NPAs or treated as part of Tier II capital but not both

SUMMARY OF PROVISIONS PERCENTAGE

Standard - General accounts – 0.40 % Direct Agriculture & SME – 0.25 % Commercial Real Estate – 1.00% Teaser Home Loans (provision will be 0.4% after one year of increase in interest rate) 2.00% New restructured a/c w.e.f 01.06.2013 : 5% Existing a/c Restructured upto 31.03.2013 wef 31.03.14 (spread over four quarters) : 3.5% wef 31.03.15 (spread over four quarters) : 4.25% wef 31.03.16 (spread over four quarters) : 5.0%	
Sub-standard Secured Sub-standard Unsecured Sub-standard unsecured (infrastructure accounts)	15% 25% 20%
Doubtful - up to 12 months Doubtful - more than 12 months but up to 3 years Doubtful - more than 3 years (secured/unsecured):	25% 40% 100%
Loss account	100%
Provisioning coverage ratio is to be calculated w.r.t. gross NPAs as on Sept 2010 (ratio of provisions / gross NPAs). Excess amount (over and above account-wise provision) to be kept in Cyclical Provision Buffer Account -70%	70%

Important issues relating to provisions : Provision on Standard account to be kept as part of other Liabilities in Schedule-5 of bank's balance sheet (it will be part of tier 2 capital fund for CAR purpose) Provision on Standard accounts to be done on Global Balance and for NPA accounts on Gross Balance For Doubtful accounts provision to be done Separately for secured portion and unsecured portion of total balance in the account.For sub-standard accounts, provision to be done by treating the account secured sub-standard or unsecured sub-standard without bifurcating the balance into secured or unsecured.
Sub-standard unsecured account means an account where at the time of sanction no security obtained or security value was 10% or less

Gross NPAs: It is the principal dues of NPAs plus Funded Interest Term Loan where the corresponding contra credit is parked in sundry account (Interest Capitalization – Restructured
Accounts), in respect of NPAs
NET NPAs: Net NPAs is the amount of Gross NPAs minus
Provisions held in the case of NPA Accounts as per asset classification (including additional provisions for NPAs at higher than prescribed rates)

- DICGC/ ECGC claims received and held pending adjustment
- Part payment received and kept in Suspense A/c or any other similar accounts
- Balance in Sundry Accounts (Interest Capitalization – Restructured Accounts), in respect of NPAs
- Floating provisions : Provisions in lieu of diminution in the fair value of restructured accounts classified as NPAs
- Provisions in lieu of diminution in the fair value of restructured accounts classified as standard assets

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PRUDENTIAL NORMS FOR AGRICULTURAL ADVANCES

With effect from September 30, 2004 the following revised norms will be applicable to all direct agricultural advances. as per RBI circular dated June 24, 2004:

- Loan for short duration crops will be treated as NPA, if the instalment of principal or interest thereon remains overdue for two crop seasons.
- A loan granted for long duration crops will be treated as NPA, if the instalment of principal or interest thereon remains overdue for one crop season ("long duration" crops would be crops with crop season longer than one year and crops, which are not "tong duration" crops, would be treated as "short duration" crops).

Agricultural term loans : Depending upon the duration of crops raised by an agriculturist, the above NPA norms would also be made applicable to agricultural term loans availed of by him.

Farm loans where recovery is not based on crop production : In respect of agricultural loans, other than those specified and term loans given to non-agriculturists, identification of NPAs would be done on the same basis as non agricultural advances which, at present, is the 90 days delinquency norm.
DICGCIECGC cover & Sub-standard
A general provision of 10% of total outstanding and while calculating provisions, DICGC/ECGC cover is not to be deducted from the outstanding balance.
Loan against Liquidity Securities
Advances against term deposits, NSCs eligible for surrender, IVPs, KVPs and LIC policies are exempted from provision requirements, provided outstanding is covered by value of security.
Appropriation of recovered amount
From the year 1996-97 (as per RBI clarffication issued during Dec 1996), recovery received in NPAs (other than suit filed and decreed accounts), is to be appropriated first towards interest and thereafter towards (1) arrears of instalment for current/previous year for term loan and (ii) principal irregularity in other accounts.

TREATMENT TO SPECIFIC CATEGORY OF ACCOUNTS

Loans against readily encashable securities: Advances against term deposits, NSCs eligible for surrender, Indira Vikas Patras, Kisan Vikas Patras and LIC policies, need not be treated as NPAs and no provision is required to be made in respect of such advances although interest thereon has not been paid for any two quarters. Interest on such advances may also be taken to income account on due date provided adequate margin is available in the account.

Consortium advances

Each bank can classify the borrowal account according to its own record of recovery and other aspects having a bearing on the recoverability of the advances, as in the case of multiple banking.

Rehabilitation cases

As regards the advances granted under rehabilitation packages finalised by BIFR and/or term lending institutions, banks should not make any provision on the additional facility for a period of one year from date of disbursement. However, for original advance, provision be made according to the classification viz substandard or doubtful, as the case may be.

NPA accounts and security/means of **the borrower/guarantors**

a)* Availability of security or net worth of borrower/guarantor should not be taken into account for the purpose of treating an advance as NPA or otherwise, as income recognition is based on record of recovery.

b) The net means of the borrowers and guarantors are not to be included as security for the purpose of calculating shortfall ***in*** doubtful category.

c) Pari-passu / second charge on all block assets should be treated as security.

d) Surplus security available in one facility of an account be considered in another facility of the same borrower where there is a shortfall.

Problem on NPA

Problem-1 : Popular Bank has following loan accounts :

1. a term loan, for purchase of transport vehicle, was being repaid regularly till recently but the instalments for the last two months have been not been paid although the interest has been paid.
2. a cash credit account, the balance of which is within its sanctioned limit and drawing power but the party has not renewed the limits which had fallen due more than 6 months earlier.
3. a cash credit account, the balance of which is within its sanctioned limit and drawing power, but the party has not submitted stock report for the last two months.
'4. a term loan to a farmer for purchase of tractor the instalment of which had fallen due 5 months back but the farmer has not deposited the instalment and interest. What will be asset classification of these assets. State with the rule applied for the purpose of such classification.

Solution:

I. TL accounts are treated as sub-standard when they remain special mention accounts for a period of more than 90 days. The account becomes special mention account when instalment or interest having fallen due, has not been paid. Since the due amount of instalment is outstanding for 2 months, the account falls under special mention category, which is part of standard accounts.

2. In case credit accounts, where the limit is not renewed in time and sanction remains overdue for renewal for a period of more than 6 months, the account is to be treated sub-standard. Hence, the account has become sub-standard.

3. In cash credit accounts, the accounts become sub-standard when it remains out of order for a period of more than 90 days. Out of order account is one where the party fails to submit to stock report for a period of 3 months when drawing power cannot be allowed against old stock report. Since the stock report is 2 months old, DP will continue to be allowed and account will remain in standard category only.

4. in case of agriculture (crop based) accounts, the period of special mention account is one crop season for long duration crop and two crop seasons for short duration crops (instead of the normal SMA period of 90 days). Hence, the account is still in special mention category (assuming that the loan is to farmer who is sowing short duration crop with a harvest period of around 6 months).

Problem-2: Murnbai branch of Universal Bank is having certain loan accounts, as under. You are

required to study the status of these accounts and calculate the provision to be made as on 31.3.2008. Also state the rule based on which you make the provision.
I. A demand loan against a fixed deposit, the present value of which is Rs.32500 and present balance is Rs29367. The amount of loan was Rs.25000 and it was sanctioned with a margin of 15%.
2. A cash credit account had become irregular on Jan 12, 2006. The limit was Rs.12 lac and the balance as on March 31, 2008 is Rs.13.12 lac including recorded interest of Rs.3.12. The account is secured by mortgage of property valued at Rs.16 lac by the bank. The party has not submitted any stock report for the last 2 years.
3. A term loan against purchase of fiat was allowed on Aug 25, 2004. The first monthly instalment alongwith interest had fallen due for payment during November 2005 but was not paid. There after, despite follow up by the bank no amount has been received. The account is showing a balance of Rs.16.23 lac (amount of loan Rs.12.50 lac — the balance being interest debited to the account and taken to income).
1. In this case the account become sub-standard around first week of March 2006 (after remaining irregular for more than 90 days wef Dec 01, 2005). The account became doubtful during March 2007 and fallen in doubtful above one y_{ear} category as on Mar 31, 2008. The provision will be @ 30% (of Rs.12.50 lac) assuming that balance is fully covered by the realizable value of security. The unrealized interest will be required to be fully provided for which amounts to Rs.3.73 lac. The total provision shall be Rs.3.75 lac + 3.73 lac = 7.48 lac.
2. The account falls in doubtful up to one year category, where the provision is made ® 20% on the secured amount,
100% on the unsecured amount and no provision on the portion of balance covered by ECGC guarantee.
Total balance in the account = Rs.25.60 lac Balance secured by security = Rs.14.60 lac
Balance without security = Rs.11.00
Less 50% ECGC cover = Rs.5.50 lac ,
Unsecured portion of the balance = 5.50 lac
Provision will be as under:
On the balanace of Rs.14.60 lac secured by principal/collateral security @ 20% = 2.92 lac
On unsecured balance of Rs.5.50 lac = Rs.5.50 lac
Total provision = Rs.8.42 lac
Problem-3: Pune branch of Popular Bank, among other loan accounts, have the following loans, which have shown peculiar operations:
a) A term loan of Rs.12 lac for housing finance, the repayment of which along with interest is to fall due wef April 2008 in equated instalments. As per procedure adopted by the bank, the branch has been debiting the interest since disbursement, every month wef Nov 2006, without actual recovery of the interest, when debited.
b) A cash credit has become sub-standard account wef February 22, 2008. The branch had debited a sum of Rs.2_15 lac during the first three quarters of the financial year ending Mar 2008 out of which interest amount of Rs.1.23 lac only has been recovered. The branch proposes to debit the interest for the period till Feb 22, 2008 and credit to profit and loss account.
c) In a Central govt. guaranteed account, interest has not been received for the last 3 quarters. The matter has been followed up consistently by the branch and the Govt. has assured to make payment alongwith principal amount, immediately after close of the year March 2008.
d) In three loans against bank deposit, the balance has exceeded the sanctioned limit due to debit of interest and branch is still debiting the interest on the plea that the outstanding balance, including interest debited to the account, is within the revised value of security. The branch is under inspection and the inspecting official has insisted the branch to reverse these entries and calculate the profit position correctly_ Discuss the position, with the RBI guidelines on the matter_
Solution : a) The amount of interest is repayable in this loan account, alongwith the principal in equated instalments due to which it has not fallen due for payment, although it has been debited when accrued. The bank can take such interest as income during moratorium period. There is no necessity for reversal of the interest.
b) In an account that has become sub-standard by the end of a financial year, if interestis debited

during the year and not recovered, such interest is required to be reversed. In this case, the branch should reverse the amount of interest of Rs.0.92 Inc, (out of Rs.2. 15 lac) which has not been recovered. Further, the branch should not debit the interest for the period till Feb 22, 2008, as that cannot be taken to income, if not recovered.

c) The income recognition guidelines applicable in case of normal accounts where recovery is not received, equally apply to Govt. guaranteed accounts. Hence, the branch should not take the interest debited to income and reverse the interest amount. The branch would be fully justified in taking the interest to income, when recovered, as per the assurance given by the Govt.

d) In case of loans against deposits, the interest can be taken to income, even if not recovered, provided the balance is within the latest value of security including interest accrued to the deposit. Hence, there is no necessity for the branch to reverse this entry_

Problem-4: Ludhiana branch of Universal Bank has the following loans portfolio:

a) standard loans Rs.9.50 cr including loans to SMEs Rs.3 cr, Housing Finance loans above Rs.20 lac, amounting to Rs.1.50 cr and loan against shares Rs.I cr.

b) sub-standard accounts of Rs.75 lac which included loan accounts of Rs.5 lac, which were sanctioned by the branch without obtaining any security and have become NPA.

c) doubtful loans up to one year Rs-30 lac- In some of these there is shortfall in the security to the extent of Rs3 lac, when compared to balance in the accounts.

d) doubtful loans above one year but up to 3 years Rs.10 lac where securities have depleted and presently the balance up to Rs.6 lac only is covered by value of security.

e) doubtful loans above 3 years Rs.5 lac where security available is Rs.2 lac only.

f) loss account Rs.3 lac, where security value is Rs.0.20 lac.

Calculated the provisions on the basis of RBI guidelines. Also quote the relevant RBI guideline.

Solution a) In case of standard accounts, the provision is made at 0.25% for SME accounts, 1% on housing loans
above Rs20 lac and 2% on capital market exposure (loan against shares). The provision will be as under:

I. SME accounts - Rs.3 cr x 0.25% = 0_75 lac
2. Housing loans above Rs.20 lac - Rs. 1.50 cr X 1% = 150 lac
3. Loans against shares : Rs.1 cr x 2% = 2.00 lac
4. Other (balance) standard loans **4** cr X 0.4 =1.60 lac

Total provision on standard accounts =
0.75+1.50+2.00+1.60 = 5.85 lac

b) On sub-standard accounts, the provision is to made @ 10% if the loan is secured sub-standard and @ 20% if the loan is unsecured substandard.

The provision will be as under:

I. Secured sub-standard accounts - Rs.70 lac X 10% = 7.00 lac
-2. Unsecured sub-standard accounts- Rs.5 lac X 20% = 1.00 lac

Provision on sub-standard accounts = 8.00 lac .

c) Provision on doubtful loans up to one year is ® 20% for the secured portion and 100% on the unsecured portion.

1. Secured balance = 27 lac x 20% = 5.40 lac
2. Unsecured balance = 3 lac x I 00 =

3.00 lac Total proviosion DF-.1 = 8.40 lac.

d) Provision on doubtful loans above one year but up to 3 years, is @ 30% for the secured portion and 100% on the unsecured portion.

1. Secured balance = 6 lac x 30% = 1.80 lac
2. Unsecured balance = 4 lac x 100 = 4.00

lac . Total proviosion DF-2 = 5.80 lac.

e) Provision on doubtful loans above 3 years is ® I00% for the secured / unsecured portion. Total provision DF-3 = 5 lac x 100% = 5.00 lac

0 Provision on loss assets is to be made @ 100% irrespective, the value of security in

the account_ Total provision-Loss = Rs3 lac x100% =3.00 lac
Total provisions = 5.85 + 8.00 + 8.40 + 5.80 + 5.00 + 3.00 = 36.05

Measurement and Management of Liquidity-Risk

(a) Appropriate management information systems, (b) central liquidity control, (c) analysis of net funding requirements under alternative scenarios, (d) diversification of funding of sources and (e) contingency planning, are important element of an effective liquidity management.

Action points for management of liquidity risk

There are three steps (1) developing a structure for management of liquidity risk (b) setting tolerance limits (c) measuring and management of liquidity risk.

1. Structure for management of liquidity risk

- Bank should have liquidity management structure to formulate liquidity strategy, policies and procedures.
- All financial transactions have effect on bank's liquidity. Hence the strategy of liquidity management should be communicated to all levels and all business units of the organization, that conduct activities affecting liquidity.
- Board has to monitor the liquidity risk profile of the bank and periodically review the information.

2. Tolerance levels and limits for liquidity risk

Banks are required to set and review the limits for various activities, with a view to ensure liquidity, which include

- Cumulative cash flow mismatch i.e. cumulative net funding as a %age of total liabilities
- Liquid assets as a %age of short term liabilities
- Loan to deposit ratio
- Loan to capital ratio
- Anticipated funding needs and available sources for meeting those needs
- Reliance on a particular liability category as a %age of total liabilities.

3. Measuring and managing liquidity risk

There are two approaches to measure and manage funding requirements (a) stock approach (b) flow approach): 3.1-Stock approach It is based on the level of assets and liabilities and also the off-balance sheet exposures on a particular date. Liquidity position can be assessed on the basis of following ratios:

Ratio	Desirable Ratio	Feature
Core deposit / total assets	Higher ratio is Desirable“	Core deposits are deposits from public
Net Loan / total deposits	Lower ratio is desirable	Loans is treated as less liquid
Time deposits ر total deposit	Higher ratio is desirable	
Volatile liabilities / total assets	Lower ratio is desirable	Liabilities like market borrowings are volatile.
Short term liabilities / liquid assets	Lower ratio is desirable	Short term liabilities are to be redeemed at the earliest
liquid assets / total assets	Higher ratio is desirable	liquid assets include bank balances, call & notice money, securities for trading
Short term liabilities / total assets	Lower ratio is desirable	Theseliabilities includecurrent account,volatile portionof SB,
Prime assets / total assets	Higher ratio desirable	Prime assets are cash, balance with banks
Marketable liabilities / total assets .	Lower ratio desirable	These liabilities include Money market borrowing

3.2- Flow approach.:

The Indian banks mainly follow this approach which is a basic approach. It is blown as gap method. It has three main dimensions (a) measuring and managing net funding requirements (b) managing market accesses (c) contingency planning.

3.2.1 -Measuring and managing net funding requirement: In this method structural liquidity gap report is prepared

- The net funding requirement is calculated on the basis of residual maturities of assets and liabilities.
- The residual maturities represent the net cash flow i.e. difference of outflow and inflow of cash in future time bucket.
- Cumulative gap is calculated for various time buckets, which shows the cash outflow and inflow difference at a particular time, say week, fortnight, month, quarter, half-Year or year.
- Where the gap is negative, the bank has to manage the shortfall.

The net funding requirements of a bank can be determined by analyzing the future cash flows based on assumptions of *future* behaviour of assets, liabilities and off-balance sheet items and thereafter calculating the cumulative net excess over the time fi¯arne for the liquidity assessment. These aspects can be explained through the concept of (a) maturity ladder (b) alternative scenarios (c) measurement of liquidity over the chosen time frame and (d) assumptions used in determining cash flows.

1. Maturity ladder : It is prepared by placing the sources and cash inflows on the one side and uses and outflows on the other side. It is used to compare a bank's future cash inflows and cash outflows position over a series of specified time periods. The ladder can be prepared for one day, one week or for a longer period.

The difference between cash inflows and the cash outflows in each period, the excess of deficit of funds, becomes a starting point for a measure of future liquidity excess or shortfall, at a series of points in time. This net funding requires management.

If these funding gaps are there in distant future time, these can be managed by influencing the maturity of future transactions. But if these are in short future time, the management becomes difficult because the maturity of transactions cannot be influenced easily.

1 Alternative scenarios: This involves making of assessment of liquidity in different conditions, which may be (a) Normal market conditions (b) bank specific crisis (c) general market crisis, as under:

Cash inflows / outflows	Normal Business	Bank Specific	General Market Crisis
Cash inflows:			
Maturing assets	200	200	180
Interest receivables	90	90	20
Asset Sales	100	120	0
Draw downs	20	0	to
Total	**360**	**360**	**210**
Cash outflows:			
Maturing liabilities	100	100	100
Interest payable	20	20	20
Deposit run-offs	60	200	120
Drawdown on lending	100	120	150
Total	**280**	**440**	390
Liquidity excess / shortfall	80	-80	-180

Normal market conditions : This scenario *is* useful in managing use of deposit and other debt instruments. It provides a benchmark and by taking into account this benchmark, the bank can manage its funding requirement to avoid impact of temporary constraints.

Bank specific crisis : This scenario may emerge when the liabilities can not be rolled over and have to be paid, while the maturing assets could not be realized on due date. Preparation of scenario with a worst-position can help a bank to prepare for the situation, if emerges.

-General market crisis : This scenario is prepared where the liquidity is affecting all the banks due to which they are failing to meet their commitments. The central bank may find such scenario useful to examine the liquidity profile of the banking system.

3. Measurement of liquidity over the chosen time frame:

The liquidity profile of a bank can be tabulated graphically for several time points with a view to provide insight into bank's liquidity and to check as to how consistent and realistic, the assumptions are for a specific bank. it is possible that a well managed bank may appear very liquid in normal market condition and marginally liquid in a bank specific crisis and quite liquid in market crisis condition.

4. Assumptions used in determining cash flows:

The planning for liquidity risk, done for future, takes into account certain assumptions that are required to be reviewed. These assumptions are to be made with reference to (a) assets (b) liabilities (c) off-balance sheet activities and (d) others.

(a) Assumptions regarding assets : Assumptions about assets include their future marketability and use of existing assets as collateral, to enhance the cash inflows. This will further take into account (a) the roll over possibilities of the assets on maturity, (b) potential for creation of new loan assets, (c) funding of expected drawdown of commitments to lend.

To determine the marketability of assets, the assets can be segregated into (a) most liquid category such as cash, interbank loans, securities, (b) less liquid category such as saleable loan portfolio and (c) least liquid category such as non-saleable loans, bank premises, investments in subsidiaries *etc.*

(b) Assumptions regarding liabilities: Assumptions regarding liabilities can be made taking into account the behaviour of bank's liabilities in normal circumstances i.e. level of roll over of deposits, effective maturity of demand deposits and normal growth of deposits.

Further the bank will have to examine as to (a) which funds are likely to stay with bank in crisis situation, (b) which shall be gradually withdrawn and (c) which shall be withdrawn. immediately and (d) what drawdown support is available.

The funds under (a) category shall be available along with the capital and reserves in all circumstances and provide support. Funds under (b) category shall stay in case of mild crisis situation.

(c) Assumptions regarding off-balance sheet activities: These assumptions have to take into account the possibility of crystallization of non-fund based credit facilities such as letter of credit and bank guarantees although they are not dependent on condition of the bank. But a general market crisis may create situations where due to increase in defaults by the constituents, there are demands to encash the non-fund based facilities by the beneficiaries.

(d) Other assumptions: In addition to the above, normal business related activities, the banks undertake other activities such as payment services to other bank. These activities may result in cash outflows.

Contingency plan:

Ability of a bank to meet the liquidity crisis would depend upon the contingency plan of a bank. An effective contingency plan takes into account the following:

1. Procedures for information inflow.
2. Clear division of responsibil*ity*
3_ Action points for altering the asset and liability
4. Maintaining customer relationship with borrowers and depositors
5. Procedure for making up cash flow shortfalls in emergency situations
6. Liaison with press and broadcast media

Important Terms

- Liquidity : Ability of a bank to accommodate' decline in liabilities and fund the increase in assets
- Liquidity management : Process of generating funds to meet the contractual obligations at reasonable prices at all time.

- Liquidity risk : Risk that arises on account of inability of the bank to accommodate decline in, Liability or increase in assets.
- Funding risk : Risk on account of replacement of net outflows due to unanticipated withdrawals or non-renewal of deposits.
- Time risk : Risk on account of non-receipt of expected inflows of funds when expected
- Call risk : Risk on account of crystallization of contingent liabilities and inability to undertake profitable business opportunities when desirable.
- Tolerance limits & levels : Various limits fixed by a bank in respect of different activities affecting liquidity position of the bank.
- Stock approach : A method to measure the liquidity risk based on the level of assets and liabilities and off-balance sheet exposure, on a particular date, by calculating ratios for important activities / pararne,ters.
- Flow approach : A method to measure and manage liquidity risk that takes into account 3 dimensions i.e. measuring and managing net funding requirements, managing market access and contingent planning.
- Maturity ladder : A schedule prepared by placing sources and amounts of cash inflows on one side and uses and cash outflows on the other side.
- Alternative scenarios : Alternative situations for which the maturity ladder could be prepared for the purpose of creating benchmark scenarios.
- Contingency planning : A plan for meeting the emergency or a liquidity crisis

Interest Rate Risk-Management

The deregulation of_interest rates by RBI during the last few years has given, the banks, the freedom to fix the cost (i.e. interest rates) of liabilities (i e. mainly deposits), on their own which has resulted in interest rate volatility leading to interest rate risk.

Interest rate risk is the exposure of a bank's financial condition to adverse- movements *in* interest rates. In other words, it means the volatility in net interest income (Nil) or variations in net interest margin (NIM). The changes in interest rate affect a bank's earnings by changing bank's net interest income and the level of other interest sensitive income and operating expenses.

Changes in interest rates also change the underlying present value of the future cash *flows* fiorn assets. The value comes down when the current interest are higher than the rates at which asset was acquired. On the other hand, the value increase when the current interest are lower than the rates at which asset was acquired_ For example, if a 7 year bond with 8% coupon was purchased for a face value of Rs.100 and if the current interest rates in the market on similar investment have declined, the bond can be sold at a higher value as it carries higher coupon rate.

In other words the increase in interest rates increases the discount rate on those future cash flows and consequently decreases the value of the asset.

The mismatching maturities by holding for a longer term assets than liabilities would mean that when interest rates rise, the market value of assets falls by greater amount than liabilities.

Interest risk rises on account of holding assets and liabilities with different principal amounts, having different maturity dates or re-pricing dates i.e. roll over rates.

Types of interest rate risk

It can be (a) mismatch or gap risk (b) basis risk (c) net interest position risk (d) embedded option risk (e) yield curve risk (f) price risk and (g) reinvestment risk.

I. Mismatch or Gap risk : The gap is the difference between the amount of assets and liabilities, on which the interest rates are reset during a given period. It arises due to holding of assets and liabilities with different principal amounts, maturity dates or re-pricing dates as explained below:

A bank has 8% liabilities of Rs.10 cc with one year maturity to fund a term loan of Rs.I0 cc with two years' maturity at 10% interest. Hence, bank is earning a spread of 2% during the first year,

but it is not certain for the 2"d year. Since deposits will have to rolled over at a new rate or new deposits have to contracted to fund the IL, the bank is exposed to interest rate risk.

2.. Basis risk : When the interest rates of different assets and liabilities change in different magnitude, it is called basis risk. Even when the maturity an asset and a liability falls at the same time interval, there could be risk, as the interest rates on liability and assets may change by different magnitude.

For example, a bank has saving bank deposit of 100 and fixed deposit of 100. It has invested **100** in call money and in cash credit 80, leaving a gap of 20_ If the interest rate falls by 1% on all assets and liabilities, it will improve the NII of the bank because of the gap. On the other hand, if the interest fall in varying degree, the position may be different as under

	Amount of *asset/* liability	Assumed fall in interest	Fall in amount
Call money	100	1%	1.00
Cash credit	80	0.7%	0.56
Decrease in interest income			1.56
Saving deposit	100	0.5%	0.50
Fixed depostt	100	0.4%	0.40
Decrease in Interest			0.90
Loss to the bank			0.66

3. **Net interest position risk :** *Net interest* position of the bank exposes the bank to additional interest rate risk. Bank having more assets on which **it** earns interest than the liabilities on which it pays interest, its interest earning will change with change in interest rate on assets without any change in interest rate on liabilities. Hence, with decline in interest rates. the bank having positive net interest position, will experience reduction in **NII.**

4. **Embedded option** *risk :* When market interest rates change substantially, such situation leads to large scale prepayment of loans or pre-mature withdrawals of deposits. For example a bank funds a short term loan of 180 days with **lf%** through a 180 **days certificate** of deposit at 9%. After 2 months, the borrower makes pm-payment of the Loan and the bank re-invests the repaid money at 10%. Hence, the bank get 2% spread for 2 months only, while for the remaining period, the spread is I% only.

5. Yield Curve Risk : Yield curve is a line on a graph that indicates (plots) the yield of all maturities of a particular instrument. For example Popular Bank used a 2 year floating rate FD for funding a 2 year corporate loan at floating rate (repricing done quarterly). Bank pays 100 basis points above the 182 days treasury bill rate of 7.5% on the deposit and recovers 300 basis points above the 364 days' treasury bill rate of 7%, thus getting a spread of 2.5%. If the 364 treasury bill rate increases to 350 basis points, while the rate of 182 days TB remains constant, there will be change in the yield curve.

6. Price Risk : When an asset (say a bond) is staid before maturity, the price risk arises. If the current interest rates go up, a bond will get lower price on sale if the coupon rate of the bond at the time of issue was lower than the presently prevailing interest rate.

Effect of interest rate risk:

When interest rates change, these bring change in the (a) earning of the bank and (b) also the economic value.

Effect on earning: Interest rate change affect the Net Interest Income and impact the overall earning. Similarly, there may be change in non-interest income from many activities that are based on fund based activities, when there is decline in fund based business due to change in interest rates_ For example, if there is decline in interest rates, the bank may experience fail in fund based business. In that case, the fee based business dependent on fund based business, may also experience decline and affect the earning.

Effect on economic value : When there is change in the interest rate, the market value of existing asset (say a bond) may change. For example, if a bank has invested in 8% govt. bonds and current market rate of interest moves to 10%, the value of investment in 8% bond will decline, for which bank

will have to make depreciation provision also.

Interest Rate Risk Measurement

Degree of risk to which a bank is exposed can be measured only if the quantum of risk inherent in bank balance sheet is measured. For this purpose, the bank has to assess all material interest rate risk associated with a bank's assets and liabilities and off-balance sheet position.

There are various techniques to measure the interest rate risk which include (a) repricing schedules (b) gap analysis (c) duration and (d) simulation approaches.

(a) Repricing schedules: It is the simplest form of measuring interest rate risk_ This schedule distributes interest sensitive assets, liabilities and off-balance sheet items into a certain no. of predefined time bands according to their maturity (if fixed rate of interest) and according to their repricing time (for floating rate of interest).

(b) Gap analysis: For evaluation of earning exposure, the interest rate sensitive liabilities in each band are subtracted from the corresponding interest rate-sensitive assets to produce a repricing gap for that time band. This gap can be multiplied by an assumed change in interest rates to yield an approximation of the change in net interest income that would result from such rate move.

A liability sensitive (or negative) gap takes place when liabilities are more than assets in a given time band. In such situation, the increase in market interest rates can cause a decline in net interest income.

An asset-sensitive (or positive) gap takes place when the assets are more than liabilities in a given. time band. In such situation, the decrease in market interest rates can cause decline in net interest income_

(c) Duration : Duration is a measure of the %age change in the economic value of a position that will occur given a small change in the level of interest rates. It reflects the timing and size of cash flows that occur before the instrument's __contractual maturity. For a small payment, longer maturity instrument, the duration would be higher. The higher duration means that a given change in the level of interest rates will have a larger impact on economic value.

(d) Simulation : Banks using complex financial products, make use of advanced interest risk measurement techniques (rather than simple maturity schedule method). Simulation technique is an extension and refinement of simple analysis based on maturity schedule. But it involves a detailed break-down of various categories of on and off-balance sheet position, with a view to incorporate assumptions about interest and principal payments. The simulation techniques could be static or dynamic.

* Static simulation : In this, the cash flows arising solely from bank's <u>current</u> on and off-balance sheet positions are assessed. To make an estimate of exposure of earnings, simulations for cash flows and resulting earnings streams are conducted on the basis of different assumptions of interest rate. The change in the economic value can also be calculated by discounting those cash flows backto their present value.

- Dynamic simulation : This simulation is build with more detailed assumptions about future course of interest rates and expected changes in a bank's business activity.
- Embedded assets / liabilities: Measuring interest rate risk may become difficult where there is no contractual maturity
(like in cash of saving bank or current account) or demand loans or loans with pre-
payment facilities. Strategies for controlling Interest Rate Risk

Banks follow various strategies to limit the shocks of interest rate volatility. But the basic strategy has been focusing on bridging the gap between rate sensitive assets and rate sensitive liabilities. Banks try to match the assets and liabilities maturities as closely as possible to reduce the gap to zero.

The strategy for reducing the sensitivity could be as under:

Asset sensitivity : (a) extension in investment portfolio maturities (b) increasing the floating rate deposits (c) increasing the fixed rate lending (d) selling the floating rate loans (e) increasing the

short-term borrowings, (f) increasing the long term lending.

Liability sensitivity : (a) reduction in investment portfolio maturities (b) increasing the float rate lending (c) increasing the long term deposits (d) increasing the short term lending.

Other options : (a) match long term assets with non-interest bearing liabilities (b) match re-priceable assets with similar re-priceable liabilities (c) make use of forward rate agreements, swaps, options and financial futures.

Full match in re-pricing is not possible but the adverse effect of NEI due to mismatches can be minimized by fixing appropriate tolerance limits on interest rate sensitivity gaps.

Control and supervision of Interest Rate Risk management

An effective system of internal control for interest rate in a bank include (a) a strong control environment (b) adequate process for identifying and evaluating risk (c) establishment of control activities such as policies, procedures and methodologies (d) proper information systems (e) continuous review of compliance of policies and procedures.

Sound Interest Rate Risk management practices

It involves use of 4 basic elements

(a) proper Board and senior management oversight
(b) adequate risk management policies and procedures
(c) proper risk measurement, monitoring and control functions
(d) comprehensive internal controls and independent audits_

Role of Board : To approve strategies and policies and ensure that senior management takes steps necessary to monitor and control these risks in line with the approved policies.

Role of senior management : To ensure that the limits on risk taking are complied with, systems and standards for measuring risk-are put to place, there is effective review process, there is effective internal effective control.

Role of other functionaries : Individuals and committees should be clearly named and given responsibility for managing interest rate risk_ There should be appropriate separation of their duties. Lines of authority and responsibility for developing strategies, implementing them and conducting the risk measurement and reporting functions should be clearly defined.

Important terms

Gap : It is the difference between the amount of assets and liabilities on which the interest rates are reset during a given period.

Gap analysis : Technique for interest rate risk measurement in which the earnings exposure is on the basis of subtracting the interest rate liabilities in each time band from the corresponding interest rate sensitive assets to produce a repricing gap for that time band.

Interest rate risk : It is the volatility in net interest income (NII) or variation in net interest margin (NIM) Basis risk : The interest rate of assets and liabilities can change in different magnitudes. Such risk is basis risk.

Mismatch risk or Gap risk : Risk arising from holding assets and liabilities with different principal amounts, maturity dates or re-pricing dates, that leads to exposure to changes in the level of interest' rates.

Net interest position risk : Risk on account of change in interest rate in assets without any change in the interest rate of liabilities, when interest earning assets are more than the interest payment liabilities.

Embedded option risk : Risk arising on account of use of put or call option by the customers such as pre-payment of loan or withdrawal of deposit before maturity.

Yield curve risk : Risk reflected by the$_e$ changes in curve (called yield curve) due to changes in economic business cycles.

Price risk : Risk that arises on account of sale of assets (say investment) before maturity that may result into loss.
Reinvestment risk : Risk on uncertainty about rate of interest at which the future cash flows can be reinvested.

Earning perspective : The approach in which the effect of interest rate changes is evaluated on earning of the bank (change in net interest income or net interest margin).

Economic value perspective : The approach iq which the effect of interest rate changes is evaluated on the economic value of the assets, liabilities or off-balance sheet items (if there is change in current interest rates, the value of investments already made by the bank, will change).

Embedded losses : The loss that may arise on account of previous contracts at **a** different rates of interest than the prevailing rates. (a fixed rate of interest loan allowed at a lower rate and funded by recent high cost liabilities).

Repricing schedules : The risk measurement technique in which schedules are prepared that distribute the interest-sensitive assets or liabilities into a certain no. of predetermined time banks according to their maturity or time remaining for next re-pricing.

Duration : An interest rate risk measurement technique which is a measure of %age change in the economic value of a position that will occur given a small change in the level of interest rates.

Simulation : A technique to estimate the interest rate risk, by use of a no. of changes and assumption about interest scenario. A simulation may be static simulation or a dynamic simulation.

TEST YOUR SELF : MCQ

COMPONENTS OF ASSETS & LIABILIITIES IN BANK'S BALANCE SHEET

1. Which of the following statements is not correct?
a) Liabilities and net worth form the sources of the bank funds
b) Assets represent uses of funds to generate revenue for the bank
c) Various sources through which bank raises funds are Capital, reserves and surplus, deposits, borrowings, other liabilities and provisions
d) Authorised capital is taken as part of the net worth.
2. Which of the following is not a liability?
a) Loan from NABARD b) Loan to Cp-operative Bank
c) Provision for Bad Debits d) **NRI** Deposits
3. What is the purpose of good investment policy?
a) Maximum profits for share holders
b) Maximum security to depositors
c) Matching liquidity d) All the above
4. What is the significance of liquidity?
a) Liquidity is the capacity to produce cash on demand
b) The depositors will feel more confident if they get required cash on demand.
c) Cash Balance is a most liquid Asset
d) All the above
5. Which of the following is the most Liquid Asset?
a) Cash with the Bank b) Cash with the RBI
c) Treasury Bills d) Current Accounts with other Banks
6. The features of money at call and short notice are:
a) It is high liquid earning Asset
b) Money is lent or borrowed for a short period
c) Transactions take place mostly among the Banks and Primary Dealers only.
d) All the above
7. The advantages of Bill of Exchange for the Banks are:
a) Easy Marketability b) Rediscount facility with the RBI
c) Safety and better yield d) All these

8. Which of the following is not money market asset?
a) Investment in Equity Shares
b) Commercial Bills
c) Treasury Bills d) Money afcall and short notice
9. The features of Bank investments are:
a) Investment are made relatively for a longer period.
b) The securities are mainly Govt. Bonds, debentures and Bonds.
c) These investments have easy transferability.
d) All the above
10. Which of the following is the risk element in the investment in long term securities?
a) Low interest rates
b) Its market price becomes less than the face value if interest rates go up.
c) Higher interest rates d) It may not redeem in time
11. The negative aspects of loans *and* advances are:
a) High element of risk b) Low liquidity
c) No transferability d) All of these
12. The ratio of liquid Assets to total Assets of a Bank generally falls
at: a) 30% b) 40% c) 50% d) 65%
13.. Who is the authority to decide CRR and SLR requirements in the Banks?
a) Reserve Bank of India b) Indian Banks Association
c) Ministry of Finance d) All these
14. Which of the following is not a liability of a Bank?
a) Prepaid expenses b) Borrowings
c) Other provisions d) Contingent liabilities
15. Which of the following is correct statement regarding capital of a Bank?
a) It is owners stake in the Bank
b) It is a long term source of Funds
c) Minimum capital requirement is decided by the RBI
d) All the above
16. Which of the following is not a part of Reserve and Surplus in the Bank's Balance Sheet?
a) Share Premium b) Cash Reserve c) Capital Reserve d) Statutory Reserve
17. Which of the following falls under the category of Reserve and Surplus?
a) Balance in profit and loss account b) Reserve for Bad Debts
c) Revenue Reserve d) All the above
18. Which of the following are demand deposits of a Bank?
a) Overdue deposits b) Current deposits c) Call Deposits d) All these
19. The demand deposits of a Bank does not include the following:
a) Savings Deposits b) Recurring deposits c) Matured fixed deposits
d) None of these
20. Other liabilities and provisions in the Bank Balance Sheet include the following: a) Bills payable b) Inter-Branch Adjustments c) Interest accrued
d) All of these
21. Which of the following is not a liability?
a) Tax deducted at source b) Unadjusted debit balance
c) Provision for income tax d) Interest tax
22. Which of the following is included under Bills Payable?
a) Demand drafts b) Travellers cheques c) Banker's cheques d) All these
23. Which of the following are not liabilities?
a) Credit Balance of Inter-Branch Adjustment Account
b) Interest accrued but not due on Borrowings.
c) Claims under clearing items d) Mail Transfer payable.
24. Which of the following is not a Borrowing?

a) Borrowings from RBI •
b) Investment in SIDBI Bonds
c) Refinance from NABARD d) Rediscounting of Bills with EXIM Bank

25. Which of the following are Cash Assets?
a) Cash in hand b) Balance with RBI c) Balance with Banks d) All of-these

26. Which of the following does not fall under the category of Cash in hand of a Bank?
a) Cash Balance with RBI to meet CRR requirement
b) Foreign Currency Notes
c) Cash Balance with Overseas Branches
d) Cash maintained by Bank branches

27. Which of the following is not included in CRR?
a) Money at call and short notice
b) Cash Balance with the Bank
c) Cash Balance with other Banks d) All the above

28. Which of the following is included as balances with Banks and money at call?
a) Term deposits with other Banks
b) Current Account with other banks.
c) Loans made in Inter-Bank call money market d) All of these

29_ Which of the following is not an investment of a Bank?
a) Capital provided to subsidiaries
b) Advances guaranteed by ECGC
c) Government and Approved securities
d) Investment in Debentures and Bonds

30. Which of the following will be treated as Advances in a Bank Balance Sheet? a) Cash credits b) Term loans c) Bills purchased and discounted
d) All these

31_ Which of the following is not included as advances in the Bank's Balance Sheet?
a) Unsecured advances
b) Advances to the employee of the Bank
c) Advances secured by tangible Assets
d) Advances covered by Bank guarantee

32.Which of the following are not fixed Assets?
a) Bank's own premises b) Furniture and fixtures c) Hardware d) None of these'

33. Which of the following is not other Assets?
a) Debit Balance in Inter-Branch Adjustment Account.
b) Clean Bills discounted.
c) Interest accrued but not collected d) Advance Tax

34. Which of the following are included under other Assets of the Bank?
a) Stationery and Stamps b) Non-Banking Assets
c) Unadjusted Debit Balance d) All thee

35. What does a contingent liability simplify?
a) It is a Bank's obligation under issuance of letter of credit
b) Bills accepted by Bank on behalf of its customers.
c) Guarantees and Acceptances on behalf of constituents d) All of these

36. Other contingent liabilities of the Bank includes:
a) Liability for partly paid investments
b) Liability on account of outstanding forward exchange contracts.
c) Arrears of cumulative dividend d) All of these

37. Which of the following is not a contingent liability of a Bank?
a) Bills rediscounted
b) Bills Payable
c) Underwriting commitment

d) Amount of contracts remaining to be executed on Capital Account and not provided for

38. The interest income can be by way:

a) Interest/discount on advances/Bills

b) Income on investments

c) Interest on Balance with RBI d) All the above

39. Other Income of a Bank can be by way of:

a) Commission exchange and brokerage

b) Profit on sale of investments

c) Profit on exchange transactions d) All of these

40. Which of the following is not an income to a Bank?

a) Income by way of dividend

b) Interest on Inter-Bank Borrowings

¯e) Security charges d) Profit on Sale of Assets

41. The expenses of a Bank can be categorized as:

a) Interest expenses b) Other operating expenses

c) Provisions & Contingencies d) All these

42. Which of the following are included under interest expenses? a) Interest payable on deposits b) Interest on Borrowings

c) Interest on Refinance d) All these

43. The operating expenses of a Bank signifies:

a) It includes cost of running a Bank

b) It involves all the expenses to Employees

c) Printing and stationery expenses are the part of operating expenses cl) All the above

44. Which of the following is not an operating expense?

a) Rent taxes and Lighting

b) Provision for taxation

c) Advertisement and Publicity d) Depreciation on Bank's property

45. Which of the following are included under operating expenses?

a) Director's fee, allowances and expenses

b) Law charges

c) Repair and maintenance d) All of these

46. Which of the following is not a payment to employee?

a) Entertainment expenses b) Leave fare concession

c) Provident Fund & gratuity d) Medical allowances

47. Which of the following a Bank needs to make provisions?

a) Bad & Doubtful Debts b) Taxation

c) Depreciation in investment d) All these

48. Which of the following statements is correct? a) Income of a Bank can be categorized as interest.

b) The expenses of a Bank include interest expenditure and non-interest expenditure

c) The provisions and contingencies are provided out of profit.

d) All the above

49. What is Asset Liability Management (ALM)?

a) It involves management of Balance Sheet strategically.

b) It is a process of effective management of different kinds of risks.

c) It also involves management of liquidity position of a Bank

d) All the above.

50. The main objectives of ALM are:

a) To generate adequate and stable earnings.

b) To build an equity of organization over time.

c) To initiate reasonable measure for business risks d) All the above

51. Which of the following is not correct regarding ALM?
a) The ALM process basically focuses on growth of demand deposits.
b) ALM is the management of Net Interest Margin (NIM).
c) It is an integrated approach of managing the mix and volume of Assets and Liabilities.
d) ALM requires an understanding of the market area in which the Bank operates.
52. Which of the following is relevant to ALM?
a) The appropriate composition and mix of Assets and Liabilities portfolios is called Balance Sheet re-structuring.
b) ALM is an ongoing process to adjust and readjust the Bank portfolio in response to economic changes and future interest ratio.
c) It is a flexible approach to establish inter-relationship between a wide variety of Risk Factors d) All the above
53. What is the significance of ALM?
a) It minimizes the liquidity risk_
b) It reduces the market risk.
c) It ensures that for every liability, there is an equivalent tenure and amount of matching Asset d) All the above
54. Which of the following is not correct regarding ALM?
a) ALM is an Off Balance Sheet process.
b) The changes in interest rates will affect net interest margin.
c) The primary goat of ALM is to control interest income and interest expenditure.
d) When Assets fall short of liability obligations in a given period of time. It is called mismatch. 55_ The reasons for growing importance of ALM are:
a) Fluctuations and volatility in the market conditions
b) Banks being prudent and innovative
c) Regulatory framework for risk management d) All the above
56. The focus of ALM is on:
a) To enhance the Asset quality
b) To quantify the Risks associated with Assets and Liabilities
c) Efficient management of mix, maturity, rate sensitivity d) All the above
57. Which of the following steps are needed for efficient ALM?
a) Review of interest rate structure.
b) Compare interest rate with the product pricing of Assets and Liabilities
c) Evaluate loan and investment, portfolio in respect of foreign exchange and liquidity risk d) All the above
58. Which of the following is not needed for efficient ALM?
a) Proper track on cash flows is not required
b) Analyzing contingency risk
c) Review of actual performance against he projections
d) To examine the credit, risk and assess the quality of Assets.
59. What are the basic parameters required for stabilizing ALM of Banks?
a) Net Interest Income
b) Net Interest Margin
c) Economic Equity Ratio d) Ali the above
60. What are the features of Net Interest Income?
a) It is a tool for measuring the impact of volatility on the short term profit.
b) This indicates difference between interest income and interest expenditure
c) Short term profits can be stabilized by minimizing fluctuations in Net Interest Income.
d) All the above
61. The Net Interest Margin signifies:
a) It is the result of Net Interest Income divided by average total Assets

b) It can be viewed as spread on earning Assets.
c) The higher the spread, more will be the Net Interest Margin. d) All the above
62_ Which of the following statements is not correct?
a) There is no correlation in Risk and Return.
b) Higher spread implies increased Risk exposure
c) Achieving higher profitability should be the target of a Business
d) Management of Risk is important not the Risk elimination
63. Economic Equity Ratio implies:
a) This is the ratio of shareholders funds to the total Assets.
b) It measures the shifts in the ratio of owned funds to total funds.
c) This indicates the sustenance capacity of a Bank d) Al! the above
64. What does price matching signify?
a) Deployment of liabilities will be at a rate higher than the cost.
b) The Bank would be benefited if there is a positive gap (Assets > Liabilities)
c) A Bank may also get benefited from declining interest _ rates by a negative gap (Liabilities > Assets). d) All the above

ANSWER : ASSETS & LIABILITIES IN A BALANCE SHEET

1	D	2	B	3	D	4	D	5	A	6	D	7	D	8	A	9	D	10	B
11	D	12	A	13	A	14	A	15	D	16	B	17	D	18	D	19	B	20	D
21	B	22	D	23	C	24	B	25	D	26	A	27	D	28	D	29	B	30	D
31	B	32	D	33	B	34	D	35	D	36	D	37	B	38	D	39	B	40	B
41	D	42	D	43	D	44	B	45	D	46	A	47	D	48	D	49	D	50	D
51	A	52	D	53	D	54	A	55	D	56	D	57	D	58	A	59	D	60	D
61	D	62	A	63	D	64	E												

CAPITAL ADEQUACY, SUPERVISORY REVIEW, MARKET DISCIPLINE

1) Bank for International settlement (BIS) is located at:
a) London b) Brussels c) Basel d) Geneva e) None of these
2) As per Basel I, all exposures to sovereign were given 2/0 risk weight while bank exposures had a risk weight of %
a) 20, 50 b) 0, 20 c) 0, 50 d) 0, 100
3) The, revised framework for capital adequacy provides for
a) Greater use of assessment of risk provided by Bank's internal systems as inputs to capital calculations
b) Capital allocation for operational risk
c) Range of options for determining capital requirements for credit risk and operational risk
d) All of these
4) Basel II accord aligns regulatory capital with the bank's
a) profitability b) risk profiles c) assets d) all of these e) None of these
5) Which of the following is not a pillar of Basel II
a) Minimum capital requirements
b) Supervisory Review Process c) Market discipline d) All of these e) None
6) The revised accord of Basel II provides incentives to banks to improve their
a) capital b) risk management system c) profitability d) bottom line
e) None of these
7) Which of the following methods is to be adopted for assessing capital for credit risk?
a) Basic Indicator Approach b) Standardised Approach

c) Internal Rating Based Approach d) Either (a) or (b) e) Either (b) or (c)

8) Supervisory review would not include:

a) Evaluating risk assessment of banks by RBI

b) Ensuring soundness and integrity of bank's internal processes to assess the adequacy of capital

c) Ensuring maintenance of minimum capital with prompt corrective action for shortfall

d) All of these e) None of these

9) The market discipline includes

a) Regulating the bank by supervisors

b) Regulating banks by shareholders

c) Enhancing disclosures

d) Disciplining banks by regulators e) None of these

10) The term capital as per Basel II includes

a) Core Capital b) Supplemental capital c) Tier 3 capital

d) both (a) & (b) e) All of these

11) As per Basel II, banks are required to maintain capital ratio of not lower than

a) 8% b) 9% c) 10% d) any of these as per risk profile of bank

12) Tier 3 capital consists of

a) Subordinated debt of more than 5 years maturity

b) Short term subordinated debt of at least two year maturity

c) Loan loss reserve

d) Limited life preference shares e) revaluation reserve

13) As per Basel II, Tier-3 capital will be limited to _% of banks Tier I capital

a) 100% b) 50% c) 250% d) None

14) Minimum of about _____% of market risk needs to be supported by Tier I capital

a) 28.5 b) 35.5 c) 40 d) None of these

15) Short term debt can be used for meeting _ capital

a) Tier I b) Tier II -c) Tier III d) All of these

16) For which of the following risks capital is to be provided for the first time as per Basel

a) Credit risk b) market risk c) operational risk

d) both (b) &. (c) e) All of these

17) Credit risk means

a) Possibility of loss due to reduction of credit quality of borrower or counter parties

b) Losses due to reduction in portfolio value due to deterioration in credit quality

c) Both (a) & (b) d) none of these

18) As per Standard approach to measure credit risk credit rating is done by external credit assessment institution which has to be selected by

a) Individual bank b) RBI c) IBA d) Any of these

19) As per Standardised Approach to credit risk, all banks in a given country will be assigned a risk weight of

a) 50% b) 100%

c) one notch below the risk weight assignment that sovereign d) none of these

20) As per standardized approach to credit risk measurement, Retail and SME exposures attract a uniform risk weight of

a) 50% b) 75% c) 100% d) 125%

21) As per standardized approach to credit risk measurement which of the following is not correct?

a) All housing loan portfolio secured by mortgage will have arisk weight of 35%

b) Loans secured by commercial property will have a risk weight of 100%

c) Post due loans would have a risk weight of 150% when specific provisions are less than 20% of loan amount

d) Post due housing loan would have a risk weight of 50% when provisionary is below 20%
e) The risk weight in respect of unrated corporate claims will be 100%

22) As per Internal Rating Based Approach, capital charge computation is not based on which of the following?
a) Probability of default b) loss given at fault c) exposure at default
d) effective maturity e) None of these

23) Which of the following is not true about Individual Rating Based approach to credit Risk?
a) Banks are required to classify exposure into corporates, sovereigns, banks, retail and equity.
b) Under the Foundation approach, banks provide their own estimates of probability of default and rely on supervisory estimates for other risk components
c) Banks adopting IRB approach should continue to use the same and for return to earlier approach approval from supervisor is required d) None of these

24) The market risk positions that require capital charge are:
a) Foreign exchange open positions in both trading and banking book
b) Equities in banking book
c) Interest rate related instruments in banking book d) All of these e) None of these

25) A trading book consists of financial instruments and commodities held with intention of
a) Trading b) hedging other elements in trading book c) Both (a) & (b)
d) None of these

26) In the Indian scenario, which of the following is not a part of the trading book?
a) Securities held till maturity
b) Open forex and gold positions
c) Derivatives for hedging trading positions
d) Trading positions in derivatives e) None of these

27) The minimum capital requirement for debt instruments comprises:
a) General market risk charge towards interest rate risk in the portfolio
b) Specific charge for each security just like capital charge for credit risk
c) Operational risk in trading d) Both (a) & (b) e) All of these

28) Which of the following is not correct regarding specific capital charge (% of exposure) for market risk
a) For investment in Govt. securities and other approved securities guaranteed by Govt. it is 0%
b) Investment in other approved securities not guaranteed by Govt. and investment in non approved securities, it is 1.8%
c) Investment in Tier II bonds of other banks it is 9% and investment in mortgage backed securities it is 4.5%
d) All of these e) None of these

29) For computation of capital charge for market risks, which of the following methods is used?
a) Standardized approach
b) Internal risk management model approach
e) Individual Rating Based Approach d) Both (a) & (b) e) All of these

30) In India, RBI has prescribed method to arrive at capital charge for market risk
a) maturity b) duration c) both (a) & (b) d) none of these

31) Operational Risk which is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events includes
a) legal risk b) strategic and reputation risk c) credit risk
d) both (a) & (b) e) None of these

32) Which of the following methods is not used for measuring capital charge for Operational Risk?

a) Basic Indicator Approach " b) Standardised Approach
c) Advanced Management Approach d) Strategic Approach e) None of these

33) Under Basic Indicator Approach banks are required to hold capital for operational risk equal to -------------- % of positive annual gross average income for last three years
a) 10 b) 5 c) 15 d) 20 e) None-of these

34) Annual gross income for the purpose of aforesaid question will be net interest income plus net non interest income and should
a) be gross of provisions if any
b) be gross of operating expenses
c) exclude realized profits/losses from sale of investment in the banking books
d) All of these e) None of these

35) Gross income for the aforesaid question would be
a) Net profit plus operating expenses minus extra ordinary items
b) Operating profit minus operating expenses minus extra ordinary items & profits from sale of investments in banking book
c) Operating profit plus operating expenses minus extra ordinary items and profits from sale of investment in banking book • d) None of these

36) Standardized approach for operational risk is based on gross income from eight business lines and different factors ranging from % to % are used for different lines ; a) 10, 15 b) 12, 18 c) 10, 20 d) none of these

37) Under Supervisory Review, the supervisors are expected to concentrate on:
a) Risks not considered under Pillar I such as credit concentration Risk
b) Risks considered under Pillar but fully captured such as strategic risk or interest rate risk in the banking book
c) Factors external to the bank e.g. business cycle effects
d) All of these e) None of these

38) As per 2nd Pillar of Basel II when supervisors are expected to invervene?
a) regularly b) continuous basis c) yearly d) whenever necessary

39) As per Basel II, which of the following issues require focused attention of supervisors
a) Interest rate risk in the Banking Book b) Operational Risk
c) Credit concentration risk d) All of these e) None of these

40) As per pillar III of Basel II, banks are required to make .disclosures which are
a) qualitative b) quantitative c) both (a) & (b)

41) Three pillars of Basel II framework *are*
a) independent of each other b) complimentary c) both (a) & (b)

42) The 2" pillar of Basel II relates to
a) Capital requirement b) market discipline c) supervisory review

43) The main purpose of the supervisory Review as per Base! II is:
a) To ensure that banks are profitable
b) To ensure that credit risk is adequately managed by banks
c) To ensure that banks have adequate capital to support all risks
d) To encourage banks to develop and use better management techniques
e) Both (c) & (d)

44) As per principle of supervisory review banks should have process for
a) assessing capital adequacy in relation to risk profile
b) strategy for maintaining capital levels
c) strategy for achieving profit targets d) Both (a) & (b) e) Both (b) & (c)

45) Which of the following is not a feature of process of ensuring that bank has adequate capital?
a) Sound capital assessment
b) Comprehensive assessment of risks
c) Board and Senior Management Review d) None of these e) All of these

-- 46) As per principle 2 of supervisory review, emphasis should be on quality of the risk management and control which would involve:
a) On site inspection and off site review
b) Review of work done by Auditor
c) Discussions with Bank Management d) Both (a) & (c) only e) All of these
47) As per principle 3 of the Supervisory Review, banks should operate at
a) Minimum regulatory capital ratio
b) Above regulatory capital ratio
c) At least 20% above regulatory capital ratio
48) Piller 3 of Basel 1I is meant for
a) Providing disclosures
b) Helping investors in a bank to make informed decisions
c) Providing key information to RBI d) both (a) & (b) e) All of these
49) Information required as per Piller 3 of Basel **II**
a) Should be consistent with the audited statements
b) Should be independent of requirement of accounting standards
c) Should be provided at a separately place in the Balance sheet
d) All of these e) None of these
50) Which of the following is correct regarding disclosures under Pillar 3
a) Disclosures should be on an annual basis
b) Qualitative disclosures such as policies, systems may be made on semi annual basis
c) Tier I capital and capital ratios should be published a quarterly basis
d) All of these e) None of these
51)Pillar 3 of Basel **II** prescribes qualitative and quantitative disclosures under 13 areas which are mainly related to: a) capital b) credit risk c) market risk d) operational risk
e) all of these

ANSWER

1	D	2	B	3	D	4	B	5	E	6	B	7	E	8	E	9	C	10	E
11	A	12	B	13	C	14	A	15	C	16	C	17	C	18	B	19	C	20	B
21	D	22	E	23	D	24	A	25	C	26	A	27	D	28	E	29	D	30	B
31	A	32	D	33	C	34	D	35	C	36	B	37	C	38	D	39	D	40	C
41	B	42	C	43	C	44	D	45	D	46	E	47	B	48	D	49	A	50	C
51	E																		

ASSET CLASSIFICATION & PROVISIONING NORMS

Prudential norms prescribed by RBI include norms relating to Accounting, Exposure, and Capital Adequacy. Prudential accounting norms were implemented in banks in India on the recommendations of Narasimham Committee on financial sector reforms. These relate to income recognition, asset classification and provisioning.

Asset Classification: Assets are classified in 4 categories namely Standard, Sub Standard, Doubtful and Loss
assets. Of these, last three categories are classified as NPA.

Definition of NPA

With effect from March 31, 2004, a non-performing asset (NPA) shall be a loan or an advance where;

1. **Term loan:** Interest and/ or instalment of principal remain overdue for a period of more than 90 days
2. . Cash credit/Overdraft: The account remains out of order' or the limit is not renewed/reviewed within 180 from the due date of renewal. Out of order means an account where (i) the balance is continuously mote iPori the sanctioned limit or drawing power OR (ii) where as on the date of Balance Sheet, there is no creriA ?n the account continuously for 90 days or credit is less than interest debited OR (iii) where stock statement has not been received

for 3 months or more.

3. **Bills: The** bill remains overdue for a period of more than 90 days from due date of payment.

4. **Agricultural accounts:** In the case of agricultural advances, where repayment is based on income from crop, an account will be classified as NPA as under: •

(i) if loan has been granted for short duration crop: interest and/or instalment of principal remains overdue for two crop seasons beyond the due date.

(ii) if loan has been granted for long duration crop: interest and/or instalment of principal remains overdue for one crop season beyond due date.

For this purpose, short duration crop means a crop with crop season up to 12 months and long duration crop means a crop for which crop season is more than 12 months. Agricultural Loans where recovery is not based on crop production, identification of NPA will be done on the same basis as in other cases.

In case of cash credit and overdraft, if, the account will be treated as NPA.

Asset Classification

Assets can be categorized into four categories namely (i) Standard (ii) Sub Standard (iii) Doubtful (iv)Loss
The last three categories are classified as NPAs based on the period for which the asset has remained nonperforming and the realisability of the dues.

(i) Standard Assets: The loan accounts which are regular and do not carry more than normal risk. Within Standard assets, there could be accounts which though have not become NPA but are irregular. Such accounts are called as Special Mention accounts.

(ii) Sub-standard Assets : With effect from 31.3.2005, a sub-standard asset is one, which is classified as NPA fog a period not exceeding 12 Months (earlier it was 18 months). In such cases, the current net worth of the borrower/ guarantor or the current market value of the security charged is not enough to ensure recovery of the dues to the banks in full. In other words, such an asset will have well defined credit weaknesses that jeopardise the liquidation of the debt and are characterised by the distinct possibility that the banks will sustain some loss, If deficiencies are not corrected.

(iii) Doubtful Assets : With effect from 31 March 2005, an asset is to be classified as doubtful, if it has remained NPA or sub standard for a period exceeding 12 months (earlier it was 18 months). A loan classified as doubtful has all the weaknesses inherent in assets that were classified as sub-standard, with the added characteristic that the weaknesses make collection or liquidation in full, - on the basis of currently known facts, conditions and values - highly questionable and improbable.

(iv) Loss Assets : A loss asset is one where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

When an account is classified as Doubtful or Loss without waiting for 12 months: If the realizable value of tangible security in an account which was secured in the beginning falls below 10% of the outstanding, it should be classified loss asset without waiting for 12 months and if the realizable value of security is 10% or above but below 50% of the outstanding, it should be classified as doubtful irrespective of the period for which it has remained NPA.

Income recognition — Policy

1. The policy of income recognition has to be objective and based on the record of recovery. Internationally income from non-performing assets (NPA) is not recognised on accrual basis but is booked as income only when it is actually received. The banks should not charge and take to income account interest on any NPA.
2. On an account turning NPA, banks should reverse the interest already charged during previous periods and not collected by debiting Profit and Loss account, and stop further application of interest. However, banks may continue to record such accrued interest in a Memorandum account in their books.
3. However, interest on advances against term deposits, NSCs, IVPs, KVPs and Life policies may be taken to income account on the due date, provided adequate margin is available in the accounts.
4. If Government guaranteed advances become NPA, the interest on such advances should not be taken to income account unless the interest has been realised.
5. If any advance, including bills purchased and discounted, becomes NPA as at the close of any year, the entire interest accrued and credited to income account in the past periods, should be reversed or provided for if

the same is not realised. This will apply to Government guaranteed accounts also.
PROVISIONING NORMS: Provisioning is made on all types of assets i.e. Standard, Sub standard, Doubtful and loss assets.

1. Standard Assets : (i) Direct advance to agriculture and SME : 0.25% of outstanding (ii) Commercial Real Estate: 1% of outstanding (iii) Housing Loans at teaser rates: 2% of outstanding (iv) All other standard assets: 0.40 per cent of outstanding at global basis. The provisions towards Standard Assets need not be netted from gross advances but shown separately as 'Contingent Provisions against
Standard Assets' under 'Other Liabilities and Provisions Others' in Schedule 5 of the balance sheet.

2. Sub Standard Assets: With effect from 1.4.11, in respect of sub standard assets the rate of provision is 15% (earlier 10%) of outstanding balance without considering ECGC guarantee cover or securities available. However, if the loan was unsecured from the beginning ('Unsecured exposure'), there would be additional provision of 10% i.e. total provision would be 25% (earlier 20%) of outstanding balance. But, in view of certain safeguards such as escrow accounts available in respect of infrastructure lending, infrastructure loan accounts which are classified as sub-standard will attract a provisioning of 20% (earlier 15%) of outstanding balance instead of 25% (earlier 20%). Unsecured exposure is defined as an exposure where the realisable value of the security, as assessed by the bank/approved valuers/Reserve Bank's inspecting officers, is not more than 10 percent, *ab-initio,* of the outstanding exposure.

3. Doubtful Assets:
In case of doubtful assets, while making provisions, realizable value of security is to be. considered. 100% provision is made for unsecured portion. In case of secured portion, the rate of provision depends on age of the doubtful asset as under:

Age of Doubtful Asset	Provision as % of secured portion (w.e.f.
Doubtful up to 1 year; D1	25% of RVS (Realisable value of security)
Doubtful for more than 1 year to 3 years; D2	40% of RVS
Doubtful for more than 3 years; D3	100% of RVS

Thus, if an account is doubtful for more than 3 years, then 100% of the provision is to be made both for secured and unsecured portion.If an advance has been guaranteed by DICGC/CGFT/ECGC and is doubtful, then provision on secured portion will be as in other cases but provision on unsecured portion will be made after deducting the claim available. For example, if the outstanding amount in a D2 account is Rs 10 lac, security is Rs 6 lac, and DICGC cover is 50%, then on Rs 6 lac, the provision will be at the rate of 40% and of the unsecured portion of Rs 4 lac, provision will be made at the rate of 100%.

4. Loss Assets: '100% of the outstanding amount.

5. Suspense Interest: While making provisions on NPAs, amount lying in Suspense interest account and derecognized interest should be deducted from gross advance and provisions be made on the balance amount.

6. Overall provisions: With a view to improving the provisioning cover and enhancing the soundness of individual banks, RBI has advised banks to ensure that their total provisioning coverage ratio, including floating provisions, is not less than 70 per cent. Banks should achieve this norm not later than end-September 2010. Provisioning coverage ratio is the ratio of provisioning to gross NPAs.
non-performing assets

7. Floating Provisions: Prudential Treatment in respect of Floating Provisions: Banks have the

choice between deducting their existing floating provisions from gross NPAs to arrive at net NPAs or reckoning it as part of Tier II capital subject to the overall ceiling of 1.25% of total Risk Weighted Assets.

Gross and Net Advances and Gross and Net NPA:

(i) Gross Advance = Standard Assets + Gross NPA. (For the purpose of computing Gross Advances, interest recorded in the Memorandum account should not be taken into account.

(ii) Net NPA = Gross NPA minus provisioning for NPAs

(iii) Net advances = Gross advances minus provisioning for NPAs

(iv) Net NPA ratio = Net NPA/Net advances*100

Banks should deduct the following items from the Gross Advances and Gross NPAs to arrive at the Net advances and Net NPAs respectively: i) Balance in Interest Suspense Account; ii)DECGC/ECGC claims received and held, pending adjustment; iii) Part payment received and kept in suspense account; iv)Total provisions held (excluding amount of technical write off and provision on standard assets).

1. Asset Classification to be borrower-wise and not facility-wise. However, in respect of agricultural advances as well as advances for other purposes granted by banks to PACSI FSS under the on-lending system, only that particular credit facility granted to PACS/ FSS will be classified as NPA and not all the credit facilities sanctioned to a PACS/ FSS.

2. Asset classification of accounts under consortium should be based on the record of recovery of the individual member banks.

3. Advances against term deposits,,NSCs eligible for surrender, IVPs, KVPs and life policies need not be treated as NPAs provided sufficient margin is available. Advances against gold ornaments, government securities and all other securities are not covered by this exemption.

4. Government guaranteed advances: The credit facilities backed by guarantee of the Central Government will be treated as NPA for income recognition. However, asset classification and provisioning would be made only when the Government repudiates its guarantee when invoked. As regards, advances guaranteed by the State Government, with effect from 31st March 2006, asset classification and provisioning norms and income recognition norms will be applicable as in other cases.

5. Appropriation of recovery in NPAs: In the absence of a clear agreement between the bank and the borrower for the purpose of appropriation of recoveries in NPAs (i.e. towards principal or interest due), banks can exercise the right of appropriation of recoveries. Bank can appropriate recovery towards principal or interest as per its discretion but should adopt an accounting principle in a uniform and consistent manner.

6. Availability of security or net worth of borrower/guarantor should not be taken into account for the purpose of treating an advance as NPA. It should be on the basis of record of recovery.

7. The net worth of borrower or guarantor should not be considered as security for calculating unsecured portion of doubtful assets.

Upgradation of loan accounts classified as NPAs: If arrears of interest and principal are paid by the borrower in the case of loan accounts classified as NPAs, the account may be classified as 'standard' accounts immediately without any waiting period. However, in respect of NPA, which have been restructured/ rescheduled, upgradation to the standard category will be done only after the specified period i.e., a period of one year after the date when first payment of interest or of principal, whichever is earlier, falls due, subject to satisfactory performance during 12 months period from the date of starting payment after moratorium period. For example, an account was restructured on 5th Jan 2007, moratorium period 6 months, 1st instalment due on 5th July 2007 which was paid on 1st July 2007 and thereafter account was regular for 12 months. This account will be upgraded on 5th July 2008 and not on 1st July 2008.

Objective Type Questions

1. What is the objective of introducing prudential norms for income recognition, asset classification and Provisioning for the advances portfolio of the banks by RBI?

(a) for greater consistency in the published accounts (b) for transparency in the published accounts
(c) to apply principle of conservatism (d) Both (a) & (b) (e) All of these

2. Prudential Accounting Norms are applicable in respect of: .
(a) Asset classification (b) Income Recognition (c) Provisioning (d) All of these
3. As per the prudential accounting norms of RBI, presently advances are classified as:
(a) Standard Assets (b) Non Performing Assets (c) Regular I Irregular Assets
(d) either (a) or(b) (e) either (b) or (c)
4. Non Performing Assets (NPAs) are categorized as:
(a) Sub Standard Assets (b) Doubtful Assets (c) Loss Assets (d) any one of the above
5. A standard asset is one which :
(a) does not disclose any problem *(b)* does not carry more than normal risk attached to the business
(c) is of a high quality as regards security and borrower both
(d) all of these (e) none of these
6. With effect from the year ending 31.03.2004, a term loan is treated as non-performing asset (NPA) if :
(a) the balance outstanding is more than the loan amount originally sanctioned
(b) interest remains overdue for more than 90 days
(c) installment remains overdue for more than 90 days
(d) interest and/or installment remain overdue for more than 90 days (e) both (a) and (d) above
7. As from the year ending 31.03.2004, a cash credit/overdraft account is classified as NPA if :
(a) balance is beyond the sanctioned limit / D.P (b) interest has not been serviced for 4 quarters
(c) the account remains out of order (d) both (b) and (c) (e) none of these
8. Crop loan granted for long duration crop becomes NPA if :
(a) interest remains unpaid after it has become overdue for two years
(b) interest and /or installment remains unpaid after it has become overdue for two crop seasons
(c) interest and/or installment of principal remains unpaid after it has become overdue for two half years
(d) interest and/or installment of principal remains unpaid after it has become overdue for two crop seasons but for a period not exceeding two half years
(e) interest or instalment is overdue for one crop season.
9. Crop loan granted for short duration crop will become NPA if:
(a) the loan is overdue for 6 months (b) the loan is overdue for 12 months
(c) the loan is overdue for two crop season (d) the loan is overdue for more than 2 crop seasons
10. Out of order account means an account where:
(a) the balance is continuously more than the sanctioned limit or drawing power
(b) where as on the date of Balance Sheet, there is no credit in the account continuously for 90 days or credit is less than interest debited
(c) where stock statement has not been received for 3 months or more.
(d) any of these (e) only (a) or (b)
11. In case of cash credit and overdraft, the account will be treated as NPA if
(a) the limit is not renewed/reviewed within 6 months from the due date of renewal.
(b) account remains out of order.
(c) the limit is not renewed within 3 months from the due date of renewal
(d) Either (a) or (b) (e) none of these
12. With a view to moving towards international best practices and to ensure greater transparency, RBI decided to adopt __________ overdue norm for identification of NPAs from the year ending 31.03.2004.
(a) 150 days (b) 120 days (c) 60 days (d) 30 days (e) 90 days
13. Which of the following accounts will be classified as NPA?
(a) Loan against LIP when the balance outstanding is more than the limit sanctioned for 6 months but within surrender value of LIP
(b) Interest debited in the educational loan account during moratorium period has not been recovered simultaneously.
(c) Interest debited in a housing loan account for last 6 months has not been recovered from the date of sanction and repayment was to start after 12 months from sanction.
(d) Loan is guaranteed by Central Govt and is overdue for more than 90 days.
(e) None of these

14. Which of the following agricultural loan will be classified as NPA?
(a) Loan given for long duration crop and overdue for only one crop season.
(b) Loan given for poultry and interest is overdue for 100 days
(c) Loan is given for raising crop and interest is overdue for 100 days
(d) Both (a) & (b) (e) None of these
15. Which of the following is not correct regarding income recognition in respect of NPA accounts?
(a) Banks should not charge and take to income account interest on any NPA.
(b) Interest on advances against term deposits, NSCs, IVPs, KVPs and Life policies may be taken to income account on the due date, provided adequate margin is available in the accounts.
(c) If Central Government guaranteed advances become NPA, the interest on such advances should not be taken to income account unless the interest has been realised.
(d) None of these
16. Which of the following is true regarding reversal of interest or fees in the case of NPA accounts?
(a) the entire interest accrued and credited to income account in the past periods, should be reversed and provided for if the same is not realised.
(b) The interest should not be reversed in the case of Government guaranteed accounts.
(c) Only interest should be reversed but commission etc should not be reversed.
(d) All of these (e) None of these
17. Interest realized on NPAs should be credited to:
(a) principal (b) interest due(c) either (a) or (b) as per bank discretion
(d) either principal or interest due but bank should adopt the policy in a uniform and consistent manner.
18. As per RBI guidelines, w.e.f the year ending 31.03.2005 when an asset is identified as NPA it will be classified as sub-standard up to a period not exceeding :
(a) 18 months (b) 5 years (c) 6 months (d) 12 months (e) None of these
19. As per RBI guidelines, w.e.f the year ending 31.03.2005, an account will be classified as Doubtful if it is NPA or sub standard for more than:
(a) 6 months (b) 12 months (c) 18 months (d) 24 months (e) None of these3 years
20. For the purpose of asset classification, a special mention account is treated as :
(a) standard (b) sub standard (c) irregular (d) problematic (e) None of these
21. An NPA account is straightaway classified as doubtful without waiting for 12 months if the security deteriorates so much that its realizable value is:
(a) less than 10% of the outstanding balance (b) 10% or above the outstanding balance
(c) 10% or above but less than 50% of the outstanding balance
(d) 10% or below the outstanding balance (e) None of these
22. An NPA account is straightaway classified as loss if the security deteriorates so much that its realizable value is:
(a) less than 10% of the outstanding balance (b) 10% or above the outstanding balance
(c) 10% or above but less than 50% of the outstanding balance
(d) 10% or below the outstanding balance (e) None of these
23. In an NPA account, interest or any other charge will be recognized as income as per which of the following:
(a) on accrual basis (b) when borrower gives a firm commitment to regularize the account
(c) when it is actually realised (d) (a) or (c) as per policy of the bank (e) None of these
24. A personal loan without any security has become NPA. In which category account will be classified?
(a) sub standard for 12 months
(b) doubtful immediately as realizable value of security is less than 10% of the outstanding balance
(c) loss immediately as realizable value of security is less than 10% of the outstanding balance
(d) As per net worth of the borrower (e) None of these
25. A crop is considered as long duration crop if crop season is more than 12 months. The crop

season for each crop which means the period up to harvesting of the crops raised, is determined by:
(a) Banks themselves (b) State Level Banker's Committee (c) NABARD (d) RBI

26. Which of the following accounts will be classified as NPA?
(a) Cash credit limit which has not been renewed for 3 months from due date
(b) Cash credit limit in which stock statement has not been received for last 3 months
(c) Bill Discounted with usance period of 2 months which was discounted 3 months back
(d) Short duration crop which is overdue for 2 crop seasons only (e) None of these

27. Provisioning is required to be made in the case ofassets.
a) Standard b) Sub standard c) Doubtful d) Only (b) & (c) e) All of these

28. On which of the following types of loans, provision is required to be made at the rate of 0.25% of the outstanding if the advance is classified in the standard category?
a) Direct advance to agriculture (b) Direct advance to SME
c)All advances to Agriculture & SME (d) Both (a) & (b) (e) None of these

29. The provision on-an advance made to a farmer for agriculture or to an entrepreneur for small scale industry
sector in the standard category as on 31.3.2010 will be_% of the outstanding balance.
a) 0.25% b) 0.40% c) 1% d) 0.50% e) None of these

30. The provision on standard assets made to a person other than Direct advance to agriculture and SME and for
commercial real estate are to be made at the rate of_ of the outstanding balance on global basis.
a) 0.25% b) 0.40% c) 1% d) 0.50% e) None of these

31. Which of the following is correct regarding provision on standard assets in the following categories?
a) Commercial Real estate: 1% of outstanding balance
b) Housing loan more than 30 lakh: 1% of the outstanding balance
c) Capital market exposure: 2% of the outstanding balance d) Both (a) & (b) only (e) None of these

32. In the case of advances classified as sub standard assets other than those which were unsecured abinitio, the provision is required to be made as per which of the following?
a) For unsecured portion 100% and on secured portion 10%.
b) For unsecured portion 100% and on secured portion 20%.
c) 10% of the outstanding balance without reference to security d) None of these

33. In the case of sub standard assets which were unsecured abinitio, the provisioning is required to be made at the rate of of outstanding balance.
a) 25% b) 50% c) 75% d) 100% e) None of these

34. A clean overdraft has become NPA and the outstanding is Rs 100,000. Haw much provision is to be made?
(a) Rs20,000 (b) Rs 25,000 (c) Rs 50,000 (d) Rs 100,000 (e) None of these .

35. An advance was granted to farmer for poultry. Account is standard and outstanding in the account is Rs 100,000 whereas realizable value of security is Rs 60,000 only. How much provision is to be made?
(a) Rs 10,000 (b) Rs 250 (c) Rs 40,150 (d) Rs 400 (e) None of these

36; An advance has been granted to a farmer for construction of house. The account is standard and outstanding in the account is Rs 100,000. How much provision is to be made on this account?
(a) Rs 250 (b) Rs 400 (c) Rs 1000 (d) None of these

37. Which of the following is incorrect?
a) An account which is doubtful for up to 1 year is classified in DF 1 category.
b) An account which is doubtful for more than 1 year but up to 3 years is classified in DF 2 category.
c) An account which is doubtful for more than 3 year is classified in DF 3 category.
d) None of these e) All of these

38. In the case of doubtful accounts, provision on unsecured portion is made at the rate of 100%. For

secured portion, the provision is made as a percentage of realizable value of security depending upon the period for which the account is doubtful. For which of the following, the rate of provision for secured portion is not correct?
a) DF1: 25% b) DF2: 40% c) DF3: 50% d) DF3: 100% e) None of these
39. A loan has become more than 3 years old in the doubtful category. In this case, the provision on secured portion as on 31.3.10 will be:
a) 50% b) 60% c) 75% d) 100% e) None of these
40. An advance of Rs. 2,35,000 has been declared sub standard on 31.07.2011. It is covered by securities with realizable value of Rs. 1,68,000. Total provision in the account as on 31.03.2012 will amount to:
(a) Rs. 35,250 (b) Rs. 30,200 (c) Rs. 23,500 (d) Rs. 83,800 (e) none
41. An advance of Rs. 1,50,000 is shown as doubtful asset as on 31.01.2010. It is covered by securities with realisable value of Rs. 90,000. As on 31.3.12, the total amount of provision under doubtful category will be (a) Rs. 12,000 (b) Rs. 30,000 (c) Rs. 87,000 (d) Rs. 60,000 (e) Rs 96,000
42. The unsecured exposure which are classified as sub standard attract a provision of 25% of the outstanding balance. For this purpose, unsecured exposure means an exposure where the realisable value of the security, as assessed by the bank/approved valuers/ Reserve Bank's inspecting officers, is ---- *ab initio,* of the outstanding exposure.
(a) not more than 10% (b) not less than 10% (c) less than 10% (d) None of these
43. A cash credit account became out of order on 5.3.09. Balance outstanding in the account is Rs 200,000. Value of security in the account is Rs 150,000. How much provision is required to be made as on 31.3.09?
(a) Rs 20,000 (b) Rs 50,000 (c) Rs 15,000 (d) None of these
44. An account became sub standard on 5.3.08. Balance outstanding in the account is Rs 5 lac and realizable value of security is Rs 4 lac. How much provision is required to be made as on 31.3.12.
(a) Rs 50,000 (b) Rs 220,000 (c) Rs 100,000 (d) Rs 500,000 (e) None of these
45. An account became NPA on 5.4.09. The outstanding in the account is Rs 10 lac. Realisable value of security is Rs 7 lac. The balance includes Rs 50,000 as recorded and suspended interest. How much provision is required to be made as on 31.3.10?
(a) Rs 100,000 (b) Rs 440,000 (c) Rs 142,500 (d) Rs 510,000 (e) None of these
46. An account became NPA on 16.7.10. Balance outstanding is Rs 10 lac. Realisable value of security is Rs 6 lac. Loan is guaranteed by Credit Guarantee Trust and cover is 75%. How much provision will have to be made as on 31.3.12.
(a) Rs 520,000 (b) Rs 220,000 (c) Rs 250,000 (d) Rs 280,000 (e) None of these
47. The banks are required to make a general provision for standard assets other than for direct advance to agriculture and SME, commercial real estate and loans at teaser rate at the rate of:
(a) 0.5% of total advances (b) 0.40% of standard assets on global basis
(c) 0.25% on domestic standard assets (d) lower of (b) or (c) (e) none of these
48. How is the provision on standard assets treated?
(a) it is deducted from Gross NPA (ii) it is deducted from Gross advances
(c) shown as 'Contingent Provisions against Standard Assets' under 'Other Liabilities and Provisions -Others' in Schedule 5 of the balance sheet.
(d) any of these but accounting practice should be followed consistently. (e) None of these
49. In respect of Govt. guaranteed advances which of the following is correct regarding application of NPA norms:
(a) For State Govt guaranteed loans, NPA norms will be applicable as in other cases.
(b) For Central Govt guaranteed loans income recognition norms will be applicable as in other cases.
(c) For Central Govt guaranteed loans, provisioning will be made only if guarantee has been invoked and Central Govt repudiates the guarantee.
(d) All of these (e) None of these
50. An advance has been made by 3 banks under a consortium arrangement. The account becomes

NPA with one of the banks. What should be done by other banks?
(a) classify the account as NPA (b) classify the account as NPA but provision not to be made
(c) the account will be classified as per record of recovery of each bank
(d) classify the account as NPA if the same is NPA with the leader bank (e) None of these
51.-Advance against which of the following will be subject to provisions of Asset classification, Income Recognition and Provisioning even if sufficient margin is available?
(a) own deposit (b) NSC (c) government securities (d) LIP (e) None of these
52. With a view to bringing down divergence arising out of difference in assessment of the value of security, in which cases stock audit should be conducted at annual intervals by external agencies.
(a) in case of all NPAs in cash credit accounts (b) in case of all doubtful accounts
(b) in cases of NPAs with balance of Rs. 5 crore and above (d) in case of DF3 accounts only
53. RBI has proposed that total provisioning coverage ratio of banks, including floating provisions, should not be
less than _________ . Banks should achieve this norm not later than end-September 2010
(a) 30% (b) 40% (c) 50% (d) 70% (e) None of these
54. For calculating Net advances and Net NPA, which of the following should not be deducted from Gross advances and Gross NPAs?:
(a) Provisions on NPAs (b) DICGC/ECGC claims received and held pending adjustment
(c) Floating Provisions (d) Provision on Standard Assets (e) None of these
55. Which of the following is true about treatment of floating provisions?
(a) Floating provisions can be deducted from gross NPAs to arrive at net NPAs
(b) Floating provisions can be treated as part of Tier II capital
(c) Either (a) or (b) (d) Both (a) & (b) (e) None of these

ANSWER : ASSET CLASSIFICATION & PROVISIONING NORMS

1	D	2	D	3	D	4	D	5	B	6	D	7	C	8	E	9	C	10	D
11	D	12	E	13	E	14	D	15	D	16	A	17	D	18	D	19	B	20	A
21	C	22	A	23	C	24	A	25	B	26	D	27	E	28	D	29	A	30	B
31	A	32	C	33	A	34	B	35	B	36	B	37	D	38	C	39	D	40	A
41	E	42	A	43	D	44	D	45	C	46	C	47	B	48	C	49	D	50	C
51	C	52	C	53	D	54	D	55	C										

LIQUIDITY MANAGEMENT

1. Which of the following statements is not correct?
a) Liquidity is ensured by grouping Assets / Liabilities based on their maturity profile.
b) In .practice, there is often match in the maturity pattern.
c) The gap is important to assess future financing requirements.
d) None of these
2. Which of the following is important in Asset side management of a Balance Sheet under ALM approach?
a) Reserve position management
b) Liquidity management
c) Investment management d) All the above
3. Which of the following is not important in Asset side management of a Balance Sheet?
a) Fixed Assets Management b) Inter Branch Adjustment
c) Loan Management d) Security Management
4. The liability side management in a Bank Balance Sheet will include:
a) Capital Management b) Long Term Management
c) Reserve Position Management d) All these

5. What are the core areas where profit planning of a Bank should focus under ALM?
a) Spread Management b) Non-interest income
c) Control on non-operating expenses d) All the above
6. Which of the following is not relevant in profit planning under ALM?
a) Control over taxes b) Generating fee income
e) Capital adequacy d) Loan quality
7. Which of the following statements is false?
a) Assets represents source of funds in the Balance Sheet.
b) Deregulated environment has narrowed spread of Banks.
c) ALM has bearing on profit augmentation
d) Net Interest Margin is also known as spread.
8. Which of the following are true about concept of liquidity in a Bank?
a) It is a function to accommodate decreases in Liability and to fund increases in Assets.
b) The cot of liquidity depends on market conditions and market perceptions of the interest rate risk and credit risk.
c) If there is a liquidity mismatch, Bank may have to acquire additional liabilities at the higher cost. d) All the above
9. The effective liquidity management in a Bank has the following role:
a) It indicates the Bank's ability of repaying its borrowings.
b) The loan commitment can be met.
c) The Bank can avoid unprofitable sale of Assets. d) All the above
10. Which of the following analysis is important, for adequacy of bank's liquidity positions?
a) Current liquidity position
b) Future funding needs
c) Trend of past funding requirements d) All the above
11. Which of the following is not relevant for analysis to find out liquidity analysis?
a) The quality of Assets b) Existing Staff Strength
c) Sources of funds d) Future Earning Capacity
12. Which of the following factors may affect the Bank's liquidity?
a) Business growth opportunities
b) Increase in non-performing Assets
c) Decline in earnings d) All the above
13. The following is not relevant to affect Bank's liquidity:
a) Level of Cash Balance with the Bank Branch
b) Down grading by Rating Agency
c) Acquisition d) New Tax Initiatives
14. Which of the following combinations is important to meet funding needs of a Bonk?
a) Increase short term Borrowings
b) Minimize holding of less liquid Assets
c) Increase Capital Funds d) All the above
15. Which of the following statements is not correct?
a) Funding risk may arise due to huge withdrawal of deposits or non-renewal of deposits
b) Swaps and options are not the part of Call Risk.
e) Time Risk arises due to non receipt of expected inflows of funds.
d) Conversion of non-fund based limit into fund based may lead to Call Risk.
16. Funding Risk may arise due to:
a) Systematic Risk
b) Loss of confidence of Depositors

c) Liabilities in Foreign currency d) All the above

17. Which of the following factors may contribute to Time Risk?
a) When standard Assets are turned into Non-performing Assets
b) Problems in recovery
c) Time factor involved in managing liquidity d) All the above

18. The types of liquidity Risk can be:
a) Funding risk b) Time Risk c) Call Risk d) All the above

19. What are the key factors for managing strong liquidity in a Bank?
a) Analysis of net funding requirement under alternative scenarios.
b) Extent of diversification of funding sources.
c) Effective contingency planning. d) All the above

20. The important steps for managing liquidity risks in a bank are:
a) Developing a suitable structure.
b) Fixing a level and limit for Liquidity Risk
c) Measuring and managing Liquidity Risk d) All the above

21. Which of the following is not relevant for developing a suitable structure u a Bank for liquidity Management?
a) Function of ALM Committee at the top level.
b) Developing customer re-orientation.
c) Creating an awareness among Bank Branches.
d) Monitoring performance and liquidity risk profile.

22. The liquidity policy of a Bank should specify:
a) To set out general principles for liquidity management, including quantitative and qualitative benefits.
b) The policy should include composition of Assets
c) To decide Bank's goal of protecting financial stability.
d) All the above

23. Which of the following can be management structure of liquidity management in foreign currency?
a) Centralized liquidity management in foreign currency.
b) Fixing Divisions responsibility subject to close monitoring by head office.
c) Independent responsibility in home currency by home office and foreiv '..,Arruney by concerned foreign office.
d) Any of the above

24. What are the aspects to be considered for liquidity strategy in each currency under foreign exchange transactions?
a) Funding and conversion methods of foreign currency
b) Strategies for managing associated risks.
c) The capacity of a Bank to access foreign currency markets.
d) All the above

25. Which of the following limits can be fixed for liquidity Risk?
a) Cumulative net funding requirement as a percentage of total liability.
b) Extent of liquid asses as percentage of short-term liabilities.
c) Level of loan to deposit ratio d) All the above

26. The extent of cumulative cash flow mismatches could be arrived as under:
a) Taking a conservative view of marketability of liquid assets.
b) Provision for discount to cover price volatility.
c) Expected outflows as a result of draw down of commitments.
d) All the above

27. A limit for liquidity Risk need not be fixed up for the following:
a) A limit on daily withdrawals.
b) A limit on loan to capital ratio
c) Quantifying sources of funds

d) Flexible limits on a particular liability category

28. A limit can be fixed for the following for managing liquidity Risk:
a) Extent of dependence on individual customer
b) Flexible limits on average maturity of different liabilities.
c) Minimum liquidity provision d) Any or all the above

29. Which of the following are important ratios under the stock approach for managing liquidity Risk?
a) Ratio of core deposits to total Assets
b) Net Loans to total deposit ratio
c) Ratio of Term deposits to total deposits. d) All the above

30. What do core deposits signify?
a) This constitutes deposits from public in the ordinary course of Business
b) The higher ratio is better
c) Core deposits are stable source of liquidity d) All the above

31. Which of the following ratio is not important for managing liquidity?
a) Ratio of volatile Assets to total Assets
b) Ratio of liquid Assets to total Assets
c) Ratio of market liabilities to total Assets
d) Ratio of short term liabilities to total Assets

32. Which of the following is an important element for managing liquidity under the flow approach?
a) Assessing net funding requirements
b) Managing market access.
c) Contingency planning d) All the above

33. What is net funding requirements management?
a) It is called Gap Analysis of measuring -and managing liquidity
b) The funding requirements are assessed on the basis of residual maturities of Assets and liabilities.
c) The Net Cash Flow is the difference between outflow and inflow of cash in future.
d) All the above

34. What does a gap signify?
a) It represents-periodical gap between cash inflow and outflow_
b) If the gap is negative, Bank has to mange shortfall.
c) An analysis of net funding requirements involves preparation of maturity ladder.
d) All the above

35. What does a maturity ladder signify?
a) It is a chart showing sources and amount of cash inflows and outflow in specified time periods.
b) Cash inflows and outflows can be ranked by the due dates,
c) Significant interest and other cash flows should also be considered d) All the above

36. The features of forward market conditions scenario are:
a) It establishes a Benchmark for the normal business behaviour of a Balance Sheet.
b) It is useful in managing a Bank's use of deposits and other debt market.
c) With this process Bank can avoid the impact of temporary constraints.
d) All the above

37. Which of the following is not a source of cash inflow?
a) Deposits Run off b) Maturing Assets c) Interest Receivable d) Asset Sale

38. The sources of cash outflows are:
a) Interest payable
b) Drawdowns on lending commitment
c) Deposits Run off d) All the above

39. What are the most liquid category of Assets?

a) Cash b) Securities c) Inter-Bank loans d) All the above

40. Which of the following is not least liquid Assets?

a) Bank Premises
b) Saleable loan portfolio
c) Investment in subsidiaries d) Non-realisable loans

41. Which of the following factors help in determining the level of Bank's Assets in Cash Flows?

a) Maturing Assets and extent of roll over or renewals.
b) Expected level of new loan demand.
c) Anticipated level of draw downs of commitment. d) All the above

42. What are the factors affecting normal funding needs?

a) Analysis of seasonal loan demand
b) Customer-by-customer assessment for large customer
c) Use to historical relationship d) Any or all of the above

43. The cash flows arising from a Bank's liabilities depends on the following factors:

a) Routine level of roll overs of deposits and other liabilities
b) Effective demand from demand deposits category
c) Normal growth of new deposits d) All the above

44. Which of the following is not a contingent liability of a Bank?

a) Letter of credit
b) Overdraft against third party guarantee
c) Swap deals d) Financial guarantee

45. Which of the following are time buckets prescribed by RBI, as per the guidelines for bucket wise classification of Assets and Liabilities issued by the RBI?

a) 1-14 days b) 15-28 days c) 29 days and upto 3 months
d) All the above

46. Which of the following is not a bucket as per RBI norms for classification of Assets and Liabilities?

a) 6 months and upto one year
b) Over one year and upto 3 years
c) Over 7 years d) Over 3 years and upto 5 years

47. What are the major dimensions for assessing and managing Bank liquidity?

a) Evaluating Net Funding Requirements
b) Managing Market Access
c) Contingency Planning d) All the above

48. What does contingency planning signify?

a) It is a process which ensures un interrupted flow of information
b) It facilitates precise information to management for making quick decisions
c) It includes the sources of cash flows in emergency situations
d) All the above

49. Which ofthe following is correct regarding objective of liquidity management?

a) Ensure profitability b) Ensure Liquidity
c) Both the above d) Either of the two

50. Banks need liquidity to:

a) Meet deposit withdrawals
b) To fund loan demands
c) Both of them d) one of them

51. Adequacy of Bank's liquidity position depends upon:

a) Sources of funds
b) Anticipated future funding needs
c) Present and future earning capacity d) All the above

52. Which of the following statements is not correct?

a) The need to replace net outflows due to unanticipated withdrawal of deposits is known as Interest Rate Risk_
b) The need to compensate for non-receipt of expected inflows of funds is classified as Time Risk.
c) Call Risk arises due to Crystallisation of Contingent Liabilities
d) Maturity ladders help the Bank to assess the difference between cash inflows and cash outflows in different periods. 53. Which of the following statements is correct?
a) Liquidity management methodology under different scenarios is known as Alternative Scenarios.
b) The capacity of a Bank to withstand a net funding requirement in a Bank specific or general market liquidity crises is known as contingency planning
c) Both (a) & (b) d) None of the above

ANSWER : LIQUIDITY MANAGEMENT

1	B	2	D	3	B	4	D	5	D	6	A	7	A	8	D	9	D	10	D
11	B	12	D	13	A	14	D	15	B	16	D	17	D	18	D	19	D	20	D
21	B	22	D	23	D	24	D	25	D	26	D	27	A	28	D	29	D	30	D
31	A	32	D	33	D	34	D	35	D	36	D	37	A	38	D	39	D	40	B
41	D	42	D	43	D	44	B	45	D	46	C	47	D	48	D	49	C	50	C
51	D	52	A	53	C														

INTEREST RATE RISK MANAGEMENT

1) The deregulation of the financial system In India has resulted in
a) operational freedom to the banks b) freedom in pricing of assets
c) freedom in pricing of liabilities d) only (a) & (b) e) All of these
2) Interest rate risk means
a) Exposure of a bank's financial condition to adverse movements in interest rates.
b) Volatility in Net Interest Income or in variations in Net Interest Margin.
c) Change in the underlying value of the bank's assets, liabilities and off balance sheet instruments due to change in interest rates.
d) Only (b) & (c) e) All of these
3) Which of the following is not correct?
a) Market value of an asset or liability is equal to the present value of current and future cash flows from that asset or liability
b) Rising interest rate decreases the discount rate and decreases the market value of assets or liabilities
c) Falling interest rates increase the market value of assets or liabilities
d) Mismatching maturities by holding longer term assets then liabilities means that when interest rates rise, the market value of assets falls by greater amount than liabilities.
e) None of these
4) Net Interest Margin means
a) Interest income — Interest Expense
b) Interest Expense — Interest Income
c) Net Interest Income divided by earning assets
d) Net interest income divided by net demand and time liabilities
e) Net interest income divided by total deposits and loans
5) Which of the following is not a interest rate risk
a) gap risk b) basis risk c) portfolio risk d) yield curve risk e) price risk
6) In the context of interest rate risk, gap means difference between the amount of assets and liabilities

a) maturing during a particular period
b) on which the interest rates are reset during a given period
c) of short term nature d) of long term nature e) which do not carry any interest rate
7) Which of the following represents gap risk?
a) Uncertainty with regard to interest rate at which the future cash flows can be reinvested
b) Risk of loss due to sale of assets before maturity dates
c) Risk that the interest rate of different assets and liabilities may change in different magnitudes
d) Holding assets and liabilities with different principal amounts, maturity dates or repricing dates creating exposure to changes in the level of interest rates e) None
8) Which of the following is incorrect?
a) Gap is the difference between the amount of assets and liabilities on which interest rates are reset during a given period
b) Mismatch or gap may lead to gain or loss depending upon how interest rate in the market tend to move
c) **In** a perfectly matched gap position there is not difference between the repricing dates. However, the magnitude of change in the deposit rates **would** not necessarily be exactly matched by the magnitude of change in loan rate
d) If a bank has more assets on which it earns interest than its liabilities on which it pays interest, interest rate risk arises when interest rate earned on assets changes while cost of funding of the liabilities remains same e) **None** of these
9) Changes in interest rates affect
a) Net Interest income b) Net Interest margin
c) Underlying value of the bank's assets and liabilities
d) Both (a) & (b) only e) All of (a), (b) & (c)
10) Rise in interest rate results in
a) Increase in the market value of the asset
b) Increase in the market value of the liability
c) Decrease in the market value of asset
d) Certain decline in the net interest income
e) No impact on the market value of the asset or liability, though it may affect Net Interest income.
11) The gap is the difference between the amount of assets and liabilities on which interest rates are during a given period_
a) fixed b) increased c) decreased d) reset e) realigned
12) A bank holds Rs. 100 crore liabilities at 9% of one year maturity to fund assets of Rs. 100 crore at 10% with two year maturity. The interest rate on liabilities increase to 11% in second year. What will the impact on net interest income of the bank from these assets and liabilities.
a) Nil will reduce by Rs. 1 crore b) Nil will increase by Rs. 1 crore
c) Nil will reduce by Rs. 2 crore d) Nil will increase by Rs. 2 crore
e) No impact as neither asset nor liability has been withdrawn_
13) A bank takes a deposit for 91 days at 8% and invests the same in a floating rate loan (repriced at monthly intervals) with an initial rate of 10%. In this case bank will be treated as
a) asset sensitive b) liability sensitive c) Both (a) & (b) d) none of these
14) Which of the following is incorrect regarding asset sensitive bank?
a) It will produce a large Nil if the interest rate rises in the market
b) It will have a reduction in NII if the interest rate declines in the market
c) It will produce a large NII if the interest rate declines in the market
d) Both (a) & (c) e) Both (a) & (b)
15) A bank is considered liability sensitive when
a) Short term deposit is used to fund long term loan
b) Interest paid on deposit is reset more, rapidly than the rate being charged on the loan

c) Long term deposit is used to fund short term loan
d) Both (a) & (b) e) Both (b) & (c)
16) The risk that the interest rate of different assets and liabilities may change in different magnitudes is called risk.
a) Basis b) Gap c) Yield Curve d) price e) Reinvestment
17) A bank has raised SB deposit of Rs. 50 crore, fixed deposit of Rs. 50 crore and invested the same in cash credit for Rs. 40 crore and call money for Rs. 50 crore. What is the gap?
a) positive gap of 10 crore b) negative gap of 10 crore
18) In the above question, if interest rate falls by 1%, then as per traditional gap management, bank's NII will
a) improve by Rs. 10 lakh b) decline by Rs. 10 lakh c) None of these
19) In the same question, if rate on call money lending falls 1%, the rate on cash credit faits 0.7%, the rate on saving deposits falls by 0.5% and rate on fixed deposits falls by 0.4%, then
a) NII will improve by Rs. 1 crore
b) NII will improve by Rs. 0.33 crore
c) Nil will decline by Rs. 0.33 crore
d) Nil will decrease by Rs. 0.78 crore e) Nil will decrease by Rs. 0.45 crore
20) If a bank has more assets on which it earns interest than its liabilities on which it pays
interest, interest rate risk arises when interest rate earned on assets changes while the cost of funding of liabilities remain same. This risk is called as: a) Embedded option Risk b) Net Interest Position Risk
c) Reinvestment Risk d) Yield Curve Risk e) Price Risk
21) When interest rates increase, depositors are likely to go for premature renewal of deposits and when interest rates decrease, borrowers are likely to pay off loans before due date resulting in lower NIL This risk is called
a) Embedded option risk b) Net Interest position risk
c) Reinvestment risk d) Yield curve risk e) Price Risk
22) When different benchmarks are used to reprice floating rate fixed deposits- and Hooting rate loans, interest rate risk arising due to this is called------ risk
a) Gap b) Basis c) Yield Curve d) Reinvestment
23) Embedded option means
a) Prepayment of loans and bonds (with put or call option)
b) Option to repay or extend the loan on due date
c) Automatic renewal of deposits
d) Premature withdrawal of deposits e) Both (a) & (d)
24) Mismatch in the context of Interest Rate Risk occurs when assets and liabilities fall doe for __ in different periods.
a) payment b) repricing c) either (a) or (b) whichever is earlier d) None
25) Changes in interest rates can have adverse impact on
a) a bank's earnings b) a bank's economic value c) both (a) & (b)
d) None of these
26) Which of the following is incorrect
a) When interest rates fall, the bank which provides the servicing function for mortgage loans may have decline in fee income due to prepayment of loans
b) Net interest income .means difference between total interest income and total interest expense
c) Change in interest rates may affect noninterest income also
d) Both (a) & (c) e) None of these
27) The economic value of a bank *can* be viewed as the present value of the bank's expected : a) net cash flows b) cash flows on assets c) cash flows on the liabilities d) none of these

28) Which of the following is incorrect?

a) Economic value perspective of interest rate risk is more comprehensive then earning perspective.

b) Increase in the interest rates on assets like bonds will reduce the market price of the bonds

c) A bank has a 5 year government security of 10%. Market interest rates decrease to 8%. The market value of bond will increase.

d) All of these e) none of these

29) Instruments that are not marked to market may represent

a) higher gain b) higher economic value c) embedded losses d)none

30) A negative or liability sensitive gap occurs where liabilities assets (including OBS positions) in a given time bond - a) are more than b) are less than c) are equal to d) none of these

31) A negative gap means:

a) liability sensitive gap - b) asset sensitive gap

c) liabilities exceed assets (including OBS positions) in a given time period.

d) both (a) & (c) e) None of these

32) Which of the following is not a shortcoming of gap analysis

a) It ignores the basis risk

b) It fails to take into account for differences in the sensitivity of income that may from option related positions_

c) It fails to capture variability in non interest revenue and expenses

d) Both (a) & (b) only e) none of these

33) Duration reflects:

a) Percentage change in the economic value that will occur with a change in the level of market interest rates

b) Timing and size of cash flows that occur before the instrument's contractual maturity

c) Both of these d) .None of these

34) Higher duration which implies that a given change in the level of interest rates will have a larger impact on economic value will be higher when:

a) The maturity or next repricing date of the instrument is longer

b) The payment that occur before maturity (e.g. coupon payments) is smaller

c) Both of these d) None of these

35) Which of the following is correct regarding strategies for controlling interest rate risk

a) Nil can be insulated from the volatility of interest rates by reducing the gap to zero

b) If a bank expects that interest rate would increase, it will widen the gap by liabilities more frequently then assets.

c) If a bank expects that interest rate would increase, it will widen the gap by repricing the assets more frequently than liabilities

d) Both (a) & (b) e) Both (a) & (c)

36) Asset sensitivity can not be reduced by:

a) Increasing short term lendings b) Increasing short "term borrowings

c) Increasing fixed rate lendings d) Increasing floating rate deposits

e) Extending investment portfolio maturity

37) Which of the following is not a strategy to manage interest rate risk?

a) Match long term assets with non interest bearing liabilities

b) Match repriceable assets with a similar repriceable liabilities

c) Contain volumes of NPA

d) Use Forward Rate Agreements, Swaps etc. e) none of these

38) The adverse impact on Nil due to mismatch as can be minimized by:

a) Fixing appropriate tolerance limits on interest rate sensitivity gaps

b) Granting short term loans

c) Accepting long term deposits d) Both (b) & (c) e) none of these

39) Maturity mismatch is increased by:
a) Increase in Non Performing assets
b) Reschedulement of loan instalments c) Both (a) & (b) e) none of these

ANSWER : INTEREST RATE RISK MANAGEMENT

1	E	2	E	3	B	4	C	5	C	6	B	7	D	8	C	9	E	10	C
11	D	12	C	13	A	14	C	15	D	16	A	17	B	18	A	19	C	20	B
21	A	22	C	23	E	24	C	25	C	26	D	27	A	28	E	29	C	30	A
31	D	32	E	33	C	34	C	35	E	36	A	37	E	38	A	39	C		

PROFIT PLANNING

1) What is the profit?
a) Surplus of income over expenditure
b) Difference between operating income and operating expenditure
c) Excess of Revenue and Expenditure d) All these
2) What is profitability?
a) It is a function of certain ratios.
b) It is a parameter of economic efficiency.
e) Productivity is one of the major determinants of profitability d) All these
3) Productivity in Banks can be measured in terms of:
a) Total assets per employee
b) Net operating profit per employee
c) Ratio of establishment expenses to working funds d) All these
4) Which of the following statements is correct?
a) Profit and Profitability goes together.
b) If profits increase, profitability will also increase.
c) Profit may increase profitability may decline d) All these
5) Profitability indicates: -
a) Financial soundness of a Bank b) Sustained confidence of the Depositort;
c) (a) and (b) both d) None of these
6) The objective of profitability is:
a) To increase productivity b) To increase efficiency
c) Cost reduction and return maximization d) All these
7) Which of the following factors helps to profitability?
a) Efficient Asset Management
b) Liability management in terms of deposits and capital funds
c) Operational efficiency in terms of branching and personnel d) All these
8) What is spread? -
a) Difference between interest receipts and interest payments as percentage to rota' Assets.
b) An increase in spread leads to rise in profits.
c) There is a positive relationship between spread and net profit. d) All these
9) What is Burden?
a) Difference between non-interest income and non-interest expenditure
b) It is measured in terms of percentage to Total Assets
c) (a) and (b) both d) None of these
10) Banks are required to make provision out of operating profits in respect of:
a) Non-performing Assets b) Income Tax c) Interest Tax d) All these
11) The extent of provision is influenced by:
a) Quality of Assets portfolio b) Tax Rate c) Depreciation in Investments
d) All these
12) Banks have non-interest income from the following sources:

a) Fee on issue of Guarantee b) Commission on issue of Letter of Credit
c) Project management fee d) All these
13) Which of the following are the important profitability ratios to measure the efficiency of a Bank?
a) Net profit as percentage of gross operating income
b) Net profit as percentage of working funds
c) (a) and (b) both d) None of these
14) Net profit as percentage to gross operating income indicates:
a) Capacity of a Bank to generate residual income
b) Cost control exercises taken up by the management
c) (a) and (b) both d) None of these
15) Net profit as percentage of working funds indicates:
a) Efficiency of fund management
b) Productivity of capital employed in a Bank
c) (a) and (b) both d) None of these
16) The factors affecting profitability are:
a) Liquidity and Credit Policy of RBI b) Changes in Deposit mix
c) Increase in establishment cost d) All these
17) The following also have direct impact on profitability of Bank:
a) High level of NPA b) Higher amount of provision
c) (a) and (b) both d) None of these
18) Profitability can be improved through:
a) Increased diversification b) Containment of cash
c) Better quality of Assets d) All these
19) What are the important parameters which established relationship with profitability?
a) Relationship between owned funds and net profits
b) Relationship between total assets and profit before depreciation, interest and tax.
c) (a) and (b) both d) None of these
20) The profit planning in a Bank involves:
a) Balance sheet management
b) Efficient management of credit and investments
c) Increased level of non-fund based income d) All these
21) The major sources of Banks income are:
a) Interest income b) Fee based income c) Treasury income d) All these
22) Interest income is derived from:
a) Loans and advances b) Investment in securities c) Investment in Bonds
d) All these
23) Which of the following are new sources which offer better non-fund income?
a) Depository sources b) Internet Banking c) E-Commerce d) All these
24) A Bank can have Treasury income by way of:
a) Trading n securities b) Forex Transactions
c) Dealing commodities and derivatives d) All these
25) The profitability is a function of following variables:
a) Interest income b) fee based income c) Trading income d) All these
26) The following variables also affect the profitability:
a) Interest expenses b) Staff expenses c) Other operation expenses d)All these
27) The fundamental principle of profitability is:
a) Interpst and other income should be maximized
b) Interest expenses and other operating expenses should be minimised
c) (a) and (b) both d) None of these
28) What has been the trends in profitability of commercial Banks in India?
a) Net profit to owned funds have shown improvements

b) Operating profits have shown increasing trend
c) (a) and (b) both d) None of these
29) The factors influencing investment decisions include:
a) Earning per share and price earning ratio b) Dividend yield
c) Return on Networth d) All these
30) What is the concept of Economic Value Added (EVA)?
a) It is the difference between the rates at which the Bank is earning from its operations and its cost of capital
b) It is difference between the net operating profit after tax and the opening the capital employed times the cost of capital
c) It is able to capture the cost of capital employed d) All these
31) The significance of EVA is:
a) It indicates the efficiency of Bank in deployment of capital to get optional returns.
b) It looks at the rate at which the Assets are put to use and compares the cost of such capital.
c) If the Bank is able to earn a return which is more than its cost of capital, it is said to be creating wealth for its shareholders. d) All these
32) EVA is a better measurement over:
a) Earning per share b) Return on Equity
c) As (a) and (-13) do not factor risk d) None of these
33) Which of the following statements is correct?
a) EPS and ROE are price return functions
b) EVA provides more refined barometer of value addition after defraying cost of funds
c) (a) and (b) both d) None of these
34) The calculation of EVA is complicated as such:
a) It needs cost of equity to arrive at the cost of capital
b) This also needs a credible operating profit after a good number of adjustments
c) (a) and (b) both d) None of these
35) EVA will be affected by:
a) Changes in Depreciation policy b) Inventory valuation policy
c) Accounting for deferred taxation d) All these
36) The limitations of EVA are:
a) It is based against companies which are capital intensive
b) It considers only capital outlay necessary for creation of physical assets
c) It ignores implicit capital outlay involved in the creation of intangible Assets
d) All the above
37) Which of the following is correct?
a) Companies with high EVA are cash rich
b) EVA depicts notional value created by a business
c) It has no relation to liquidity requirement d) All these
38) Which of the following is correct?
a) Companies which are cash sensitive and if there is a cash shortage in may lead to Bankruptcy. -
b) EVA is an ideal measure for matured industries.
c) EVA will not be that effective for the companies in growth stage. d) All these
39) What is Market Value Added?
a) An excess of market value of the. company over the value of investors capital.
b) It quantifies the premium the market is willing to pay.
c) It is the sum of the current market value of debt and equity minus economic book mEque.
d) All the above
40) The important factors which determine MVA are:
a) Market value of capital employed b) Economic value c) (a) and (b) both

d) None of these
41) Which of the following statements is correct?
a) A company creates value if its MVA is positive
b) MVA is same as the price to Book value figure
c) (a) and (b) both d) None of these
42) What has made profitability management more challenging task?
a) The Extent competition b) Advanced Technology c) Deregulatory measurement
d) All these

ANSWER : PROFIT PLANNING

1	A	2	D	3	D	4	C	5	C	6	D	7	D	8	A	9	C	10	D
11	D	12	D	13	C	14	C	15	C	16	D	17	C	18	D	19	C	20	D
21	D	22	D	23	D	24	D	25	D	26	D	27	C	28	C	29	D	30	D
31	D	32	C	33	C	34	C	35	D	36	D	37	D	38	D	39	D	40	C
41	C	42	D																

CASE STUDY / CASE LETS ON MODULE – D

CASE STUDIES ON NPA PROVISIONING

Case-1

International Bank has provided the following information relating to its advance portfolio as on Mar 31, 2010: Total advances P_s. 40000 cr. Gross NPA 9% and Net NPA 2%. Based on this information, answer the following questions:

01 Considering that all the standard loan accounts represent general advances, what is the amount of provision for standard loan accounts:
a) Rs. 160 cr b) Rs. 151.90 cr
c) Rs. 145.60 cr d) Rs. 141.50 cr

02 What is the provision on NPA accounts:
a) **Rs.** 3600 cr b) Rs. 3200 cr
c) Rs. 2800 cr
d) Incomplete information. Cannot be calculated

03 What is the total amount of provisions on total advances, including the standard accounts:
a) Rs. 3612.30 cr b) Rs. 2945.60 cr
c) Rs. 2840.20 cr
d) Incomplete information. Cannot be calculated

04 What is the amount of gross NPA:
a) Rs. 4000 cr b) Rs. 3600 cr
c) Ps. 3200 cr d) Rs. 2800 cr

05 What is the amount of net NPA:
a) Rs. 800 cr b) Rs. 1000 cr
c) Rs. 1200 cr d) Incomplete information

06 What is the provision coverage ratio for NPA:
a) 70%¯ — b) 74.3%
c) 75.2% d) 77.85

07 What is the minimum amount of provisions to be maintained by the bank to meet the provisioning coverage ratio of 70%;
a) Ps. 3600 cr b) Rs. 3200 cr
c) Rs. 2880 cr d) *Rs.* 2520 cr

Answers: 1-c 2-c 3-b 4-b 5-a 6-d 7-d

Explanations:

Que-1: Standard account Total = 40000 cr — 9% NPA = 3600 cr. = 40000 — 3600 = 36400 cr. Provision at 0.4% = 36400 x 0.4% = 145.60 cr

Que-2: Provision on NPA = Gross NPA 9% - net NPA 2% = 7% i.e. 40000 x 7% = 2800 cr

Que-3: Prevision on¯NPA = Gross NPA 9% - net NPA 2% = 7% i.e. 40000 x 7% = 2800 cr. Provision on

standard account Rs. 145.60 cr. Hence total provision = 2945.60 cr

Que-4: 40000 x 9% = 3600 cr

Que-5: 40000 x 2% = 800 cr

Que-6: Total provision on NPA/Gross NPA = 2800/3600 = 77.8%

Que-7: Gross NPA x 70% = 3600 x 70% = 2520 cr

Case-2

International Banks provided following information about its-NPA account as on Mar 31, 2012.

Total loans — Rs. 40000 cr. Standard accounts Rs. 38000 cr induding direct agriculture and SME loans of Rs. 10000 cr. Sub-standard Rs. 800 a- out of which unsecured sub-standard Rs. 200 cr. Doubtful up to 1 year Rs. 800 a-, Doubtful above 1 year up to 3 years Rs. 200 cr and doubtful above 3 years Rs. 120 cr and loss accounts Rs. 80 cr. All doubtful loans are fully secured.

01 What is the provision on standard accounts:
a) Rs. 25 cr b) Rs. 112 cr
c) Rs. 137 cr *d)* Rs. 151 cr

02 What is the amount of provision on sub-standard loan accounts:
a) Rs. 120 cr b) Rs. 140 cr
c) Rs. 160 cr d) Rs. 240 cr

03 What is the amount of provision on doubtful loan accounts:
a) Rs. 400 cr b) Rs. 340 cr
c) Rs. 320 cr d) Rs. 260 cr

04 What is the total provision on NPA loan:
a) Rs. 420 cr b) Rs. 560 cr
c) Rs. 580 cr d) Rs. 620 cr

05 What is the total provision on standard and NPA loans:
a) Rs. 813 cr b) Rs. 757 cr
c) Rs. 689 cr d) Rs. 716 cr

06 What is the provision coverage ratio of the bank:
a) 78.5% b) 30.8%
c) 31.0% d) 34.1%

07 If the security value in secured sub-standard accounts is Rs. 500 cr, what will be the provision on sub-standard accounts:
a) Rs. 90 cr b) Rs. 85 cr
c) Rs. 80 cr d) Rs. 75 cr

08 If security value in DF-1 category accounts is Rs. 600 cr, what will be amount of provision for OF-1 category accounts:
a) Rs. 800 cr b) Rs. 600 cr
c) Rs. 350 cr d) Rs. 190 cr

09 If security value is Rs. 150 cr in DF-2 accounts, the provision shall be:
a) Rs. 110 cr b) Rs. 95 cr
c) Rs. 80 cr d) Rs. 75 cr

10 What is the percentage of gross NPA:
a) 8% b) 6%
c) 5% d) 4%

11 what is the amount of net NPA:
a) Rs. 2000 cr b) Rs. 1380 cr
c) Rs. 1170 cr d) Rs. 1080 cr

12 What is the percentage of net NPA:
a) 3.29% b) 3.41%
c) 3.50% -1:1)-4.01%

Answers:1-c 2-b 3-a 4-d 5-b 6-c 7-a 8-c 9-a 10-c 11-b 12-c Explanations:

Que-1: Provision on general accounts = 28000 x 0.4% = 112 cr + Provision on direct agriculture *and* SME accounts = 10000 x 0.25% = 25 c. Total provision = 112 + 25 = 137 cr

Que-2: Secured sub-standard accounts = 600 x 15% = 90 cr + Unsecured sub-standard 200 x 25% = 50cr. Total provision = 140 cr •

Que-3: DF-1 = 800 x 25% = 200 a + DF-2 = 200 x 40% = 80 cr + 120 x 100 = 120 cr. Total provision = 200 + 80 + 120 = 400 cr

Que-4: Sub-standard = 140 + DF = 400 + loss accounts = 80 cr Total = 140 + 400 + 80 = 620 cr

Que-5: Standard accounts = 137 cr + NPA loans Rs. 620 cr. Total provision = 757 cr
Que-6: 620/2000X100 = 37.9%
Que-7: In secured sub-standard accounts, secured and unsecured balance is not to be differentiated for provisioning purpose. Hence the provision shall be 600 x 15% = Rs. 90 cr
Que-8: Provision on secured portion 25% and on unsecured portion 100%. Hence provision shall be as under:
Secured accounts = 600 x 25% = 150 a Unsecured 200 x 100 = 200 x 100 = 200 cr
Total provision = 150 + 200 = 350 cr
Que-9: Secured = 40% and unsecured = 100%
Secured account = 150 x 40 = 60 cr Unsecured = 50 x 100 = 50 a
Total = 60 + 50 = 110 cr
Que-10: 2000 a/40000 a = 5%
Que-11: Gross NPAs - provision = 2000 - 620 cr = 1380 cr
Que-12: Net advances =7;0000 - 60 = 39380. Net NPA = 1380. NPA %age = 1380/39380 = 3.5%

Case- 3

International Bank has following information relating to NPA loans portfolio on its records as on Mar 31, 2012.
Sub-standard secured loans - Rs. 1200 cr (security value Rs. 1000 cr),
Sub-standard unsecured loans - Rs. 200 a (security value Rs. 18 a),
Doubtful up to 1 year loans - Rs. 800 cr (security value Rs. 600 cr),
Doubtful above 1 year up to 3 years loans - Rs. 800 cr (security value Rs. 400 cr),
Doubtful,above 3 years loans - Rs. 800 a (security value Rs. 200 cr),
Loss loans - Rs. 200 cr (security value Rs. 18 cr),
Total advances - Rs. 40000 cr. Total NPA Rs. 4000 cr
On the basis of given information, answer the following questions:
01 What is the percentage of gross NPA:
a) 10% b) 11%
C) 12% d) 8%
02 What is the amount of provision for sub-standard account:
a) Rs. 320 cr b) Rs. 240 cr -
c) Rs. 230 cr d) Rs. 180 cr
03 What Is the amount of provision for doubtful loans:
a) Rs. 1710 cr b) Rs. 1660 cr
c) Rs. 1520 cr d) Rs. 1490 cr
04 What is the amount of total provisions:
a) Rs. 1640 cr b) Rs. 1760 cr
c) Rs. 1840 cr d) Rs. 2140 cr
05 What is the percentage of net NPA:
a) 5.18% b) 4.91%
c) 4.65%
d) Cannot be calculated on the basis of given information
06 What is the provision coverage ratio:
a) 51.5% b) 53.5%
c) 57.9% d) 64.5%
Answers: 1-a 2-c 3-a 4-d 5-b 6-b
Explanations:
Que-1: Gross NPATTotal advances = 4000/40000 x 100 = 10%
Que-2: 1200 x 15% + 200 x 25% = 180 + 50 = 230 cr
Que-3: DF-1 600 x 25% = 150 cr unsecured portion 200 x 100 = 200 cr Total = 350 cr
DF-2 400 x 40% = 160 cr i- unsecured portion = 400 x 100 = 400 cr Total = 560 cr
DF-3 = 800 crx100% = 800 cr Total provision = 350 + 560 + 800 = 1710 cr
Que-4:Total provision = Sub-standard = 230 cr, Doubtful 1710 cr, Loss = 200 cr. Total provision Rs. 2140 cr
Que-5: Net NPA = 4000 – 2140 = 1860 -
Net advance = 40000 – 2140 = 37860
Net NPA/Net Advances 1860/3.7860 = 4.91%
Que-6: 2140/4000 = 53.5%

CASE STUDIES ON CAPITAL ADEQUACY

Case-.1.

International Bank has paid up capital of Rs. 100 cr, free reserves of Rs. 300 cr, provisions and contingencies reserves Rs. 200 cr, revaluation reserve of Rs. *300* cr, Perpetual non-cumulative preference shares of Rs. 400 cr, and subordinated debt of Rs. 300 cr. The risk weighted assets for credit and operational risk are Rs. 10000 cr and for-market risk Rs. 4000 cr.
Based on the above information, answer the following question:

01 What is the amount of Tier-1 capital:
a) 900 cr b) 800 cr
c) 750 cr d) 610 cr

02 Calculate the amount of Tier-2 capital:
a) 900 cr b) 800 cr
c) 750 cr d) 610 cr

03 Calculate the amount of capital fund:
a) 895 cr b) 1255 cr
c) 1435 cr d) 1675 cr

04 What is the capital adequacy ratio of the bank:
a) 9% *b)* 9.65%
c) 10.05% d) 10.07%

05 What is amount of minimum capital to support credit and operational risk:
a) 900 cr b) 950 cr
c) 1000 cr d) 1250 cr

06 What is the amount of minimum Tier 1 and Tier 21-6 support-fife credit and operational risk:
a) 900 cr, 900 cr b) 600 cr, 900 cr
c) 450 cr, 450 cr d) 300 cr, 450 cr

07 What is the amount of Tier-1 capital fund, to support market risk:
a) 450 cr b) 350 cr
c) 250 cr d) 185 cr

08 What is the amount of Tier-2 capital fund, to support market risk:
a) 450 cr b) 350 cr
c) 250 cr d) 160 cr

Answers: 1-b 2-d 3-c 4-d 5-a 6-c 7-b 8-d

Explanations:

Que-1:Tter-1 = Capital + Free Reserves + Perpetual non-cumulative preffrence shares = 100+300+400 cr = 800 cr. Tier II = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount + subordinated debts = 175+135 (300x45%, at 55% discount) + 300 = 610.

Que-2: Tier-1 = Capital + Free Reserves + Perpetual_non-cumulative preference shares = 100+300+400 cr 800 cr. Tier II = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount + subordinated debts = 175+135 (300x45%, at 55% discount) + 300 = 610.

Que-3: Tier-1 = Capital + Free Reserves + Perpetual non-cumulative preference shares = 100+300+400 cr = 800 cr. Tier II = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount + subordinated debts = 175+135 (300x45%, at 55% discount) +
300 = 610. Total capital fund = 800+610 = 1410 cr ._ •

Que-4: 1410/14000 = 10.07%

Que-S: 10000x9% = 900 cr

Que-6: Tier 1 = 10000x4.5% = 450cr Tier-2 = 10000x4.5% = 450 a (Tier 2 capital fund cannot be more than Tier **I)**

Que-7: Total Tier 1 — Min Tier 1 for credit and operational risk = 800-450 = 350 cr

Que-8: Total Tier 2 — Min Ter 2 for credit and operational risk = 610-450 = 160 cr

Case — 2

Popular Bank has provided following details: 1—
Tier 1 capital = 2000 cr
2 - Tier 2 capital = 2400 cr
3 — Risk weighted assets for credit risk = Rs. 20000 a
4 - Risk weighted assets for market risk = Rs. 1000 cr
5 Capital charge for operational risk = Rs. 600 cr

01 Based on the given information, please calculate the amount of total risk weighted assets, if the CAR is 9%:
a) Rs. 21600 cr b) Rs. 23200 cr
c) Rs. 33457 cr d) Rs. 37779 cr

02 Based on the given information, please calculate the amount of Tier I capital adequacy ratio of the bank:
a) 6% b) 5.81%
c) 5.29% d) 4.89%

03 Based on the given information, please calculate the total capital to risk assets ratio:
a) 9% b) 10.59%
c) 11.12% d) 11.67%

Answers: 1-d 2-c 3-b Explanations:

1. RWA for Credit risk + RWA for market risk + RWA for operational risk = 20000 + 1000/0.09 + 600/0.09= 20000 + 11112 + 6667 = 37779 cr.
2. RWA for Credit risk + RWA for market risk + RWA for operational risk = 20000 + 1000/0.09 + 600/0.09 = 20000 + 11112 + 6667 = 37779 cr.

Tier I capital = 2000
Tier **II** capital = 2400
Total = 4000 (Tier 2 cannot be Tier I)
Tier **I** capital funds = Eligible Tier I/Total RWA = 2000/37779 = 5.29%

3. RWA for Credit risk + RWA for market risk + RWA for operational risk = 20000 + 1000/0.09 + 600/0.09 = 20000 + 11112 + 6667 = 37779 cr.

Tier I capital = 2000 ____
Tier H capital = 2400
Total = 4000 (Tier 2 cannot be Tier I. Hence maximum it can be taken is 2000 cr)
Total capital funds = Eligible total capital fund/Total RWA = 4000/37779 = 10.59%

Case- 3

International Bank has paid up capital of Rs. 200 cr, free reserves of Rs. 600 cr, provisions and contingencies reserves Rs. 400 cr, revaluation reserve of Rs. 600 cr, Perpetual non-cumulative preference shares of Rs. 800 cr, and subordinated debt of Rs. 600 cr. The risk weighted assets for credit and operational risk are Rs. 20000 cr and for-market risk Rs. 8000 cr.

Based on the above information, answer the following question:

01 What is the amount of Tier-1 capital:
a) 1800 er b) 1600 cr
c) 1500 cr d) 1220 cr

02 Calculate the amount of Tier-2 capital:
a) 1800 cr • b) 1600 cr
c) 1500 cr d) 1200 cr

03 Calculate the amount of fund:
a) 1790 cr b) 2510 cr
c) 2820 cr d) 3350 cr

04 What is the capital adequacy ratio of the bank:
a) 9% b) 9.65%
c) 10.05% d) 10.07%

05 What is amount of minimum capital to support credit and operational risk:
a) 1800 cr b) 1900 cr
c) 2000 cr d) 2500 cr

06 What is the amount of minimum Tier 1 and Tier 2 to support the credit and operational risk: a) 1800 cr, 1800 cr b) 1200 cr, 1800 cr
c) 900 cr, 900 cr 600 cr, 900 cr

07 What is the amount of Tier-1 capital fund, to support market risk:
a) 900 cr b) 700 cr
c) 500 cr d) 370 cr

08 What is the amount of Tier-2 capital fund, to support market risk:
a) 900 cr b) 700 cr
c) 500 cr d) 320 cr

Answers: 1-b 2-d 3-c 4-d 5-a 6-c 7-b 8-d
Explanations:

Que-1: Tier-1 = Capital + Free Reserves + Perpetual non-cumulative preference shares = 200+600+800 cr =- 1600 cr. Tier II = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount ˉFsubordinated debts = 350+270 (600x45%, at 55% discount) + 600 = 1220.

Que-2: Tier-1 = Capital + Free Reserves + Perpetual non-cumulative preference shares = 200+600+800 cr = 1600 cr. Tier II = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount + subordinated debts = 350+270 (600x45%, at 55% discount) + 600 = 1220.

Que-3:71er-1 = Capital + Free Reserves + Perpetual non-cumulative preference shares = 200+600+800 cr = 1600 cr. Tier H = Provisions and contingencies reserves maximum 1.25% of risk weighted assets + revaluation reserve at 55% discount + subordinated debts = 350+270 (600x45%, at 55% discount) + 600 = 1220. Total capital fund = 1600+1220 = 2850 cr

Que-4: 2820/28000 = 10.25%

Que-5: 20000x9% = 1800 cr

Que-6: Tier 1 = 20000x4.5% = 900cr Tier-2 = 20000x4.5% = 900 cr

Que-7: Total Tier 1— Min Tier 1 for credit and operational risk = 1600-900 = 700 cr

Que-B: Total Tier 2 — Min Tier 2 for credit and operational risk = 1220-900 = 320 cr

Case- 4

International Bank provides following information:

Rs. In crores	1st year	rd year
Net profits	120	150
Provisions	240	290
Staff expenses	280	320
Other operating 1 expenses	160	240
Other income	320	460

Based on the above information, answer the following questions

01 What is the amount of capital charge for operation risk, on the basis of *1* year results alone:

a) 100 cr b) 120 cr
c) 150 cr d) 135 cr

02 What is the amount of capital charge for operational risk, on the basis of 2nd year results alone:

a) 100 cr b) 120 cr
c) 150 cr d) 135 cr

03 What is the amount of capital charge for operational risk, on the basis of 1g and 2nd year results:

a) 100 cr b) 120 cr
c) 135 cr d) 150 cr

04 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of *1st* year results alone:

a) 1500 cr b) 1687.50 **cr**
c) 1875 cr d) Incomplete information

05 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of 2nd year results alone:

a) 1500 cr b) 1687.50 cr
c) 1875 cr d) Incomplete information

06 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of 1g year and 2° year results:

a) 1500 cr b) 1687.50 cr
c) 1875 cr d) Incomplete information

Answers: 1-b 2-c 3-c 4-c 5-c 6-b

Explanations:

Que-1: Capital charge = Gross income X 15%. Gross income = net profit + provisions + staff expenses + other operating expenses = 120+240 +280+160 = 800 cr. Capital charge = 800x15% = 120cr

Que-2: Capital charge = Gross income X 15%. Gross income = net profit + provisions + staff expenses + other operating expenses = 150+290 +320+240 = 1000 cr. Capital charge = 1000x15% = 150cr **Que-3:** Capital charge = Gross income X 15%. Gross income = net _profit + provisions + staff expenses + other operating expenses =
year = 120+240 +280+160 = 800 cr.

2nd year = 150+290 +320+240 = 1000 cr.
Average gross income = (800+1000)/2 = 900 Cr. Capital charge = 900x15 = 135cr

Que-4: Capital charge/8% = 120/8% = Rs. 1500 cr
Que-5: Capital charge/8% = 150/8% = Rs. 1875 cr
Que-6: Capital charge/8% = 135/8%=Rs. 1687.50 cr

Case- 5

International Bank provides following information:

Rs. In crores	1st year	2nd year
Net profits	300	400
Provisions	200	300
Staff expenses	300	400
Other operating expenses	200	300
Other income	400	600

BaSed on the above information, answer the following questions

01 What is the amount of capital charge for operation risk, on the basis of 1st year results alone:

a) 120 cr b) 150 cr
c) 180 cr d) 210 cr

02 What is the amount of capital charge for operational risk, on the basis of 2" year results alone:

a) 120 cr • h) 150 er
c) 180 cr d) 210 cr

03 What is the amount of capital charge for operational risk, on the basis of 1st and 2" year results:

a) 120 cr b) 150 cr
c) 180 cr d) 210 *a*

04 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of 1st year results alone:

a) 1875 cr b) 2625 cr
c) 2250 cr d) Incomplete information

05 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of 2" year results alone:

a) 1875 cr b) 2625 cr
c) 2250 cr d) Incomplete information

06 What is the amount of risk weighted assets for operational risk as per Basel II recommendations, on the basis of 1st year and 2nd year results:

a) 1875 cr b) 2625 cr
•c) 2250 cr d) Incomplete information

Answers: 1-b 2-d 3-c 4-a 5-b 6-c

Explanations:

Que-1: Capital charge = Gross income X 15%. Gross income = net profit + provisions + staff expenses + other operating expenses = 300+200+300+200 = 1000 cr. Capital charge = 1000x15% = 150cr

Que-2: Capital charge = Gross income X 15%. Gross income = net profit + provisions + staff expenses + other operating expenses = 400+300+400+300 = 1400 cr. Capital charge = 1400x15% = 210cr

Que-3: Capital charge = Gross income X 15%. Gross income net profit + provisions + staff expenses + other operating expenses =

1st year = 300+200+300+200 = 1000 cr.

2nd year = 400+300+400+300 = 1400 cr.

Average gross income = (1000+1400)/2 = 1200 cr. Capital charge = 1200x15 = 180cr

Que-4: Capital charge / 8% = 150/8% = Rs. 1875 cr

Que-5: Capital charge / 8% = 210/8% = Rs. 2625 cr

Que-6: Capital charge / 8% = 180/8% = Rs. 2250 cr

Case- .6

The financial results of International Bank as on Mar 31, 2010 provide the following information:

Interest earned — Rs. 24000 cr, other non-interest income — Rs. 3600 cr, profit on sale of fixed assets — Rs. 240 cr, income on sale of 3rd party products — *Rs.* 160 cr, interest paid — Rs. 15600 cr, operating expense — Rs 7600, provisions Rs. 3200 cr.

In the basis of given information, answer the following questions.

01 What is the amount of operating profit:

a) Rs. 1600 a b) Rs. 4800 cr
c). Rs. 6400 cr d) Inadequate information

02 What is the amount of gross income as per Basic Indicator Approach for operational risk:

a) Rs. 24000 cr b) Rs. 15600 cr
c) Rs. 12000 cr d) Rs. 8400 cr

03 What is the amount of capital charge for operational risk under basic indicator approach:
a) Rs. 1200 cr b) Rs. 1800 cr
c) Rs. 2400 cr d) Rs. 3000 cr
04 What is the amount of risk weighted assets for operational risk under basic indicator approach:
a) Rs. 18000 cr b) Rs. 20000 cr
c) Rs. 22500 cr d) Rs. 25500 cr
Answers: 1-b 2-c 3-b 4-c
Explanations:
Que-1: Operating profit = Interest earned + other non-interest income + profit on sale of fixed assets + income on sale of 3rd party products — interest paid — operating expense
Rs. 24000 cr + Rs. 3600 cr + Rs. 240 a + Rs. 160 cr — Rs. 15600 cr — Rs. 7600 = 4800
Que-2: Gross income = Net interest income + net non-interest income
Gross income = 24000 — 15600 + 3600 = 12000
Que-3: Capital charge for operational risk = Gross income x 15% = 12000 x 15% = 1800 cr
Que-4: RWA = Capital charge/minimum Basel-2 CAR. RWA=1800/8% = 22500 cr

Case- 7
The financial results of International Bank as on Mar 31, 2010 provide the following information:
Interest earned — Rs. 28000 cr, other non-interest income — Rs. 4700 cr, profit on sale of fixed assets — Rs. 350 cr, income on sale of 3rd party products — Rs. 250 cr, interest paid — Rs. 17800 a, operating expense — Rs 8800, provisions Rs. 1100 cr.
On the basis of given information, answer the following questions.
01 What is the amount of operating profit:
a) Rs. 5600 cr b) Rs. 5800 a
c) Rs. 6200 cr d) Rs. 6700 cr
02 What is the amount of gross income as per Basic Indicator Approach for operational risk:
a) Rs. 14900 cr b) Rs. 15600 a
C) Rs. 16000 cr d) *Rs.* 18400 cr
03 What is the amount of capital charge for operational risk under *basic* indicator approach:
a) Rs. 1800 cr b) Rs. 2075a
c) Rs. 2235 cr d) Rs. 2430 cr
04 What is the amount of risk weighted assets for operational risk under basic indicator approach:
a) Rs. 18540.50 cr b) Rs. 22507.75 a
c) Rs. 22511.50 cr d) Rs. 27939.50 a
Answers: 1-a 2-a 3-c 4-d
Explanations:
Que-1: Operating profit = Interest earned + other non-interest income + profit on sale of fixed assets + income on sale of 3rd party products — interest paid — operating expense
Rs. 28000 cr + Rs. 4700 a + Rs. 350 cr + Rs. 250 a — Rs. 17800 cr — Rs. 8800 = **6700** **Que-2:** Gross income = Net interest income + net non-interest income
Gross income = (28000-17800) + 4700 = **14900**
Que-3: Capital charge for operational risk = Gross income x 15% = 14900 x 15% = 2235 cr **Que-4:**
RWA = Capital charge/minimum Basel-2 CAR. RWA=2235/8% = 27937.50 Cr

Case- 8
The assets side of balance sheet of International Bank provides the following information:
Fixed Assets — 500 cr, Investment in Central govt. securities — Rs. 5000 a. In standard loan accounts, the Retail loans — Rs. 3000 cr, House Loans — Rs. 2000 a (all Individual loans below Rs. 30 lac and fully secured by mortgage), Other loans — Rs. 10000 Cr. Sub-standard secured loans — Rs. 500 a, sub-standard unsecured loans Rs. 150 a, Doubtful loans Rs. 800 cr (all OF-1 category and fully secured) and other assets — Rs. 200 cr. Based on this information, by using Standard Approach for credit risk, answer the following questions.
01 What is the amount of risk weighted assets for retail loans:
a) Rs. 3000 cr b) Rs. 2500 cr
c) Rs. 2250 cr, d) Zero, as retail loans are risk free
02 What is the amount of risk weighted assets for housing loans:
a) Rs. 2000 cr b) Rs. 1800 cr
c) Rs. 1500 cr d) Rs. 1000 cr
03 What is the amount of risk weighted assets *for* investment in govt. securities:
a) Rs. 5000 cr b) Rs. 2500 cr

c) Rs. 1000 cr d) NII

04 What is the amount of risk weighted assets for sub-standard secured accounts:

a) Rs. 250 cr b) Rs. 500 a
c) Rs. 750 cr d) Rs. 1000 cr

05 What is *the* amount of risk weighted assets for sub-standard unsecured accounts:

a) Rs. 75 cr b) Rs. 112.50 cr
c) Rs. 150 cr d) Rs. 225 cr

06 What is the amount of risk weighted assets for doubtful accounts:

a) Rs. 400 cr b) Rs. 600 cr
c) Rs. 800 cr d) Rs. 1600 cr

Answers: 1-c 2-d 3-d 4-c 5-c 6-c

Explanations:

Que-1: RW is 75% on retail loans. RW value = 3000x75% = 2250

Que-2: RW is 50% on housing loans for individual loan up to Rs. 30 lac. RW value --- 2000x50% = 1000 **Que-3:** On claims against Central govt., the risk weight is zero. 5000x0% = 0

Que-4: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard secured account, the provision being 15%, RW is 150%. Hence RWA 500x150% = 750 cr

Que-5: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard unsecured account, the provision being 25%, RW is 100%. Hence RWA = 150x100% = 150 cr

Que-6: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In doubtful up to one year category (DF-1) account, the provision being 25%, RW Is 100%. Hence RWA = 800x100% = 800 cr

Case- 9

The assets side of balance sheet of International Bank provides the following information:
Fixed Assets — 600 cr, Investment in Central govt. securities — Rs. 6000 cr. In standard loan accounts, the Retail loans — Rs. 4000 cr, House Loans — Rs. 1000 cr (all individual loans above Rs. 30 lac and properly secured by mortgage), Other loans — Rs. 8000 cr. Sub-standard secured loans — Rs. 400 cr, sub-standard unsecured loans Rs. 100 cr, Doubtful loans Rs. 500 caall DF-3 category and fully secured) and other assets Rs. 100 cr.
Based on this information, by using Standard Approach for credit risk, answer the following questions.

01 What is the amount of risk weighted assets for retail loans:

a) Rs. 3000 cr b) Rs. 2500 cr
c) Rs. 2250 cr d) Zero, as retail loans are risk free

02 What is the amount of risk weighted assets for housing loans:

a) Rs. 500 cr b) Rs. 750 cr
c) Rs. 1000 cr d) Rs. 1250 cr

03 What is the amount of risk weighted assets for investment in govt. securities:

a) Rs. 5000 cr b) Rs. 2500 cr
c) Rs. 1000 cr d) Nil

04 What is the amount of risk weighted assets for sub-standard secured accounts:

a) Rs. 200 cr b) Rs. 400 cr
c) Rs. **600** cr d) Rs. 900 cr

OS What is the amount of risk weighted assets for sub-standard unsecured accounts:

a) Rs. 100 a b) Rs. 112.50 cr
c) Rs. 150 cr d) Rs. 250 cr

06 What *is* the amount of risk weighted assets for doubtful accounts:

a) Rs. 250 *a* b) Rs. 400 cr
c) Rs. 500 cr d) Rs. 1000 cr

Answers: 1-a 2-b 3-d 4-t 5-a 6-a Explanations:

Que-1: RW is 75% on retail loans. RW value = 4000x75% = 3000

Que-2: RW is 75% on housing loans for individual loan above Rs. 30 lic. RW value = 1000x75% = 750 cr

Que-3: On claims against Central govt., the risk weight is zero. 6000x0% -= 0

Que-4: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard secured account, the provision being 15%, RW is 150%. Hence RWA = 400x150% = 600 cr

Que-5: RW is 150%, if the provision is less than 20% and 100%, If the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard unsecured account, the provision being 25%, RW is 100%. Hence

RWA = 100x100% = 100 cr

Que-6: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In doubtful above 3 years category (DF-3) account, the provision being 100%, RW is 50%. Hence RWA = 500x50% = 250 cr

Case- 10

You are working as an Executive with International Bank. The MIS Department of the bank has submitted the following data relating to the bank, from which you are required to estimate the likely Capital Funds required by the Banks as on March, 31st , 2010 taking into account the Basel Ii implementation compliance of RBI in India. I) Risk- Weighted Assets for Credit Risk likely to be Rs.62,854 crores.

ii) Capital Allocation for Market Risk to be Rs.100/- crores

iii) For Operational Risk, the following Data available. The gross income of the bank is Rs.3600 cr for 31.3.08, Rs.4000 cr for 31.3.09 and Rs.4400 cr for 31.3.10.

The bank is required to calculate Capital Charge for operational Risk by Basic Indicator Approach.

You are required to take into account the Capital Adequacy prescription applicable to Indian Banks for calculation of capital fund.

Answer the following questions based on above information.

01 As per RBI directives, the Minimum CapitalAdequacy Ratio and minimum Tier i capital the Bank is required to maintain-as on 31.3.2010 should be respectively

a) 8% and 4.5% b) 9% and 6%

c) 9% and 4.5 % d) 12% and not specified

02 Based on the Gross Income given above, the likely Capital Charge as on March 31, 2010 to cover Operational Risk under Basic indicator Approach shall be:

a) 475 crores b) 540 crores

c) 590 crores d) 600 crores

03 What is the totall Capital Funds requirement of the bank, for covering Credit Risk as on March 31, 2010 to comply base! II norms.

a) Rs.5656.86 crore b) Rs.6767.97 crore c) Rs.4848.87 crore d) Rs.4949.67 crore

04 What is the minimum *Tier* I Capital Fund requirement of the bank, for covering Credit Risk as on March 31, 2010 to comply Basel II norms.

a) Rs.3387.22 crore b) Rs.3467.43 crore

c) Rs.3641.10 crore d) Rs.3771.24 crore

Ans. 1-b 2-d 3-a 4-d

Explanation:

Que-1: RBI directives prescribed min CRAR of 9% and Tier I should be at least 6% by 31.3.2010

Que-2: Average gross income = 3600 + 4000 4400 = 12000/3 = 4000. Capital charge for operational risk is 15% of average gross income for 3 years. Hence 4000x15% = Rs.600 cr

Que-3: For credit risk weighted assets of Rs.62854 cr, the 9% capital fund = 62854x9% = 5656.86 cr.

Que-4: For credit risk weighted assets of Rs.62854 cr, the 9% capital fund = 62854x9% = 5656.87 cr. Out of this Tier 1 should be 6%. Hence 5656-.87x6/9 = Rs.3771.24 cr.

Case- 11

You are working as officer with International *bank.* The MIS department of the bank *has* submitted the following data relating to the bank, from which you are required to estimate the likely Capital Funds required by bank as on March 31st, 2010 taking into account the Basel II implementation compliance of RBI in India.

I) Risk-Weighted Assets for credit Risk likely to be Rs.70,000 crores.

ii) Capital Allocation for Market Risk to be Rs.200/- crores

iii) For Operational Risk following data is available. The gross income of the bank is Rs.4000 cr for 31.3.08, Rs.5000 cr for 31.3.09 and Rs.6000 cr for 31.3.10.

The bank is required to calculate Capital Charge for operational Risk by following Basic Indicator Approach.

You are required to take into account the Capital Adequacy prescription applicable to Indian Banks for calculation of capital fund.

Answer the following questions based on above information.

01 As per RBI directives, the Minimum Capital Adequacy Ratio and maximum Tier II capital, the Bank is required to maintain as on 31.3.2010 should be respectively

a) 9% and 50% of capital fund

b) 9% and 100% of capital fund

c) 8% and 50% of capital fund

d) 8% and 50% capital fund

02 Based on the Gross Income given above, the likely Capital Charge as on March 31, 2010 to cover Operational Risk under Basic Indicator Approach shall be: b

a) 750 crores b) 700 crores
c) 600 crores d) 500 crores

03 What is the total Capital Funds requirement of the bank, for covering Credit Risk as on March 31, 2010 to comply Basel li norms.

a) Rs.5400 crore b) Rs.6000 crores
c) Rs.6300 crores d) Rs.6600 crores

04 What is the minimum Tier I Capital Fund requirement of the bank, for covering Credit Risk as on March 31, 2010 to comply Basel II norms.

a) Rs.4200 crore b) Rs.3900 crores
c) Rs.3600 crores d) Rs.3300 crores

Ans. 1-a 2-a 3-c 4-a

Explanations:

Que-1: RBI directives prescribe min CRAR of 9%, minimum Tier **I** of at least 6% *by* 31.3.2010. Tier *It* can be maximum 50% of the capital fund.

Que-2: Average gross income = 4000 + 5000 + 6000 = 15000/3 = 5000. Capital charge for operational risk is 15% of average gross income for 3 years. Hence 5000x15%=Rs.750 cr

Que-3: For credit risk weighted assets of Rs.70000 Cr, the 9% capital fund = 70000 x 9% = 6300 cr.

Que-4: For credit risk weighted assets of Rs.70000 cr, the capital fund = 70000 x 9% = 6300 cr. Out of this Tier

TEST YOUR SELF

PRACTICE TEST PAPERS

(BASED ON IIBF TEST PATTERN)

BANK FINANCIAL MANAGEMENT

(CAIIB PAPER - 2)

PRACTICE TEST PAPER NO. 1 (TEST YOUR SELF)

1) Assets represent source of funds whereas liabilities denote the use of funds in a balance sheet.
a) True b) False c) Difficult to say

2) A bank's liabilities include deposits, borrowings and capital.- Among these which contributes higher % in the liabilities portfolio.
a) Deposits *b)* Borrowings c) Investments d) Capital

3) Asset liability management is only management of maturity mismatch and has no bearing on profit augmentation
a) True b) False c) Difficult to say

4) "ALM defines management of all assets and liabilities (both off and a balance sheet items)". The "Off balance sheet items" are
a) Current Assets & Current Liabilities b) Preliminary & Pre-paid expenses
c) Letters of Credit & Financial Guarantee d) All of the above

5) ___________has formulated comprehensive guidelines in respect of interest rate and liquidity risk management systems in banks which form part of ALM.
a) ALCO b) Individual bank board c) RBI d) IBA

6) Asset-Liability Management Committee (ALCO) deals with
a) Market risk b) Credit Policy c) Counterparty risk and _country risk d) All of the above

7) Objective of liquidity management is to
a) Ensure profitability b) Ensure liquidity c) Either of two d) Both

8) Banks need liquidity to
a) Meet deposit withdrawal b) Fund loan demands c) Both of them d) None of them

9) Adequacy of bank's liquidity position depends upon
a) Sources of funds b) Anticipated future funding needs c) Present and future earnings capacity d-) **All** of the above

10) The need to replace net outflows due to unanticipated withdrawal of deposits is known as ___ risk.
a) capital b) operational c) funding d) none of these

11) The need to compensate for non-receipt of expected inflows of funds is classified as risk
a) Operational b) Liquidity c) Time d) None 'of these

12) Call risk arises due to crystallization of------------------------
a) Assets b) Profits c) Contingent Liabilities d) None of these

13) Maturity ladders enables the bank to estimate the difference ------------------------ and predetermined periods.
a) Cash, Transfer b) Interest, Dividends c) Cash inflows, Cash outflows d) None

14) Liquidity management methodology of evaluating whether a bank has sufficient liquid funds based on the behavior of cash flows under the different what if scenarios is known as
a) Alternative Scenarios b) Asset Liability Management c) Duration Gap

15) The capability of bank to withstand a net funding requirement in a bank siwific ter general market liquidity crisis is denoted as _
a) Contingency Planning b) Long term planning c) Liquidity crisis d)None of these

16) ALM is required to match the assets and liabilities to__ __ liquidity risk as well as market risk.
a) Maximise b) Minimize c) Average d) None of these •

17) Liquidity is ensured by grouping the assets / liabilities on their ---------------------------
a) Interest Rates b) Spread c) Maturities d) None of these

18) Proliferation of NPA results in increasing
a) Liquidity mismatch b) Interest Mismatch c) Maturity mismatch

19) More Liquidity in Banking System is a sign of
a) Increase in profits of the banks b) Decrease in profits of the banks
c) Neither increase nor decrease in profits d) Difficult to define

20) Liquidity Risk means
a) More Liquid funds in the Banks b) More Demand Deposits than Time Deposits

c) Insufficient Cash for normal cash requirements d) Credit Deposit Ratio is low

21) Net interest income is

a) Interest earned on advances b)interest earned on investments c)Total interest earned on advances and investment d) Difference between interest earned and interest paid

22) Interest rate risk is a type of

a) Credit risk b) Market risk c) Operational risk d) All of the above

23) Premature payment of a term loan will result in interest rate risk of type

a) Basis risk b) Yield curve risk c) Embedded option risk d) Mismatch risk

24) A bank funds its asets from a pool of composite liabilities. Apart from credit and operational risks, it faces

a) Basis risk b) Mismatch risk c) Market risk d) Liquidity risk

25) Deregulated environment has narrowed spreads of the banks.

a) True b) False c) Difficult to say

26) Net interest margin is also known as 'Spread'

a) True b) False c) Difficult to say

27) Net Interest Margin is defined as net interest income divided by ----------------------------

a) Net Profit b) Average Total Liabilities c) Average total Assets d) None

28) The Institution is in a position to benefit from rising interest rate when assets are than liabilities.

a) Smaller b) Lower c) Greater d) None of these

29) Changes in interest rates also affect the underlying value of the bank's ______

a) Gross Profit, Net Profit b) Gross Income, Gross Expenditure c) Asset, Liabilities d) None of these

30) Rise in interest rates -- the market value of that asset or liability. Conversely falling interest rates the market value of assets or liabilities.

a) Decreases, increases b) Increases, Decreases c) Rise, Fall d) None of these

31) The gap is the difference between the amount of assets and liabilities on which the interest rates are during a given period.

a) Fixed b) Reset c) Falling d) None of these

32) Mismatch occurs when assets and liabilities fall due for ---------------------------- in different periods.

a) Mis-match b) ALM c) Re-pricing d) None of these

33) The economic value of a bank can be viewed as the present value of the bank's expected

a) Gross Profit b) Gross Revenue c) Net Cash Flows d) None of these

34) A negative, or liability — sensitive gap occurs when liabilities assets (including OBS positions) in a given time band.

a) Change b) Exceed c) Include d) None of these

35) Interest rate risk can be managed by matching re-priceable assets with

a) RE-priceable liabilities b) RE-priceable assets c) Pricing of product

36) The adverse impact on Nil due to mismatches can be minimized by fixing appropriate on interest rate sensitivity gaps.

a) Within limits b) Tolerance limits c) Border limits d) None of these

37) Net interest Margin means

a) The difference between Yield on Advances

b) The difference between Yield on Advances and Cost of Deposits

c) The difference between cost of deposits and Tax deducted at source

d) All of the above

38) When the interest rates fall, the market price of fixed rate bond

a) Falls b) rises c) does not change

39) When interest rates go up, prices of fixed interest bonds

a) Go up b) Go down c) Remain unchanged

40) A fall in interest rates will make prices of government securities

a) go down b) go up c) remain unchanged d) none

41) A fall in the interest rates causes government securities to

a) Remain stable b) fall c) rise

42) A bond with remaining maturity of 5 years is presently yielding 6%. Its modified duration is 5 years. What is

its Mc Cauley's duration?

a) 5.05% b) 3.77% c) 5.30% d) 6.00%

43) Estimates derived from a standard duration generally focus on just one form of interest rate risk exposure i.e., risk.

a) Re-pricing b) Interest c) Liquidity d) None of these

44) VaR is not enough to assess market risk of a portfolio. Stress testing is desirable because

a) It helps in calibrating VaR module
b) It helps as an additional risk measure
c) It helps in assessing risk due to abnormal movement of market parameters
d) Its use as VaR measure is not accurate enough

45) 1 day of VaR of a portfolio is Rs. 500000 with 95% confidence level. in a period of six months (125 working days) how many times may the loss on the portfolio exceed Rs. 500000?

a) 4 days b) 5 days c) 6 days d) 7 days

46) Foreign exchange risk is the risk that relates to gains I losses that arise due to in the exchange rates.

a) Constant b) fixed c) Fluctuations d) None of these

47) Appreciations in domestic currency the value of assets and liabilities in FC.

a) Decrease b) Increase c) Constant d) None of these

48) Risk due to change in the foreign exchange rate between the time the transactions is executed and the time it is settled is called _ _

a) Foreign exchange exposure b) Transaction exposure c) Liquidity exposure

49) Translation exposure losses or gains are known as accounting losses I gains as there are no

a) Funds Flow b) Capital Flows c) Cash Flows d) None of these

50) In a forward contract actual cash flow occurs on the date of -------------------------

a) Transaction b) Delivery c) Due Date d) None of these

51) In an option there exists a right but without ------------------------------ to buy (or sell) the currency at an agreed price, on a specified future date.

a) Put option b) Call option c) An obligation d) None of these

52) The right to buy is called a _ __ option; the right to sell, is known as a ------------------- option.

a) Spot, Forward b) Call, Put c) Delivery, Liquidity d) None of these

53) Currency futures are forward contracts which have a standard _ and standard __

a) Assets, Liabilities b) Amount, Maturity c) Size, Maturity d) None of these

54) Swaps can be of two types a --------------------- swap or an ---------------- swap.

a) Currency, Interest b) Forward, Spot c) Put option, Call option d) Options, Futures.

55) Benefits of integrated risk frame work are

a) To relate capital and reserves more effectively to their actual level of risk exposure
b) To evaluate pricing decisions and product profitability
c) In making risk transfer decisions
d) All of these e) none of these

56) A bank expects fall in price of a security if it sells it in the market. What is the risk that the bank is facing?

a) Market risk b) Operational risk c) Asset liquidation risk d) Market liquidity risk

57) Systemic risk the risk of

a) Failure of a bank, which is not adhering to regulations
b) Failure of two banks simultaneously due to bankruptcy of one bank
c) Where a group of banks fail due to contagion effect
d) Failure of the entire banking system

58) Investment in post office time deposit is

a) Zero risk investment b) Low risk investment c) Medium risk investment d) High risk investment

59) Risk mitigation measures result in

a) Reducing downside variability b) Reducing upside potential c) Both (a) & (b) d) None of these

60) Portfolio risk is less than weighted average of individual risks in the portfolio because of

a) diversification effect b) Individual risks do not materialize in a unidirectional manner
c) Both (a) & (b) d) None of these

61) Financial risk is defined as

a) Uncertainties resulting in adverse variation of profitability or outright losses b) Uncertainties that result in outright losses c) Uncertainties in cash flow d) Variations in net cash flows .

62) Strategic risk is a type of

a) Interest rate risk b) Operation risk c) Liquidity risk d) none of these

63) Operating exposure is more of a ----------------------- rather than accounting concept.

a) Supervisory b) Regulatory c) Managerial d) None of these

64) What are the generic "types of risks" that bankers face?

a) Credit Risk & Interest Risk b) Foreign Exchange Risk & Liquidity Risk

c) Operating Risk & Capital Adequacy Risk d) All of the above

65) Nature of profitability and Risk of constituents are more in the following business.

a) Deposits Business b) Advances Business c) Both Deposits and Advances Business d) Collection of Instruments Business

66) A organizational level, overall risk management should be assigned to

a) An independent Risk Management Committee

b) Executive Committee of the top executives that reports directly to the Board of Directors

c) (a) or (b) d) None of these

67) The functions of Risk Management Committee should essentially be

a) To identify the risk profile of the bank b) To monitor the risk profile of the bank

c)To measure the risk profile of the bank d) All of the above

68) Market risk takes the form of

a) Liquidity Risk / interest Rate Risk b) Foreign Exchange Rate (Forex) Risk / Commodity Price Risk

c)Equity Price Risk d) All of the above

69) The management of Interest Rate Risk should be one of the critical components of

a) Market risk management in banks b) Capital adequacy management in banks

c) External funds management in banks d) None of these

70) The banks have been given flexibility to use in-house models for risks measurement and that is

a) VaR for measuring market risk b) IRR for measuring market risk

c) NPV for measuring market risk d) None of these

71) Key funds of Risk Management Committee of Board (RMCB) in Banks is/are

a) Approve operational risk policies and issues delegated to it bylhe Board.

b) Review profiles of operational risk throughout the organization

c) Approve operational risk capital methodology and resulting attribution

d) All of the above

72) "Branch which collecting and holding cash more than its stipulated limit ! normal payment requirement" is called as

a) Cash Surplus at the Branch b) Cash pooling at the Branch c) Safety cash at the Branch d) None of these

73) What is the beta factor for corporate finance under standardized approach?

a) 15% b) 18% c) 12% d) None of these

74) Which of the following is not a type of credit risk?

a) Default risk b) Credit spread risk c) Intrinsic risk d) Basis risk

75) Risk of portfolio with over exposure in steel sector will be

a) More than systematic risk b) Equal to intrinsic risk c) Less than intrinsic risk d) None of these

76) How many accounts have suffered rating migration in the following table

Rating Migration of 100 A Rated Accounts Migration between 31.03.06 and 31.03.07

Last Rating	No. of Accounts	Present Rating						
		A++		A	B+	B	C	Default
A	100	1	1	79	10	4	3	2

a) 2 b) 19 c) 21 d) 25

77) In order to develop a capability to actively manage an credit portfolio one must have in place the following

a) Credit rating model (or models for different categories of loans and advances)

b) Develop and maintain necessary data on defaults of borrowers rating category wise, i.e. 'Rating Migration'.
c) Both (a) and (b) **d)** None of these

78) The model that combines five financial ratios using reported accounting information and equity values to produce on objective measure of borrower's financial health is

a) Altman's 2 score **b)** Credit metrics **c)** Credit risk **d)** none

79) The risk that arises due to worsening of credit quality is

a) Intrinsic risk **b)** Credit spread risk **c)** Portfolio risk **d)** Counterparty risk .

80)A bank holds a security is rated A+. The rating of the security migrates to A. What is the risk that the bank has faced?

a) Market risk **b)** Operational risk **c)** Market liquidation risk **d)** Credit risk

81)A bank holds a security is rated A+. The rating of the security migrates to A. What is the risk that the bank has faced?

a) Market risk **b)** Operational risk **c)** Market liquidation risk **d)** Credit risk

82) Capital charge for credit risk requires input on PD, LGD, EAD and M. Under advanced IRB approach, who provides the input for LGD?

a) Bank **b)** Supervisor **c)** Function provided by BCBS **d)** none

83) Credit risk or default risk involves

a) Inability or unwillingness of a customer **b)** Counterparty to meet commitments in relation to lending **c)** Trading, hedging, settlement and other financial transactions **d)** All of the above

84) Measurement of credit risk is done through

a) Credit rating **b)** Credit scoring **c)** Either (a) or (b) **d)** None of these

85) The credit risk management process should be articulated in the banks through

a) Loan Policy duly approved by the Board. **b)** Sanction process of the Bank
b) Financial powers to the credit committees **d)** None of these

86) The risk rating system should be drawn up in structured manner, incorporating

a) Financial analysis **b)** Projections and sensitivity **c)** Industrial and management risks **d)** All of the above

87) Loan Review Mechanism (LRM) is an effective tool for constantly evaluating the

a) Quality of loan book **b)** Qualitative improvements in credit administration **c)** (a) and (b) **d)** None of these

88) The loan reviews should focus on

a) Approval process **b)** Accuracy and timeliness of credit ratings assigned by loan officers
c)Adherence to internal policies and procedures, and applicable laws / regulations **d)** All of the above

89)A transaction where financial securities are issued against the cash flow generated from a pool of assets is called

a) securitization **b)** credit default swaps **c)** credit linked swaps **d)** total return swaps

90) Operational risk has been defined by the Basel Committee on Banking Supervision:

a) The risk of loss resulting from inadequate or failed internal processes **b)** The risk of loss resulting from people and systems or from external events **c)** Both (a) & (b) **d)** None of these

91) The Basel Committee has identified the• following types of operational risk events as having the potential to result in substantial losses:

a) Internal fraud / External fraud **b)** Employment practices and workplace safety
c)Clients, products and business practices **d)** All of the above

92) The key elements in the Operational Risk Management process include

a) Appropriate policies and procedures -**b)** Effective monitoring and reporting
c) A sound system of internal controls **d)** All of the above

93) Process Risk means

a) Transaction Risk **b)** Operational Control Risk **c)** Model Risk **d)** All of the above

94) Systems Risk means

a) Technology Risk **b)** MIS Risk **c)** Both (**a**) & (**b**) **d)** None of these

95) The Basel Committee has put forward a framework consisting of ______________________ for calculating operational risk capital charges

a) Basic Indicator Approach **b)** Standardized Approach **c)** Advanced Measurement Approaches **d)** All of the

above

96)Reserve Bank proposes to allow banks initially for calculating capital adequacy for operational risk requirements based on

a) Basic Indicator Approach b) Standardized Approach
c) Advanced Measurement Approaches d) All of the above

97) Under the Basic Indicator Approach, banks have to hold capital for operational equal to a fixed percentage (alpha) of a single indicator which has currently lunvir proposed to be "gross income°. The formula is KBIA = E? (Gra)1/n — here % alpha defined by RBI is

a) 15% set by the RBI b) 10% set by the RBI c) 5% set by the RBI

98) Under the new capital adequacy framework, Gross Income is defined as

a) Gross income = Net Profit (+) Provisions & Contingencies (+) operating expenses (schedule 16) (-) Profit on sale of HTM investments (-) income from insurance (-) extraordinary / irregular item of income (+) loss on sale of HTM investments.

b) Gross income = Net Profit (+) Provisions & Contingencies (+) operating expenses (Schedule 17) (+) profit on sale of HTM investments (+) income from insurance (-) extraordinary / irregular item of income (+) loss on sale of HTM investments

c) Both (a) and (b) d) None of these

99) Operational risk arises from

a) inadequate or failed internal processes b) people and systems c) external eventsd) defaults e) (a), (b) & (c)

100) Rewards of proper management of operational risks are

a) Higher risk capital b) Cost increase in operations c) Competitive edge d) none of these

101) Given the following

Probability of occurrence = 4%; Potential financial impact = 4%;
Impact of internal controls,.= 0%; What is the estimated level of operational risk?

a) 3 b) 2 c) 0 d) 4

102) A bank suffers loss due to adverse market movement of a security. The security was however held beyond the defeasance period. What is the type of the risk that the bank has suffered?

a) Market risk b) Operational risk c) Market liquidation risk d) credit risk

103) The third consultative paper recommended for _ _ _ _for operational risk

a) cause based classification b) effect based classification c) event based classification d) none of these

104) Rewards of proper management of operational risks are

a) Lesser risk capital b) Cot reductions in operations c) Competitive edge d) Both (a) & (b) e) All of these

105) A branch sanctions Rs. 1 crore loan to a borrower, which of the following risks the branch is not taking

a) Liquidity risk b) Interest rate risk c) Market risk d) Credit risk e) Operational risk

106) "Interest rate at which RBI lends to Sch. Comm. Banks is

a) Refinance Rate b) Lending Rate c) Bank Rate d) None of these

107) The minimum % of CRR on DTL of Commercial banks is

a) 10% b) 5% C) Nil d) 1%

108) The maximum % of SLR on DTL of Commercial Banks is

a) 50% b) 40% c) 25% d) 15%

109) ----------------- is the difference between the Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL) and its is said to be positive when RSA > RSL

a) GAP b) Duration GAP c) Spread d) None of these

110) The following is / are general objective(s) of the Investment management:

a) To preserve the integrity and safety of the deposits and net worth of the Bank

b) To attain and sustain a strong level of earnings as further protection for the depositors and to assure appropriate return to the shareholders

c) To be an asset to the market by responding to it needs d) All of the above

111)- Investment objectives of the Bank should focus the following

a) Maximization of spreads b) Maximization of shareholder value / net worth
c) Effective deployment of funds d) All of the above

112) Treasury has to look into following factors
a) Period up to which the liquidty gap has to be filled b) Total quantum of liquidity needs
c) Opportunity cost of funds if raised through other sources like deposits, refinances d) All of the above
113) 'Highly liquid assets include the following
a) Cash holdings, balances with RBI (over CRR) and with other Banks
b) Govt. T Bills and highly traded Govt. securities
c) CDs issued by Banks / Institutions maturing within 1 yr. d) All of the above
114) Banks hold cash assets to :
a) Supply coin and currency to meet customers' regular transaction needs.
b) Maintain statutory reserves (CRR) that can only be met by holding qualifying cash assets
c) Maintain cash balances to get services from the correspondent Banks
d) All of the above
115) European option can be exercised on any day at the option of the buyer on or before the expiry of the option a) True b) False
116) An increase in cash reserve ratio will cause yield curve to
a) Shift downward b) Remain unchanged c) Become steeper d) Become flatter
117) A decline in cash reserve ratio will cause the yield curve to
a) shift upward b) shift downward c) become flatter d) remain unchanged
118) A fall in long term interest on government securities will make the yield curve become
a) flatter b) steeper c) shift downward
119) If the yield on long dated government securities falls, then yield curve will become
a) steeper b) flatter c) shift downward
120) If the short term interest rates are temporarily higher than the long term interest rates, the yield curve will be
a) Sloping upward b) Inverted c) Zigzag d) Horizontal
121) A rise in government securities prices will make yield curve
a) slope upward b) Shift downward c) Remain stable d) Shift upward
122) If call money rates are temporarily higher than the long term interest rates, the yield curve will be
a) Slopping upwards b) Zigzag c) Inverted d) Horizontal
123) A fall interest rate of long dated government securities with the short term interest rates remaining unchanged will make the yield curve
a) Steeper b) Slop downward c) Shift downward d) Flatter
124) A rise in the short term interest rates with the long term interest rates remaining unchanged will make the yield curve
a) Steeper b) Shift upward c) Flatter d) Slope upward
125) If the volatility per annum is 25% and the number of trading days per annum is 252, find the volatility per day.
a) 1.58% b) 15.8% c) 158%, d) 0.10%
126) Daily volatility of a stock is 1%. What is its 10 days' volatility approximately?
a) 3% b) 10% c) 1% d) 4%
127) Back testing is done to
a) test a model b) compare model results and actual performance c) record performance d) none
128) Growth fund is a mutual fund that
a) assures growth in incomeb) invests in fixed income securitiesc) gives fixed returnd) invests primarily in equities
129) Balanced fund is a mutual fund that
a) assures income b) invests in debt and equity c) assures growth d) gives fixed returns
130) Equity oriented mutual funds
a) Assure income b) Assure growth c) Invest in debentures d) Invest in shares
131) A mutual fund charges 1% entry load and no exit load. Its NAV is Rs. 16; it sale and are purchase price will be
a) Rs. 16 and Rs. 15.80 b) Rs. 16.16 and Rs. 15.84 c) Rs. 15.84 and Rs. 16 d) Rs. 16.16 and Rs. 16

132) A scheme of mutual funds has units with face value of Rs. 10 and NAV of Rs. 37. The fund declares a dividend of 35% in the scheme. The ex-dividend NAV will be __________ per unit.

a) Rs. 37 **b)** Rs. 2 **c)** Rs. 33.50 **d)** Rs. 35.5

133) The June 1999 Basle Committee on Banking Supervision issued proposals for reform of its 1988 Capital Accord (the Basle II Proposals). These proposals contained mainly

a) Capital requirements **b)** Supervisory review **c)** Market discipline **d)** only (a) & (c) e) all of these

134) Central Bank governors of G-10 countries participate in the Bank Committee on banking supervision. Total number of members is:

a) 10 **b)** 11 **c)** 12 **d)** 13

135) 1988 capital accord frame work accounted for

a) credit risk **b)** market risk **c)** operational risk **d)** defined capital component **e)** (a), (b) & (d)

136) Under Basel II, capital requirement under the accord is

a) The maximum capital that is required to be maintained
b) The minimum capital that is required to be maintained
c) The capital as specified by the regulatory authority is required to be maintained
d) None of the above

137) Capital charge component of pricing accounts for

a) Cost of capital **b)** Internal generation of capital **c)** Loss provision **d)** (a) & (b) **e)** All of these

138) "BIS is standardizing the practices of banks across the Globe and India is part of this". BIS stands for

a) Bankers Internal Systems **b)** Bankers Identified Standards
c)Bank for International Settlements **d)** Bank for Interest Settlements

139) The Basel II accord will be implemented by the Commercial Banks w.e.f.:

a) 31[5t] March, 2008 for banks with branches abroad
b) 31" March, 2009 for banks which do not have branches abroad
c) Both (a) and (b) **d)** Not finalized

140) The ratio of the shareholders funds to the total assets is called ----------------------------

a) EOQ **b)** TQM **c)** Economic Equity Ratio **d)** None of these

ANSWER PRACTICE TEST NO. 1

1	B	2	A	3	B	4	C	5	C	6	A	7	D	8	C	9	D	10	C
11	C	12	C	13	C	14	A	15	A	16	B	17	C	18	C	19	B	20	C
21	D	22	B	23	C	24	A	25	A	26	A	27	C	28	C	29	C	30	A
31	B	32	C	33	C	34	B	35	A	36	B	37	B	38	B	39	B	40	B
41	C	42	C	43	A	44	C	45	C	46	C	47	A	48	B	49	C	50	C
51	C	52	B	53	C	54	A	55	D	56	C	57	D	58	A	59	C	60	C
61	A	62	D	63	C	64	D	65	C	66	C	67	D	68	D	69	A	70	A
71	D	72	A	73	B	74	D	75	A	76	A	77	A	78	A	79	B	80	D
81	D	82	A	83	D	84	C	85	A	86	D	87	C	88	D	89	A	90	C
91	D	92	D	93	D	94	C	95	D	96	A	97	A	98	A	99	E	100	C
101	D	102	B	103	C	104	D	105	C	106	C	107	C	108	B	109	A	110	D
111	D	112	D	113	D	114	D	115	B	116	D	117	B	118	A	119	B	120	B
121	B	122	C	123	D	124	C	125	A	126	A	127	B	128	D	129	B	130	D
131	D	132	C	133	E	134	D	135	E	136	C	137	B	138	C	139	C	140	C

PRACTICE TEST PAPER NO. 2 (TEST YOUR SELF)

(BASED ON RECALLED QUESTIONS)

01 In respect of the items contained in the Balance Sheet of a bank, find the odd man out:
(a) capital (b) investments (c) borrowing (d) sundry creditor.
02 Net interest margin can be worked out as:
a interest income / interest expenses x 100 b interest income — interest expenses x 100
c interest income / average total assets x 100 d (interest income — interest expenses)/ average total assets x 100
03 Which of the following does not appear in the balance sheet of a bank as 'off-balance sheet' item:
a letter of credit b bank guarantees c demand drafts issued d option forward contracts
04 Of the following which is the objective of the liquidity management (a) ensure profitability of the bank (b) protect the bank from reputation loss (c) create the maturity ladder for assets and liabilities.
a a only b a and b c a and c d b only
05 Basis Risk to a bank arises on account of (a) exposure in different currencies (b) exposure to different maturities (c) exposure to different type of entities. Which of these is not a factor:
a a and b b b and c c a and c d none of the above
06 Management and control of interest rate risk is the responsibility of:
a Credit risk management Deptt (CRMD) b Asset Liability Management Committee (ALCO)
c SMS Deptt d all the above
07 A negative gap in a time bucket can affect net interest income adversely, if:
a there is decline in interest rate b there is an increase in interest rate c there is no movement in interest rate
d none of the above
08 Liquidity is measured by grouping the assets and liabilities on the basis of their
a pricing b. risk weightage c maturity d amount
09 A negative gap occurs when in a given time bucket:
a assets exceed the liabilities b liabilities exceed the assets c assets match the liability d none of the above
10 Which one of the following is a forward transaction:
a spot transaction b ready transaction c TOM transaction d transaction beyond two days
11 in an option contract where the buyer of a contract has the right but not the obligation to sell a currency at a predetermined price during the contract period is called:
a American put option b American call option ,c European call option d European put option
12 An FCNR deposit received from an NRI in US$ can be viewed by the bank as:
a Euro-rupee deposit, b Petro-dollar deposit, c Rupee-dollar deposit, d Euro-dollar deposit
13.The systemic risk encompasses (a) business risk (b)financial risk (c) interest risk. Which of these is correct?
a a and b only, b b and c only , c a and c only d a, b and c all
14.The off-balance sheet items, as long as, they are not invoked /devolve, give rise to-----risk
a.currency risk b credit risk, c contingency risk d liquidity risk
15.VaR (value at risk) is: a measure of interest rate risk , b a type of market risk, ca measure of operational risk d.none of the above
16.Which of the following procedures is essential in validating the VaR estimates:
a back testing b scenario analysis c stress testing d no validation needed, if Var is approved by the regulator
17 Review process by the supervisors for operational risk implementation by banks include:
a the quality and comprehensiveness of the bank's disaster recovery and business continuity plans
b the effectiveness of the bank's risk management process and overall control of management. with respect to operational risk
c the effectiveness of the bank's operational risk mitigation effort
d all the above
18 What is the 'Beta' factor for commercial banking under standardized approach:
a 10% b 12% c 15% d 20%
19 The dealer in Treasury Department of bank wits US 2 million spot on May 12 (Friday). May 13 is a public holiday under NI Act. The settlement of the deal shall take place:
a May 15 b May 16 c May 17 d May 18
20 The simultaneous purchasing and selling of different securities by a person so that the cornposition of portfolio can be changed without significant cost is called: a arbitrage deal b swap deal, c switch deal d option deal
21.Forward rate is: a derived from the spot rates b spot rate adjusted for the premium/discount

c the rate agreed for settlement on an agreed date in the future,d all the above
22 The minimum and maximum cash reserve ratio that RBI can prescribe, falls under which of the following range:
a 3% to 15% b 3% to 20% c 5% to 20% d none of the above
23 Which among the following is not a correct statement in the context of treasury bills:
a issued in demat form (SGL) unless the investor so desires b issued at a discount to face value
c are approved securities and qualify for SLR purpose for banks d the discount is calculated at front end
24 A company has issued debentures for a period of 5 years with the provision that interest for the first year shall be 6.5% and for the remaining 4 years it shall be 7%. These can be called:
a floating rate debentures b step up debentures c flexible debentures d option debentures
25 Yield to maturity of a bond is also called:
a internal rate of return of the bond b coupon of the bond c discount of the bond swap rate of the bond
26 The risk of loss in gold investment is an example of:
a liquidity risk b commodity risk c interest rate risk d exchange risk
27 Under ALM, stock approach for monitoring and managing liquidity is based on:
a level of assets b level of liabilities c level of assets and liabilities d level of assets, liabilities and off-balance sheet exposure
28 Flow approach in ALM depends upon:
a measuring and managing the funding requirement b managing market access c contingency planning
d all the above
29 As per RBI guidelines, the gap of maturing assets and liabilities in the first two buckets should not be more than of for funds:
a 5%,10%, outflow b 10%, 20%, outflow c 5%, 10%, inflow 10%, 20%, inflow
30 Measuring and managing net funding requirement is done through:
a maturity ladder b alternative scenarios c measuring liquidity over a chosen time frame d all the above
31 Rate sensitive gap report is used for measuring risk of loss due to:
a changes in currency rates b changes in commodity rates c changes in equity rates d changes in interest rates
32 The term 'duration' stands for
a contractual maturity b residual maturity c weighted average maturity d duration of forward contract
33 A bank has saving bank deposit of Rs.1000 cr which it invests in 7 year 7% govt. securities. The securities are actively traded in the market. The bank carries:
a interest rate risk b liquidity risk c credit risk d liquidity and interest rate risk
34 Building strong relationships with some providers of funding can provide a line of defence in liquidity problem. This is called:
a contingency planning b alternative scenario c managing- market access d none of the above
35 Asset held by bank under 'trading book', suffer from:
a market risk b market and credit risk c market risk and operational risk d market risk, credit risk and liquidity risk
36 Legal risk is a type of :
a operational risk b credit risk c market risk d none of the above
37 Under the Basel II, the advanced internal rating based approach to credit risk, banks are required to input their own:
a EAD b LGD c EAD & LGD d None of the above
38 The following statements compare a highly liquid assets against an illiquid asset. Which of these statement is false:
a it is possible to trade a larger quantity of liquid assets without affecting the price
b the liquid asset has a smaller bid-ask spread the liquid asset has higher price volatility since it trades more often
d the liquid asset has higher trading volume
39 The risk_ weight of 2.5% on Govt. bonds was introduced in 1999 to address:
a credit risk b operational risk c) market risk d counter-party risk
40 A trader buys a call option at an exercise price of 45 and premium of 2. Under which of the following situations, he shall make profit:
a spot price < 43 b 43 < spot price < 45 c 45 < spot price > 47 d spot price > 47
41 Monthly volatility of a stock is 20%. Its one year volatility is approximately :
a 140% b 69% c 20% d 12%
42 In case of a positive gap in rate sensitive assets and liabilities of a bank an increase in the market rate of interest shall:
a increase the profit ,b decrease the profit, c no change in the profit , deither increase or decrease the profit
43. Which of the following statements concerning Risk,Capital and Return is false:
a. business having large variations in the net cash flows would be a business with higher risk and need higher capital to sustain
b. capital and RAROC both are risk dependant
c. a business with lower variation in net cash flow would be a business with low risk and need higher capital to sustain

d. higher the RAROC, higher the reward to investors/shareholders
44. Dynamic liquidity is the liquidity position of: a. 1-14 days, b 15-28 days c. 29 day — 3 months, d 1 day to 3 months
45. Which of the following statements is true: a. capital is a rate sensitive liability , b. cash is a rate sensitive asset c. deposit is a rate sensitive liability, d. fixed asset is a rate sensitive asset
46. Which of the following activities is likely to be carried out by the Integrated Treasury in a bank (a) meeting the reserve requirements (b) monitoring large value credits (c)•global cash management (d) investment in securities. Indicate as .to which of these will be carried out : a. all the above , b. only b and d , c. a, b and d d. a, c and d
47. The term capital adequacy refers to: a.the ability of a bank to generate adequate capital ,b.the amount of shares outstanding for a bank, c. the ability of a bank to meet its dividend payment to shareholders, d. the bank has sufficient capital to carry out normal business under internationally recognized rules
48. Basel II rests on three pillars. Which of the following is one of such pillars:- a. market risk, b. supervisory review, c. risk management, d. operational risk
49.Which of the following method is considered a traditional method to quantify the risk: a. simulation, b.maturity gap approach, c. duration approach , d. hedging approach
50. The objective of securitization of loans is to: a. reduce credit concentration, b. reduce regulatory capital requirement c. provide access to loan products for investor, d alfthe above
51 Value at risk (Var) analysis should be complemented by stress-testing because stress testing:
a summarises the expected loss over a target horlzorr within a minimum confidence interval
b provides a maximum loss, expressed in dollars assesses the behaviour of portfolio at a 99% confidence level
d identifies losses that go beyond the normal losses measured by VaR.
52 When the costs / yields of liabilities / assets are linked to a floating rate and there is no simultaneous movement in interest rates, it leads to:
a real interest rate risk b basis risk c reinvestment risk volatility risk
53 The effective interest rate on a Repo trarpsacOon should be:
a higher than the corresponding money market b lower than the corresponding money market
c equal to the corresponding money market d none of the above
54 If a dollar-yen transaction takes place between 13;.Ylk A and Bank Bin Mumbal, it will:
a give rise to settlement risk for only bank A b give rise to settlement risk for both banks
c give rise to settlement risk for bank A or bank B d not give rise to settlement risk for either banks
55 SLR is prescribed by RBI as a percentage of banks (a) net bank credit (b) net deposits (c) total deposits (d) total liabilities. Which of these is correct:
a a and b b b and c c c and d d none of these is correct
56 Risk weighted assets for operational risk are worked out as:
a capital to operational risk x 9 b capital to operational risk x 12.5 c capital to operational risk x 8.33 d none of the above
57 Basel 11 prescribes that the housing loan portfolio be given the risk weight of:
a 100% b 35% c 75% d none of the above
58 A confidence interval of 95% in a VaR model Mei:MS that:
a the losses will not exceed 5% of VaR number b there is a 5% chance that losses will be greater than the VaR number c 5% of price moves cannot be explained by the VaR model d only 95% of all activities are covered by the VaR model
59 Which of the following is likely monetary policy in falling interest rate scenario with oihe remaining the same:
a an expansive monetary policy b a restrictive monetary policy c rising nominal interest rates d falling inflation
60 Calculate the price of Zero Coupon bond with a par value of Rs.100 yielding 6% with exactly 2 years left until final maturity:
a Rs.88 b Rs.89 c Rs.94 d Rs.87.92
61 What do you call a yield curve where the short term yields are higher than the long term yields:
a positive b parabolic c inverted d flat
62 The risk that arises due to worsening of credit quality is
a intrinsic risk b credit spread risk c portfolio risk d counterpart), risk
63 The method suggested by Basel Committtee II for measuring capital charges does not include:
a basic indicator approach b standardized approach
c advanced measurement approach
d quantitative measurement approach
64 The back office of a bank has failed to exercise a forward contract due to oversight. In this the bank has suffered: a operational risk b market risk c settlement risk d counterparty risk
65 Which of the following is not a limit to control the market risk:
a counterparty limit b maximum transaction size limit c stop loss limit d forward gap limit
66 Which of the following statements is not true?:

a value at risk is the maximum possible loss for a given portfolio of assets
b In an interest rate swap transaction, the principal amounts are exchanged on the first day of itself and only interest flows occur on the maturity date
c Future contract can be for any amount as may be agreed by both the parties to the contract, d None of these
67 Which of the following statements is true?
a Basel II accord is based on three pillars (a) credit risk (b) market risk and (c) operational risk
b Under Basel II, the risk weight of a particular country can be more than the risk weight for a corporate in another country
c Issuing ADR/GDR instruments in foreign currency causes exchange risk for the issuing company.
68 Net Interest Margin (NIM) is —
a The difference of interest earned and interest paid b The Net Interest Income divided by total assets
c The Net Interest Income divided by average assets d Net Profit divided by total interest earned.
69 Off-Balance Sheet items such as Guarantees, Letters of Credit, underwriting commitments give rise to
a Operational risk b Credit risk and Market risk c Contingency risk d Liquidity risk, interest rate risk, credit risk and operational risk
70 Given that remaining maturity is the same, which among the following will have the longest duration?
a Bonds with half yearly coupon rates b High Coupon Bond trading at premium c Low Coupon Bond trading at discount d Zero Coupon Bond
71 Portfolio risk is less than weighted average of individual risks in the portfolio because of —
a Diversification effect b Risks on individual share prices are unpredictable c Both (a) & (b) are correct d None of them is correct
72 Daily volatility of a stock is 0.5%. What is its 15 days volatility?
(a) 7.5% (b) 1.5% (c) 1.94% (d) 5%
73 The periodicity 'proposed for 'disclosure' under market discipline for Basel II implementation is
(a) Quarterly (b) Annual (c) Semi-annual (d) Monthly
74 Which one of the following statements is correct as regards 'duration' of a 5 year Zero Coupon Bond?
a) Duration of a five year Zero Coupon Bond would be less than 5 years.
b) Duration of a five year Zero Coupon Bond would be more than 5 years
c) Duration of a five year Zero Coupon Bond would be less than or equal to 5 years
d) Duration of a five year Zero Coupon Bond is exactly 5 years

75. The latest proposal of the Basel Committee on Banking Supervision (BCBS) for the new Basel Accord (Basel II) introduces the Advanced Internal Rating Approach for credit risk. Under this, banks will input their own :a) EAD b) LGD c) EAD & LGD d) None

QUESTION BASED ON CASE STUDY/ CASE LET

Case Study No. 1

Data relating to balance sheet as on 21.12.2007 of a bank reveals (Rs. cc) its capital at 1100, reserves 2150, demand deposits 6500, SB deposits 20500, term deposits from banks 1300, term deposits from public 30800, borrowing from RBI nil, borrowing from other institutions 200, refinance from NABARD 150, bills payable 50, interest accrued 20, subordinated debt 200 and credit balance in suspense account 30. (Total being 63000). Based on the above facts, answer the following questions based on RBI guidelines on calculation of CRR:
76 Items of liabilities which are not to be included for computing NDTL are:
a) capital and reserves b) capital and reserves + refinance from NABARD
c) capital and reserves + refinance from NABARD + term deposits of banks d) none of the above
77 Total amount of liabilities not to be included in computing NDTLs is Rs:
a) 3250 cr b) 3300 cr c) 4600 cr d) 4700 cr
78 Total amount of NDTL on which 7.5% CRR is to be maintained:
a) 58100 cr b) 63000 cr c) 58300 cr d) 67100 cr
79 Bank would be required to maintain average CRR amounting to:
a) 4372.5 cr b) 4357.5 cr c) 4725 cr d) None of these
80 On any particular day during the fortnight, the cash balance with RBI should not fall below Rs:
a. 3061 cr b. 3050 cr c. 2835 cr d. 2945 cr

Case Study No. 2

East-West Bank Ltd. (EWB) is a scheduled commercial bank, has computed its obligatory average cash reserve requirement at Rs. 175 crore for the fortnight beginning 10.11.2007. The bank has maintained average of 70% of obligatory CRR for the first 12 days due to fund constraints / high call rates in Inter-Bank Call money market. However, on the 13th day of fortnight, the bank could maintain Rs. 400 crore in their current account with RBI. Based on the above information, answer following questions:
81. EWB is required to Maintain minimum CRR on Product basis for the fortnight to comply with CRR requirement

of
(**a**) 2450 crore (**b**) 2100 crore (**c**) 175 crore (**d**) 1715 crore

82. How much amount of CRR the bank has maintained upto first 12 days?
(**a**) Rs. 2185 crore (**b**) Rs. 2100 crore (**c**) Rs. 1470 crore (**d**) Rs. 1785 crore

83. ____ Total CRR Product achieved at the end of 13th day by the bank is ________________________________
(**a**) 1870crore (**b**) 2450 crore (**c**) 2185 crore (**d**) 2100 crore

84. EW
B is required to arrange for on the last day of the fortnight with RBI so as to comply with CRR maintenance
(**a**) 265 crore (**b**) 580 crore (**c**) 300 crore (**d**) 122.50 crore

85. If EWB has successfully maintained the obligatory CRR for the fortnight starting from 10.11.2007, the rate of interest it will earn on the eligible amount from RBI is ____
(**a**) Bank Rate (**b**) Repo Rate (**c**) Reverse Repo Rate (4) None of these

Case Study No. 3

A bank has total advances of Rs.10000, gross NPA of 8% & Net NPA 5%, Based on the above facts, answer the following questions:

86 Total provisions amount would be: a 200 cr b 300 cr c.336.80 cr d. None of the above
87 Net NPA amount would be: a 550 cr b 400 crc. c. 500 cr d. None of the above
88 Provision required for standard assets would be: a 36.8 cr b 25 cr c c.40 cr d. None of the above

Case Study No. 4

The financial results of AB Bank reveals the classification of its non-agriculture credit portfolio (of Rs.10000 cr) as on 31.3.08 under standard assets Rs.9500 cr, Sub-standard secured Rs.150 cr and unsecured Rs.50 cr, doubtful up to 12 months(DF1) 200 cr, doubtful for more than 12 months but up to 3 years (DF II) Rs.50 cr and doubtful above 3 years (DF **III) Rs.30 cr and** loss assets Rs.20 cr. Based on the above information, choose the correct answer:

89 Provisioning requirement for sub-standard accounts would be:
a Rs.20 cr b Rs.40 cr c Rs.25 cc d Rs.35 cr

90 If the realisable value of security for OF I advances is Rs.150 cr, the provision required on OF-1 accounts would be:
a 40 cr b 120 cr c 30 cr d 80 cc

91 Iithe realisable value of security for DF **II** advances is Rs.30 cr, the provision required on DF-2 accounts **would** be:
a 20 cr b 29 cr c 36 cr d 35 cr

92 If the realisable value of security for DF Ill advances is Rs.10 cc, the provision required on GF-3 accounts would be:
a 25 cr b 30 cr c 20 cr d none of the above

93. Provision for total NPAs would be:
a 184 cr b 164 cr c 150 cr none of the above

Case Study No. 5

Advance Portfolio of XYZ Bank is summarized as below:
Total Advances:Rs. 10000 crore; Sub-standard secured (Code 21) : Rs. 300 crore; Sub-standard unsecured(Code 22):Rs 50 crore and Realizable value of security (RVS):Rs 5 crore; Doubtful-I Category (Code 31):Rs 200 crore and Realizable value of security (RVS): Rs150 crore; Doubtful-II Category (Code 32): Rs 200 crore and Realizable Value of Security (RVS): 100 crore; Category:Rs200 crore and Realizable value of Security (RVS):Rs 50 crore; Loss Assets: 50 crore. Based on the following information, *answer* following questions

(94) Gross NPA Percentage for this bank is
(**a**) 7% (**b**) 10% (**C**) 9% (**d**) 9.5%

(95)Provision for Sub-Standard advances would be
(**a**) 35 crore (**b**) 39 crore (**c**) 40 crore (**d**) 30 crore

(96) Provision for doubtful advances would be
(**a**) 410 crore (**b**) 340 crore (**c**) 300 crore (**d**) 385 crore

(97) Provision for loss assets would be
(**a**) 50 crore (**b**) 45 crore (**c**) 47 crore (**d**) 48 crore

(98) If the bank has made Provision fully, then the net NPA Percentage for XYZ bank would be
(**a**) 4.36% (**b**) 5.26% (**c**) 6.1% (**d**) 6.27%

Case Study No. 6

As on Mar 31, the net profit of the bank are 30 cr, provisions 60 cr, staff expenses 70 cr, other operating expenses 40 cr, other income 80 cr. Based on the above facts, answer the following questions:

99 Capital charge for operational risk based on one year's results using Basic Indicator approach would be:

a 24 cr b 30 cr c 33 cr d 15 cr

100. Risk weighted assets for operational risk would be worked out as:

a 375 cr b 300 or c 240 cr d none of the above

ANSWER PRACTICE TEST NO. 2

1	D	2	D	3	C	4	B	5	D	6	B	7	B	8	C	9	B	10	D
11	A	12	C	13	A	14	C	15	A	16	A	17	D	18	C	19	B	20	B
21	D	22	D	23	A	24	B	25	A	26	B	27	D	28	D	29	A	30	D
31	D	32	C	33	A	34	C	35	D	36	A	37	C	38	A	39	C	40	D
41	B	42	A	43	C	44	D	45	C	46	D	47	D	48	B	49	B	50	D
51	D	52	B	53	B	54	C	55	D	56	B	57	B	58	A	59	A	60	B
61	C	62	B	63	D	64	A	65	A	66	C	67	B	68	B	69	D	70	D
71	A	72	C	73	C	74	D	75	C	76	C	77	D	78	C	79	A	80	A
81	A	82	C	83	A	84	B	85	D	86	C	87	C	88	A	89	C	90	D
91	B	92	B	93	A	94	B	95	C	96	A	97	A	98	B	99	B	100	A

PRACTICE TEST PAPER NO. 3 (TEST YOUR SELF)

1.The latest proposal of the Basel Committee on Banking Supervision (BCBS) for the new Basel Accord (Basel II) introduces the Advanced Internal Rating Approach for credit risk. Under this, banks will input their own : (a) EDF (b) LGD, (c) EDF & LGD (d) None

2.Recently Reserve Bank of India has issued revised guidelines as to the treatment of 'Investment Fluctuation Reserve' for calculation of capital funds. Which one of the following is the revised one?

a. Banks which have maintained capital of at least 9 per cent of the risk weighted assets for both credit risk and market risks for both HFT and AFS category may treat the balance is excess of 5 percent of securities included under HFT and AFS categories, in the IFR, as Tier I capital.

b.Banks which have maintained capital of at least 9 per cent of the risk weighted assets for both credit risk and market risks for both HFT and AFS category as on March 31, 2006, would be permitted to treat the entire balance in the IFR as Tier I capital.

c.Full amount of IFR qualify for Tier capital without any conditions, d. None of the above

3.The difference between rates for buying and selling of foreign currency (Bid and Offer rates) is known as :

(a) Surplus (b) Profit (c) Gain (d) Spread

4.From 6.8.2005, which of the players listed below discontinued from participating in lending in Call Money Market by Reserve Bank of India? a. Primary Dealers, b.Scheduled Co-operative Banks c.All India Financial Institutions / Mutual Funds I Insurance Companies, d.None of the above

5.The Eligible Securities for REPOS and REVERSE REPOS comprise ___

a. All SLR Transferable Securities , bAll SLR transferable Government of India dated Securities c.All those Securities held in SGL format d.Non-SLR Securities only

6. Commercial Papers can be issued : a As a Stand-alone facility, b. Against Working Capital entitlement c. As a stand alone facility with a standby assistance / Credit backstop facility from Banks/FIs, d All of the above

7. Which of the following investment carries more credit risk?

a Investment in Treasury Bills b Investment in Commercial Paper with P1 Rating c Investment in 'BBB' rated 3 year Corporate Bonds d) All the above carry equal credit risk

8. A trader buys a call option at an exercise price of 45 and premium of 2. Under what conditions will he make a profit?

a Spot price < 43 b 43 < spot price < 45 c 45 < spot price < 47 d spot price > 47

9. Basel-II accord rests on three pillars. The second pillar of the accord is _ _

a Market Discipline b Risk Management c Supervisory review process Operational risk management

10. Risk weighted assets for Operational risk are worked out as
a Capital for operational risk x 9 b Capital for operational risk x 12.5
c Capital for operation risk x 8.33 d Capital for operational risk x 8
11.Basel-11 accord prescribes that housing loan portfolio be given risk weight of
(a) 100% (b) 75% (c) 35% (d) 150%
12.Under Simplified Standardised Approach (SSA), maximum risk weight for corporates is prescribed as
(a) 150% (b) 100% (c) 50% (d) 20%
13. Basic Indicator Approach (BIA) is one of the methods for computation of capital charge for ___
a Interest rate risk b Market risk c Operational risk d Credit risk
14. Capital charge for Credit risk under
Internal Rating based (IRB) approach is a function of Probability of default (PD), Loss given default (LGD), Exposure at default (ED) and __
a Risk weights as prescribed b Maturity c Provisions already set aside Yield
15.For Substandard Secured Assets (code 21), the provision required is _ of the outstanding amount.
a 10% b 20% c 10% of the realizable value of security (RVS) d None of these
16. For standard assets, the provision required is of the outstanding amount.
(a)' 0.10% (b) 0.20% (c) 0.40% (d) 0.25%
17. The highest beta factor (in percentage) is assigned to different business lines for operational risk under standardised approach is___
(a) 10% (b) 20% (c) 18% (d) 15%
18. Provisioning requirement for facility under Doubtful-I denoted by code 31, is
a 20% of Realisable Value (RVS) b 20% of RVS 4- 100% of security
c 30% of RVS 4- 100% of security d 20% of outstanding loan amount
19.Provisioning requirement for an advance facility under Doubtful-III category, denoted by code 33, is-
a Same as loss asset b 50% of RVS + 100% of security c 100% of outstanding amount
d none of the above
20. Market discipline framework refers to : a Disclosure requirements b Rates quoted in the market c Market risk d) Disclosure of confidential information

an advance category, of Security shortfall in shortfall in

21)Asset-liability management is concerned with
(a) Quality of the assets b) Recovery of non-performing assets c) Operational risk d) None of these
22)A coupon Swap is defined as_
(a) Forex swap, where one currency is traded for another
(b) Interest rate swap, where underlying benchmark interest rates are exchanged
(c) Interest rate swap, where fixed rate is exchanged with floating rate (d) None of these
23)FCNR Deposit is
(a) Futures contract b) Options contract (c) Swap (d) None of these
24)Interest rate sensitivity gap statement is prepared by classifying the assets and liabilities based on their
(a)Maturity dates b) Repricing dates c) Maturity date or repricing date whichever is later d) None of these
25) Find the odd man out.
(a)Futures Value at Risk (VAR) c) Options (d) Swaps
26)ALM system is built on three pillars, which are _
(a)Capital adequacy, supervisory review, and market discipline
(b) Information system, organization and process
(c)ALCO, maturity ladder and duration d)All of the above
27)Change in interest rates will affect__
(a)Net interest income b) Other income c) Staff expenses (d) All of these
28)The risk for the option seller is
(a)Limited to the Premium amount b)Limited to the amount of option clot isoil:
c) Limited to a certain percentage of the option contract d) None of these
29)Currency futures are forward contracts_
(a)With standard size b) With standard maturity date c) Traded on the exchange d) All of the above

30)Savings bank deposits are placed in bucket.
(a)Non sensitive **b)** 3-6 months **c)**Over 5 years (**d)** None of these
31)Borrowing from Reserve Bank of India are placed in _ bucket.
(a)Upto one month **b)** 6 months or 1 year **c)** 1 month to 3 months **d)** none of these
32)Sub-standard NPAs are placed in bucket.
(a)Over 5 years **b)**3-5 years **c)** Non-sensitive **d)**None of these
33)PLR based Cash-Credit accounts are placed in----bucket. (PLR is found to be changed once in eight month)
(a)0-8 months **b)** 6-12 months **c)** 1-2 years (**d)** None of these
34)Capital and reserves are placed bucket.
(c) Over 5 years **b)** Upto one month **c)** Residual maturity **d)** Non sensitive
35)The term "economic value Perspective" indicates_____
(a) Impact of interest rate changes on earnings
(b) Present value of expected cash flows taking into account change in interest rates
(c) Instruments that are not marked to market **d)** None of the above
36)Duration can be described as_
(a) A measure of operational risk **b)** A percentage change in economic value, given a unit change in interest rate. **c)** A measure of interest rate sensitivity **d)** None of these
37)Bank's own trading positions are called as__ _
(a) Overnight Positions **b)** Daylight Positions **c)** Proprietary Positions **d)** All these
38)Basel Accord of 1988 recommended____
(a) Minimum capital standards for the banks **b)** Classification of assets into various time buckets **c)** Classification of assets basedon counterparty risk **d)** All the above
39)Value at Risk (VAR) concept can bedescribed as
(a) Downside risk potential b Measure of volatility **c)** Measure of sensitivity **d)** All the above
40)Find the odd man out
(**a)** Liquidity risk (**b)** Sovereign risk(**c)** Interest rate risk (**d)** Foreign exchange risk
41)Find the odd man out
(a) Standardised method **b)** Basic Indicator Approach (**c)** Supervisory Review Process **d)** (**d)** Internal Rating Based Approach
42)Loans which are NPA for over 48 months are categorized under _
(a) Doubtful-III category **b)** Doubtful-II category **c)** Sub-standard category **d)** None of the above
43)Advance under Doubtful-II category require ____________as provision.
(**a)** 50% of realizable value of security Plus 100% of shortfall in security (**b)** 100% of outstanding amount
(**c)** 100% of shortfall in security plus 30% of realizable value of security **d)** none of these
44)Capital Adequacy Ratio under Basel it is computed on the basis of _
(a) Risk weighted assets for credit risk **b)** Capital for market risk
(b) Capital for operational risk **d)** All the above
45)Supervisory Review under Basel-il framework refers to
(a)Operational risk, **b)** Market risk **c)** Credit risk (**d)** None of these
46)Find the odd man out.
(**a)** Fee based income (**b)** Owned funds (**c)** Staff expenses (**d)** Treasury Income
47)Which of the following is not a function of . integrated Treasury Department
(a) Pricing of Products **b)** Facilitation of Payment and Settlement of the bank
c) Issuance of Foreign currency denominated Traveler's cheques **d)** Assisting the bank management in ALM.
48)By 'Emerging Market Countries' we mean__
(**a)** Countries attracting BPO business (**b)** Fast developing economies
(**c)** Countries which became independent after splitting of erstwhile USSR (**d)** OECD countries.
49)The differences between Forward and Futures contracts are
(a)In futures contracts, the contract terms are highly standardized unlike Forward contracts.
(b) Trades in Futures contracts require to be marked to market daily unlike forward contracts

(c) Futures contract obligationsare guaranteed by respective clearing houses unlike forward contracts
(d) Both (a) & (b) only e) All of these

50) Promissory notes issued by Central Government to meet its short term requirements are called__
(a) Certificate of Deposits b)Commercial Papers c) Capital Indexed Bonds (d) Treasury Bills

51)Under Open Market Operation (OMO), if the Reserve Bank wishes to increase the quantity of Money Supply with Banks,it______________-
(a)Sells Bond b) Buys Bond c)Allows banks to take money from currency chests
d) Restricts customers to withdraw from their Accounts

52)In the Inter Bank Call money market, Borrowing and Lending is restricted among___
(a) Scheduled commercial banks,co-operative banks & Primary Dealers (PDs)
(b) Scheduled Commercial Banks,Co-operative Banks, All India Financial Institutions & Primary Dealers (PDs)
(c) Scheduled commercial banks,Co-operative Banks & Mutual Funds
(d) Scheduled Commercial BanksCo-operative Banks & Insurance Companies

53)Scheduled Commercial Banks are required to maintain 25% of their DTL as SLR under section 24 of Banking Regulation Act, 1949 in the form of _
(a) Cash in hand (b) Gold (valued at current market price)
.(c) Un-encumbered Approved securities (d) Combination of all of the above

54)In which option does the buyer get the right to buy the underlying asset?
(a) Call option b) Put option c) American option d) European option

55)In a futures contract the risk of default is faced by _ _
(a) Buyer of the contract b)Seller of the contract c) Clearing agency d) Both (1) & (2) above

56)An Indian Firm has receivables amounting to US $ 1,00,000 arising out of the export of its product. The price of a spot dollar in terms of Rupees is Rs. 44 & the three month forward rate is Rs. 45.40. But after three months the spot rate turns out to be Rs. 45.60. Calculate the exposure
(a) Rs. 1,20,000 (b) US $ 120000 (c) US $ 1,000,000 (d) Rs. 45,60,000

57)The risk that is associated with the intermediate cash flows arising with the payment of interest, installment on loans ,etc. is
(a)' Rate level risk (b)Volatility risk c) Reinvestment risk (d) Basis risk

58)Which one of these is not a source of Interest Rate Risk?
'(a) Yield Curve Risk b) Basis Risk c) Embedded Option Risk d) Funding Risk

59)The core Capital of a Bank under Basel 2 consist of
(a) Paid up capital of the bank b) Authorized capital of the hank
c) Paid up capital plus retained eaE ozcags and disclosed reserves d) None of these

60)Frequency of coupon Payments and duration of a bond are
(a) Directly related b) Inversely related c) Not related at all d) Randomly related

61)A credit derivative seeks to__
(a) Protect the market risk as well as the credit risk of an asset
(b) Segregate the credit risk from an asset and trade it separately
(c) Transfer the credit risk along with the reference asset to the credit risk buyer d) None of the above

62)Derivatives are available for __
(a)Foreign exchange b) Interest bearing financial assets c) Commodities / Equities d) All of the above

63)Assuming the time . horizon for all transactions is the same, which of the following transactions would have the least credit risk?
(a) A forward purchases of oil from an 'AA' rated company b) Buying a call option on oil from a 'B' rated company
c) A forward sale of oil to an 'AA' rated company d) A forward sale of oil to a 'C' rated company where the total purchase price is guaranteed by a letter of credit from an 'AAA' rated company

64)How is the risk of so-called Event of God losses dealt with?
(a) Through RAROC models b) Through Var, Preferably delta-gamma approach
c) Only insurance companies can offer a partial cover d) Both (b) & (c) above

65)In order to formulate Bank's Loan Policy to address Credit risk, which of the following points are not considered?

(a)Delegation of Powers **b)** Credit appraisal **c)** Pricing policies **d)** Standardization of Documents
66)What is the beta factor for payment and settlement under Standardized Approach for operational risk?
(a) 12% (**b)** 18% 15% (**d)** 16%
67)A negative yield curve is one in which
(a) Long term interest rates are lower than short term interest rates.
(b)Forward Exchange rates are at a discount to spot rates.**c)** Short-term interest rates are lower than long term rates.
(d) Forward exchange rates are premium to spot rates.
68)A dealer makes the following spot EUR/USD transactions
Buy EUR 10,000,000 at 1.1001
Buy EUR 25,500,000 at 1.0993
Sell EUR 20,000,000 at 1.1011
If the end of day revaluation rate is 1.0990, what is his profit or loss?
(a) USD 23,350 Profit **b)** USD 23,350 Loss **c)** USD 23,500 Profit **d)** USD 23,500 Loss

QUESTION BASED ON CASE STUDY/ CASE LET

Case Study No. 1

Bank has fixed assets 100 cr, govt. securities 1000 cr, standard assets in retail loans 600 cr, in home loans 400 cr and other loans 2000 cr. Substandard secured are 100 cr, unsecured 30 cr, doubtful advances are 170 cr and other assets 200 cr. Under the simplified standard approach for credit risk, compute the following components of claims:
69 RWA for retail and home loan segment:
a 510 cr b 590 cr c 1000 cr d none of the above
70. Risk weighted assets for NPAs:
a 350'cr b 300 cr c 400 cr d 450 cr
71.Risk weighted asset for the entire asset portfolio:
a 3240 cr b 3440 cr c 3190 cr d 3350 cr
72 Risk weighted assets for standard assets:
a 2510 cr b 3590 cr c 2590 cr d 5000 cr

CASE STUDY NO. 2

The summary information about P&L account of the bank indicates the interest earning of Rs.6000 cr, other non interest income of Rs.900 cr, profit on sale of fixed assets Rs.60 cr and income from sale of 3" party products Rs.40 cr. Interest expenses are Rs.3900 cr, operating expenses Rs.1900 cr and provisions of Rs.800 cr. Based on the above information answer the following questions: _
73. Operating profit for the bank is:
a Rs.400 cr b Rs.2200 cr c Rs.1200 cr d Rs.1400 cr
74 Gross income for the purpose of working out capital charge for operational risk under Basel I! would be:
a 3000 cr b 2200 cr c 2000 cr d 1300 cr
75 Under Basic indicator approach, the bank would be required to allocate capital for operational, risk under Basel II based on operations for one year as:
a 450 cr b 300 cr c 150 cr d 600 cr
76 The risk weighted assets for operational risk under Basel II in the above case would be :
a Rs.5625 cr b 4500 cr c 2500 cr d 3000 cr
77 The allocation of capital for market risk under Basel II would be:
a Rs.148 cr b Rs.296cr c Rs.777 cr d insufficient data to calculate the capital required.

CASE STUDY NO. 3

Bank gioup-wise maturity profile of select liabilities and assets of banks in %age terms of major maturity buckets as on Mar 31, 2008 are given below:

Liability/asset	PSU Banks	Old Pvt Bank	New Pvt Bank	Foreign Bank
Deposits:	100 '	100	100	1 0 0
Up to 1 year	34	51	51	46
Over 1 to 3 yr	38	37	43	46
Over 3 to 5 yr	12	5	4	1
Over 5 years	16	7	2	7
Borrowings:	100	100	100	100
Up to 1 year	82	90	47	85
Over 1 to 3 yr	14	5	36	12
Over 3 to 5 yr	3	3	8	3
Over 5 years	1	2	9	0
Loans:	100	100	100	1 0 0

Up to 1 year	40	41	35	57
Over 1 to 3 yr	33	36	31	16
Over 3 to 5 yr	12	10	13	8
Over 5 years	15	13	21	19
Investments:	100	100	100	100
Up to 1 year	10	18	51	46
Over 1 to 3 yr	12	10	43	31
Over 3 to 5 yr	15	11	4	8
Over 5 years	63	61	2 .	15

On the basis of above information, answer the follow ng questions:

78 Interest rate for deposits is increased by 50 basis points for period up to 3 years. The bank group which will be most affected due to cost of funds:

a) old private banks **b)**new private banks **c)** public sector banks **d)** all will be affected equally

79 in, respect of borrowing, the group that more often relying on call / short term borrowings to remain liquid is:

a) old private banks **b)**new private banks **c)** public sector banks **d)** foreign banks

80 Assuming that all banks across the group have insignificant investment in equity shares and other non-interest bearing investments under 'over 5-year bucket' and the yield for bonds increases by 100 basis points for over 5 years tenor, the group which will be most affected due to diminution in value of bonds:

a) old private banks **b)**new private banks **c)** public sector banks **d)** all will be affected equally

81 In an upward moving interest rate scenario for loans, the bank group which has a higher %age of loans due for repricing up to 1 year term is:

a) old private banks **b)**foreign banks **c)** public sector banks **d)** none of these

82 The bank group which appears to have a better ALM position among all the 4 bank groups is:

a) old private banks **b)**new private banks **c)** public sector banks **d)** foreign banks

CASE STUDY NO. : 04

RBI has issued following guidelines for interest rate sensitivity :

1. Capital, Reserves and Surplus, balance in current account are non-sensitive to interest rate changes in the market.
2. SB deposit earning portion called core portion is sensitive and to be classified in 3-6 bucket but volatile portion is non-sensitive.
3. Term deposits, CDs, borrowings fixed as well as floating and zero coupon are sensitive to rate dhanges.
4. Borrowing from RBI to be put in one month bucked. Other liabilities and provisions are non-sensitive.

Following information about bank's liabilities is available: Capital is Rs.295 cr, Reserves 3000 cr, current account deposits 250 cr, SB account 1000 or (25% being volatile). Time deposit are maturing within one month 100 cr, one months 'and before 3 months 200 cr, after 3 months and before 6 months 300 cr, after 6 months and before 1 year 500 cr, after 1 year and before 3 years 400 cc, after 3 years and before 5 years 150 cr and after 5 years 200 cr. Borrowing from RBI is 100 cr. Based on the above information answer the following questions:

83 What is the amount of SB deposit in 3-6 months bucket:

a 500 b 600 c 750 d 1000

84 How much of the current account would be under 1 month bucket:

a 50 b 100 c 250 d none of the above

85 How much reserve and surplus will be put under non-sensitive if you feel that 100 will be lost in NPA and 400 in treasury loss:

a 2500 b 2900 c 3000 d none of the above

86 How much time deposit shall be under one month bucket

a 150 b 100 c 250 d none of the above

87 Borrowing from RBI for 100 will be put in bucket for interest rate sensitivity

a one month b more than one to three months

c more than 3 months to 6 months d more than 6 months to 12 months

CASE STUDY NO. 05

The balance sheet of Bank-X provides the following information as on Mar 31, 2008 (Rs.cr): Capital - 1000, Reserves - 6000, current account deposit 30000, saving bank deposit 30000, term deposit 30000 and borrowing 3000. On the assets side, the cash - 6900, balance with banks-15000, investments-15000, bills purchased-20000, cash credit-20000, term loans-20000 and fixed assets3100. Total-100000. Earning assets out of total assets are Rs.90000 cr. Cash credit, bills purchased and investments are affected by change in interest rate. Term loans carry fixed interest rate. SB and TD are affected by change in interest rate. Based on the above information answer the following questions:

88 Rate sensitive assets of the bank are:
a 55000 b 75000 c 85000 d 90,000
89 Rate sensitive liabilities of the bank
a 63000 b 93000 c 60000 d None of the above
90 The above bank has:
a positive gap b negative gap c marginal gap d Zero gap
91 Tier-1 capital of the bank is Rs
a 1000 b 7000 c 10000 d Credit risk

92. Basic Indicator Approach is one of the methods of Computing :
a) Interest Rate Risk , b) Market Risk c) Operational Risk d) Credit Risk

CASE STUDY NO. 06

In the following Table, data about movement of monthly closing prices of stocks of XYZ Ltd are given from January, 2007 to December, 2007. You are required to answer the following five uestions using these data.

Month	Closing Stock Price	Month	Closing Stock Price
January	10	July	23
February	11	August	41
March	9	September	38
April	10	October	45
May	. 12 .	November	42
June	17	December	51

(93) Find out the 'Mean' Price of XYZ stocks for the observed period.
(a) 25.75 (b) 20 (c) 23 (d) 10
(94) The variance of the selected data will be approximately (upto 2 decimal point).
(a) 2922.25 (b) 243.52 (0) 15.61 (d) 54.06
(95) The volatility of XYZ stocks for the period from January, 2007 to December, 2007 is
(a) 2922.25 (b) 243.52 (c) 15.61 (d) 54.06
(96) The volatility is also known as
(a)Standard Deviation (b)Value at Risk (VaR) (c)Mode (d) Median
(97) If the Investor has identified one more stock 'A' with a standard deviation of 25 to invest with XYZ stocks in 50:50 ratio of the corpus, the volatility will be
(a)More than volatility of stock 'A' (b) will be less than volatility of XYZ Jocks
(c)Average of both stocks (d) Between volatility of XYZ and stock 'A'

CASE STUDY NO. 07

ABC Bank Ltd. analyzed the operating profits of five zones for last five years. The Standard-- - Deviation and Standard Deviation to mean for the five years are given in the following table.

Name of Zones	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Mean	S.D.	S.D. to Mean
Ahmedabad	10	3	4	8	11	36	7.20	3.56	0.49
Chennai	3	8	1	6	4	22	4.40	2.70	0.61
Delhi	12	8	9	2	4	35	7.00	4.00	0.57
Kolkata	6	9	2	3	5	25	5.00	2.74	0.55
Mumbai	7	12	5	.8	6	38	7.60	2.74	0.36
Total	38	40	21	27	30	156	31.20	7.85	

From the above data, answer the following questions assuming that the bank's credit exposure is at equal levels for each zone:

98. From business risk point of view, the Performance of the zone which is subjected to maximum risk exposure appears to be
(a) Ahmedabad (b) Mumbai (c) Chennai (d) Kolkata
99. F
rom Business risk point of view, the Performance of the Zone which is subjected least risk exposure appears to be
(a) Delhi (b) Mumbai (c) Chennai (d) Kolkata
100. The ratio of Standard Deviation to Mean for all zones put together for ABC Bank Ltd. Is
(a) 7.85 (b) 31.20 (c) 0.516 (d) 0.25

ANSWER PRACTICE TEST NO. 3

1	C	2	B	3	D	4	C	5	B	6	C	7	C	8	D	9	C	10	B
11	C	12	B	13	C	14	B	15	A	16	C	17	C	18	B	19	C	20	A
21	A	22	C	23	B	24	C	25	B	26	B	27	A	28	D	29	D	30	B
31	A	32	B	33	B	34	D	35	B	36	B	37	C	38	A	39	A	40	B
41	C	42	A	43	C	44	D	45	D	46	B	47	C	48	B	49	E	50	D
51	B	52	A	53	D	54	A	55	C	56	D	57	C	58	D	59	C	60	A
61	B	62	D	63	D	64	C	65	D	66	B	67	A	68	A	69	B	70	A
71	A	72	C	73	C	74	A	75	A	76	A	77	D	78	B	79	A	80	C
81	B	82	B	83	C	84	D	85	A	86	B	87	A	88	D	89	A	90	A
91	B	92	C	93	A	94	B	95	C	96	A	97	A	98	C	99	B	100	D

CASE STUDIES / CASE LETS

Case study - 1 : Calculation of Capital Fund (Fund based)

Popular Bank is a leading bank in public sector and its balance sheet as on 31.03.2008 reveals the following inter-bank call money market lending and refinance & loans to other banks:

1 Call money lending Rs.1100 cr which comprises: a)Rs.500 cr to a public sector bank having CRAR of 10%, b)Rs.300 cr to a private bank having CRAR of 14%, c)Rs.200 cr to a scheduled bank having CRAR of 8%, d)Rs.50 cr to a non-scheduled bank with CRAR of 16%,e)Rs.50 cr to another non-scheduled bank with CRAR of 5.5%. **2.** Loans and refinance to other banks as under: a)Rs.300 cr to a scheduled bank with CRAR of 5.5% b)Rs.200 cr to a non-scheduled bank with CRAR of 15% c)Rs.100 cr to a non-scheduled bank with CRAR of 8.5%.

What will be amount of capital fund required for this purpose **and what** will be the minimum or maximum amount of Tier I and Tier **II capital. The** RBI guidelines on the issue are as under:

RBI guidelines: The claims on banks incorporated in India and foreign **bank** branches in India, will be risk weighted as under:

(i) All claims on scheduled banks, which comply with the minimum CRAR (9% presently), will be risk weighted at 20%.

(ii) All claims on non scheduled banks which meet the minimum CRAR (9% presently), will be assigned a risk weight of 100%.

(iii) Claims on other scheduled and non scheduled banks will be assigned a risk weight as applicable to the bank's CRAR position as under:

a)CRAR of 6 to < 9 : For scheduled bank - 50% and for non-scheduled bank 150%

b)CRAR of 3 to < 6 : For scheduled bank - 100% and for nonscheduled bank 250%

c)CRAR of 0 to < 3 : For scheduled bank - 150% and for nonscheduled bank 350%

Negative CRAR: For scheduled bank or non-scheduled bank 625% **Solution:** Risk weight for Call money lending to other banks:

a) 500 cr x 20% = 100 cr b) 300 cr x 20 %= 60 cr c) 200 cr x 50% = 100 cr d) 50 cr x 100% = 50 cr

e) 50 cr x 250% = 125 cr

Total amount of risk weight for call money lending = 435 cr Risk weight for loan and refinance to other banks: a) 300 cr x 100% = 300 cr b) 200 cr x 100% = 200 cr c) 100 cr x 150%= 150 cr

Total amount of risk weight for loans/refinance = 650 cr Total amount risk weight assets = 435 + 650 cr = Rs.1085 cr. Total capital fund requirement = 1085 x 9% = Rs.97.65 cr Tier **I** capital should be minimum 50% = Rs.48.825 cr Tier **II** capital can be maximum 50% = Rs.48.825 cr

Case study - 2 : Calculation of Capital Fund (Non-Fund based)

Universal Bank has allowed non-fund based credit facilities **to its** borrowers, the details of which are as under:

a) letters of credit for imports of goods and buying of domestic goods to various parties within the retail portfolio — Rs.1000 cr (out of this, to AAA rated companies 20% and the balance for BBB rated).

b) standby letters of credit serving as financial guarantees for credit enhancements — Rs.500 cr (Entire

amount is to A rated companies)

c) Standby letters of credit related to particular transactions — Rs.200 cr (out of this to AA rated is 50% and balance amount is for unrated companies).

d) Performance bonds and bid bonds on behalf of their customers Rs.1000 cr (out of this 50% is to A rated and the balance for unrated companies)

e) Financial guarantees — Rs.400 cr (on behalf of AA rated companies)

f) Letters of credit of other banks confirmed by Universal Bank for imports — Rs.100 cr

RBI guidelines on credit conversion factor (CCF) are as under:

1. Direct credit substitutes e.g. general guarantees of indebtedness(including standby L/Cs serving as financial guarantees for loans and securities, credit enhancements, liquidity facilities for securitisation transactions), and acceptances (including endorsements with the character of acceptance). (i.e., the risk of loss depends on the credit worthiness of the counterparty or the party against whom a potential claim is acquired) : 100%

2. Certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties, indemnities, standby LC related to particular transaction) : 50%

3. Short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment) for both issuing bank and confirming bank : 20% The rules relating to risk weight for corporates based on rating provide as under:

AAA rated — 20%, AA-30%, A-50%, BBB-100%, BB & Below-150%, unrated- 100%

Please calculate the total amount of risk weighted assets and the total capital fund requirement.

Solution: To calculate the risk weight and provide for capital, the non-fund based exposure will be first converted into the funded exposure by applying the credit conversion factor.

Calculation of credit exposure using CCF:

a) Rs.1000 cr x 20% = 200 cr.

b) Rs.500 cr x 100% = 500 cr

c) Rs.200 cr x 50% = 100 cr

d) Rs.1000 cr x 50% = 500 cr

e) Rs.400 cr x 100% = 400 cr t) Rs.100 cr x 20% = 20 cr

Calculation of Risk weight on the above credit exposure:

a) Rs. 200 cr Out of this for 20% i.e. Rs.40 cr x 20% = 8 cr (20% is for AAA rated companies where risk weight is 20%)

Out of this for 80% i.e. Rs.160 cr x 100% = 160 cr (for this the risk weight is 100%)

b) Rs.500 cr x 50% = 250 cr (for A rated companies, the risk weight is 50%)

c) Rs.100 cr Out of this for 50% i.e. Rs.50 cr x 30% = 15 cr (risk weight is 30% for AA rated companies)
Out of this for 50% i.e. Rs.50 cr x 100 = 50 cr (risk weight is 100% for unrated companies)

d) Rs.500 cr Out of this for 50% i.e. Rs.250 cr x 50% = 125 cr (risk weight is 50% for A rated companies)
Out of this for 50% i.e. Rs.250 cr x 100% = 250 cr (risk weight is 100% for unrated companies)

e) Rs.400 cr x 30% = 120 cr (risk weight is 30% for AA ratedcompanies)

f) 20 cr x 20% = 4 cr (risk weight for confirming banks is 20%).

Total amount of risk weight assets from (a) to. (f)

8+ 160 + 250 + 15 + 50 + 125 + 250 + 120 4= 982

Minimum capital fund required for risk weighted assets of Rs.982 cr = 982 x 9% = Rs.88.38 cr

Case study - 3 : Effect of change of interest rates on net interest income

International Bank has the following repricing assets and liabilities:Call money— Rs.300 cr Cash credit loans — Rs.240 cr Cash in hand - Rs.200 cr Saving bank - Rs.300 cr Fixed Deposits - Rs.300 cr Current deposits Rs.250 cr On the basis of above information, answer the following questions: **01**What is the adjusted gap in repricing assets and liabilities?: a)Rs.540 cr b)Rs.600 cr c)Rs.60 cr negative d)Rs.60 cr positive **02**What is the change in net interest income, if interest falls by **2% p**oints across the board i.e. for all assets and liabilities?:a) improves by Rs.1.20 cr b)declines by Rs.1.20 cr c)changes by Rs.1 cr d) there is nochange 03)If the interest rates on assets and liabilities increase by 2%, what is the change in net interest

income?:a)improves by Rs.1.20 cr b) declines by Rs.1.20 cr c)changes by Rs.1 cr d) there is no change
04)If interest rate falls on call money by 1%, on Cash credit by 0.6%, on saving bank by 0.2% and on FD by 1%, what is change in net interest income?:a)improves by Rs.0.72 cr b)declines by Rs.0.82 cr c)decline by Rs.0.84 cr d)declines by Rs.0.96 cr 05)If interest rate increases on call money by 0.5%, on Cash credit by 1%, on saving bank by 0.1% and on FD by 0.8%, what is change in net interest income?:a)declines by Rs.1.05 cr b)improves by Rs.0.90 cr c)declines by Rs.1.25 cr d)improves by Rs.1.20 cr

Explanations: 01

Que-1: (SB + FD) — (Call money +CC) = (300 + 300) — (300 + 240) = Rs.60 cr (assets are less than liabilities — Hence negative gap). The cash in hand and current account deposits are not subject to re-pricing as these are not interest bearing, hence these have been ignored.

Que-2: There is negative gap (interest bearing liabilities more) of Rs.60 cr [(300 + 300) — (300 + 240)], which means the interest cost declines @2% on this negative gap, which leads to increase in NIL Hence it is Rs.60 cr x 2% = Rs.1.20 cr.

Que-3: There is negative gap of Rs.60 cr [(300 + 300) — (300 + 240)],3.00 cr) = 3.60 cr

Net fall in interest income = 4.44 cr — 3.60 cr = 0.84 cr.

Que-5: Increase in interest amount in case of assets = (Call — 300 x 0.5% = 1.50 cr) + (Cash credit — 240 x 1% =2.40) = Rs. 3.90 cr.

Increase in interest amount in case of liabilities (SB — 300 x 0.1 = 0.30 cr) + (300 x 0.8% = 2.40 cr) = 2.70 cr , Net improvement = 3.90 cr — 2.70 cr = 1.20 cr.

Case Study — 4 : Rating Migration in Borrowal Accounts •

You are provided the following information about the no. of loan accounts with different rating, in International Bank as on Mar 31, 2009 and Mar 31,2010.

Rating	Mar 31, 2009	Mar 31, 2010							
		AAA	AA+	AA	A+	A	BBB	C	Default
AAA	100	70	16	4	4	2	2	2	-
AA+	100	10	60	14	10	-	2	2	2
AA	-	-	-	-	-	-	-	-	-
A+	-	-	-	-	-	-	-	-	-
A	200	-	-	-	20	160	12	4	4
BBB	400	-	-	-	20	-	240	60	80
C	60	-	-	-	-	-	10	40	10
Default	-								

Based on this information, answer the following questions.:

01What is the %age of AAA rated borrower that remained at the same rating level during the observation period?: a)70% b)65% c)60% d)55%

02What is the no. of AAA rated accounts as at the end of observation period: a) 100 b) 80 c)70 d)60

03What is the percentage of migration of borrowers from A and BBB category to default category: a)1%, 20% b)2%, 20% c)1%, 10% d)2%, 10%

04What is the percentage of migration of loan accounts from C rated to default category?: a)10% b)12.50% c)15.5% d)16.7%

05What is the total no. of borrower in the default category at the beginning and end of the observation period?: a)nil, 80 b)nil, 90 c)nil, 96 d)inadequate information to answer the question

06Calculate the percentage for migration of AA+ account to AA category.: a) 10% b)12% c)**14%** d)16%

07What is the percentage of BBB category accounts, that did not change their category during the observation period?: a)70% b)60% c)50%d)40%

08What is the percentage of A category accounts that were upgraded to A+ category?: a)10% b)12.5% c)15%d)17.5%

Answers: 1-a 2-b 3-b 4-d 5-c 6-c 7-b 8-a

Explanations:

Que-1: Mar 2010 = 70 accounts. Mar 2009 = 100 account. **Hence**70/100x100 = 70%

Que-2: 70 + 10 = 80

Que-3: For A category = 4 / 200 x 100 = 2%. For BBB category = 80/ 400 x 100 = 20%

Que-4: 10 / 60 x 100 = 16.7%

Que-5: At beginning — nil At end = 2+4+80+10 = 96

Que-6: 14 / 100 X 100 = 14%

Que-7: 240 / 400 x 100 = 60%

Que-8: 20 / 100 x % = 10%

Case Study — 5 : Calculation of capital for market risk

International Bank has paid up capital of Rs.100 cr, free reserves of Rs.300 cr, provisions and contingencies reserves Rs.200 cr, revaluation reserve of Rs.300 cr, Perpetual non-cumulative preference shares of Rs.400 cr, and subordinated debt of Rs.300 cr. The risk weighted assets for credit and operational risk are Rs.10000 cr and for market risk Rs.4000 cr.

Based on the above information, answer the following questions?:

01What is the amount of Tier-1 capital?: a)900 cr b)800 cr c)750 cr d)610 cr

02Calculate the amount of Tier-2 capital?: a)900 cr b)800 cr c)750 cr d)610 cr

03Calculate the amount of capital fund.: a)895 cr b) 1255 cr c)1435 cr d)1675 cr

04What is the capital adequacy ratio of the bank?: **a)**9% b)9.65% c)10.05% d)10.07%

05What is amount of minimum capital to support credit and operational risk?:a)900 cr b)950 cr c)1000 cr d)1250 cr

06What is the amount of minimum Tier 1 and Tier 2 to support the credit and operational risk?: a)900 cr, 900cr b)600 cr, 900 cr c)450 cr, 450 cr d)300 cr, 450 cr

07What is the amount of Tier-1 capital fund, to support market **risk?:** a)**450** cr b)350 cr c)250 cr d) 185 cr

08What is the amount of Tier-2 capital fund, to support market risk?: a)450 cr b)350cr c)250 cr d) 160 cr

Answers: 1-b 2-d 3-c 4-d 5-a 6-c 7-b 8-d

Case Study — 7: Calculation of Risk Weighted Assets based on. Standard Approach for credit risk

The assets side of balance sheet of International Bank provides the following information:

Fixed Assets — 500 cr, Investment in Central govt. securities — Rs.5000 cr. In standard loan accounts, the Retail loans — Rs.3000 cr, House Loans- Rs.2000 cr (all individual loans below Rs.30 lac and fully secured by mortgage), Other loans — Rs.10000 cr. Sub-standard secured loans — Rs.500 cr, sub-standard unsecured loans Rs.150 cr, Doubtful loans Rs.800 cr (all DF-1 category and fully secured) and other assetsRs.200 cr.

Based on this information, by using Standard Approach for credit risk, answer the following questions.

01What is the amount of risk weighted assets for retail loans?:a)Rs.3000 cr b)Rs.2500 cr c)Rs.2250 cr d)Zero, as retail loans are risk free

02What is the amount of risk weighted assets for housing loans?: a)Rs.2000 cr b)Rs.1800 cr c) Rs.1500 cr d) Rs.1000 cr

03What is the amount of risk weighted assets for investment in govt. securities: a)Rs.5000 cr b) Rs.2500 cr c)Rs.1000 cr d)nil

04What is the amount of risk weighted assets for sub-standard secured accounts?: a)Rs.250 cr b)Rs.500 cr c)Rs.750 cr d)Rs.1000 cr

05What is the amount of risk weighted assets for sub-standard unsecured accounts? : a)Rs.75cr b) Rs.112.50 cr c)Rs.150 cr d)Rs.225 cr

06What is the amount of risk weighted assets for doubtful accounts?: a)Rs.400 cr b)Rs.600 cr c) Rs.800 cr d)Rs.1600 cr

Answers: 1-c 2-d 3-d 4-c 5-c 6-c

Explanations:

Que-1: RW is 75% on retail loans. RW value = 3000 x 75% = 2250

Que-2: RW is 50% on housing loans for individual loan up to Rs.30 lac. RW value = 2000 x 50% = 1000

Que-3: On claims against Central govt., the risk weight is zero. 5000 x 0% = 0

Que-4: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard secured account, the provision being 10%, RW is 150%. Hence RWA = 500 x 150% = 750 cr

Que-5: RW is 150%, if the provision is less than 20%, nd 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In sub-standard unsecured account, the provision being 20%, RW is 100%. Hence RWA = 150 x 100% = 150 cr

Que-6: RW is 150%, if the provision is less than 20% and 100%, if the provisions is 20% and 50%, where the provision is 50% of the outstanding balance. In doubtful up to one year category (DF1) account, the provision being 20%, RW is 100%. Hence RWA = 800 x 100% = 800 cr

Case Study — 8 : NPA provisioning

International Bank has provided the following information relating to its advance portfolio as on Mar 31, 2010: Total advances Rs.40000 cr. Gross NPA 9% and Net NPA 2%. Based on this information, answer the following questions?

01Considering that all the standard loan accounts represent general advances, what is the amount of provision for standard loan accounts: a)Rs.160 cr b)Rs.151.90 cr c)Rs.145.60 cr d)Rs.141.50 cr

02What is the provision on NPA accounts?: a)Rs.3600 cr b)Rs.3200 cr c)Rs.2800 cr d)Incomplete information. Cannot be calculated.

03What is the total amount of provisions on total advances,including the standard accounts?: a)Rs:3612.30 cr b)Rs.2945.60 cr c)Rs.2840.20 cr d) Incomplete information. Cannot be calculated.

04What is the amount of gross NPA ?: a)Rs.4000 cr b)Rs.3600 cr c) Rs.3200 cr d)Rs.2800 cr

05What is the amount of net NPA?: a)Rs.800 cr b)Rs.1000 cr c)Rs.1200 cr d)Incomplete information.

06What is the provision coverage ratio for NPA?: a) 70% b)74.3% c)75.2% d)77.8%

07What is the minimum amount of provisions to be maintained by the bank to meet the provisioning coverage ratio of 70%.: a)Rs.3600 cr b)Rs.3200 cr c)Rs.2880 cr d)Rs.2520 cr

Answers: 1-c 2-c 3-b 4-b 5-a 6-d 7-d

Explanations:

Que-1: Standard account Total = 40000 cr — 9% NPA = 3600 cr. = 40000 — 3600 = 36400 cr. Provision at 0.4% = 36400 x 0.4% = 145.60 cr

Que-2: Provision on NPA = Gross NPA 9% - net NPA 2% = 7% i.e. 40000 x 7% = 2800 cr.

Que-3: Provision on NPA = Gross NPA 9% - net NPA 2% = 7% i.e. 0000 x 7% = 2800 cr. Provision on standard accounts Rs.145.60 cr. Hence total provision = 2945.60 cr.

Que-4: 40000 x 9% = 3600 cr

Que-5: 40000 X 2% = 800 cr

Que-6: Total provision on NPA / Gross NPA = 2800 / 3600 = 77.8%

Que-7: Gross NPA x 70% = 3600 x 70% =2520cr

Case Study — 9 : Default Probabilities

International Bank has provided following information on its advances portfolio:

Default nrobabilit

Rating	AAA	AA	A	BBB	BB	B	CCC
3 year	0.04%	0.15%	0.30%	1.10%	6.0%	25.0%	40.0%
5 year	0.10%	0.40%	0.60%	2.00%	10.0%	35.0%	45.0%

The base rate of the bank = 11% which is charged for AAA category borrowers for a 3 year loan.The load factor is added to base rate by 1% for AA, 2% for A, 3% for BBB, 4% for BB accounts.The load factor is further increased by 0.5% for each additional maturity year over 3 years.

Based on this information, answer the following questions?:

01Which of the following loans shall have the highest expected loss if there is no amortization and entire loan is payable on maturity only.: a)Rs.600 lac — 3 year loan to A rated borrower b)Rs.50 lac — 5 year loan to BB rated borrower c)Rs.400 lac — 3 year loan to BBB rated borrower d)Rs.2500 lac — 5 year loan to AA rated borrower

02Banks has given a loan of Rs.400 lac to an A rated company for 5 years out of which 2 year period has already lapsed and there has been no default. Present outstanding is Rs.300 lac in the loan. EAD is 100% and LGD 50%. What is the expected loss on this account?: a)Rs.45000 b)Rs.54000 c)Rs.63000 d)Rs.72000

03Taking into account the above risk policy of the bank, which loan shall earn the lowest return? : a)BB — 3 year b)BBB — 5 year c)A — 5 year d)AAA — 3 year

04Bank wants to sanction a loan to AA rated borrower which is repayable in 5 years. What interest rate should be charged by the bank?: a)11.0% b) 11.5% c)12.5% d)13%

05As on Mar 31.3.2009, bank had 200 BBB rated account out of which 10% account migrated to default category by 31.3.2010. What is increase in no. of accounts in default category?: a)20 b)25 c)30 d)35

Answers:1-d 3-d 4-d 5-a

Explanations:

Que-1: AA rated borrower is having the largest amount, due to which here the expected loss would be highest.

Que-2: 300 x 0.30 x 50% = Rs.45000 (remaining period of load is 3 year. Hence 0.30% default probability has

been taken)
Que-3: AAA loan shall have the lowest interest rate as the period is least and rating is highest.
Que-4: Base rate + load factor for AA rating + load factor for 5 year over 3 year maturity.11% + 1.0% + 1% = 13%
Que-5: 200 x 10% = 20
Case Study —10 : Pre-shipment and post-shipment Loan
An exporter approaches the Popular Bank for pre-shipment and post-shipment loan with estimated sales of Rs. 100 lakh. The bank sanctions a limit of Rs. 50 lakh, with 25 % margin for pre-shipment loan on FOB value and margins on bills of 10 % on foreign demand bills and 20 % on foreign usance bills.The firm gets an order for USD 50,000 (CIF) to Australia. **On** 1.1.2011 when the USD/INR rate was Rs.43.50 per USD, the firm **approached** the Bank for releasing pre-shipment loan (PCL), which is released.On 31.3.2011, the firm submitted export documents, drawn on sight basis for USD 45,000 as full and final shipment. The bank purchased the documents~at Rs.43.85, adjusted the PCL outstanding and credited the balance amount to the firm's account, after recovering interest for Normal Transit Period (NTP).The documents were realized on 30.4.2011 after deduction of foreign bank charges of USD 450. The bank adjusted the outstanding post shipment advance against the bill.Bank charged interest for pre-shipment loan @ 7 % up to 90 days and, @ 8% over 90 days up to 180 days. For Post shipment credit the Bank charged interest @ 7 % for demand bills and @ 7.5 % for usance (D/A) documents up to 90 days and @ 8.50 % thereafter and on all overdues, interest @ 10%.
01.What is the amount that the Bank can allow as PCL to the exporter against the given export order, considering the profit margin of 10% and insurance and freight cost of 12% ?: a)Rs.2200000 b)Rs.1650000 c)Rs.1485000 d)Rs.1291950
02What is the amount of post shipment advance that can be allowed by the Bank under foreign bills purchased, for the bill submitted by the exporter?:a)Rs.1980000 b)Rs.1775925 c)Rs.1973250 d)Rs.2192500
03.What will be the period for which the Bank charges concessional interest on DP bills, from date of purchase of the bill?: a)90 days b)25 days c)31 days d)Up to date of realization 04In the above case, when should the bill be crystallized (latest date), if the bill remains unrealised for over two months, from the date of purchase (ignore holidays)?: a)On 30.4.2011 b)On 24.4.2011 c)On 24.5.2011 d)On 31.5.2011
05 What rate of interest will be applicable for charging interest on the export bill at the time of realisation, for the days beyond Normal Due Date (NDD)?: a)8% b)7% c)7.5 % d)10 %
Answers: 1-d 2-c 3-b 4-c 5-d
Explanations:
1FOB value = = 50000 x 43.50 = 2175000 — 24000 (12% of 2175000) = 1914000 — 191400 (10% profit margin) = 1722600 430650 (25% margin) = 1291950
2) 45000 x 43.85 = 1973250 3)Concessional rate wil' be charged for normal transit period of 25 days and there after overdue interest will be charged.
4)Crystallisation will be done when the bill becomes overdue after 25 days of normal transit period. Date of overdue will be 25.4.2011. If bill remains overdue, it will be crystallised within 30 days i.e. up to 24.5.2011.
5)Rate of interest will be 10% as the overdue interest is stated as 10% in the question.

CASE STUDY11:
Modern Bank has the following assets liabilities (other than capital and Reserves) in its balance sheet: current deposits Rs.500 cr, saving bank deposits Rs.1000 cr, term deposits Rs.3000 cr, cash in hand Rs.300 cr, call money Rs.400 cr and cash credit loans Rs.4000 cr There is change in interest rates as under: saving bank - increase from 3.5% to 4%, FD - from 7.5% to 8.5%, call money - from 5% to 6% and cash credit - from 12% to 12.5%
01 Calculate the adjusted gap in re-pricing assets and liabilities: a)Rs.200 cr negative b)Rs.200,cr positive c)Rs.400 cr negative d)Rs.400 cr positive
02 On the basis of change in interest rate, calculate the amount of repricing liabilities, as per standard gap method in re-pricing assets and liabilities.: a)Rs.3000 cr b)Rs.3500 cr c)Rs.2500 cr d)Rs.2400 cr
03 On the basis of change in interest rate, calculate the amount of repricing assets, as per standard gap method in re-pricing assets and liabilities. : a)Rs.3000 cr b)Rs.3500 cr c)Rs.2500 cr d)Rs.2400 cr
04 On the basis of above information, calculate the standard gap of the bank in re-pricing assets and liabilities: a)1000 cr negative b)1000 cr positive c)1100 cr negative d)1100 cr positive

Explanation:
1.Adjusted gap = (SB + FD) - (Call money + Cash credit) = (1000 + 3000) - (400 + 4000) = - 400. Current account and cash not to be taken, as these are not subject to repricing. 2)Repricing liabilities = (SB + FD) = 1000 x 0.5 + 3000 x 1 = 500 + 3000 = 3500 cr. 3)Repricing assets = (Call money + cash credit) = 400 x 1 + 4000 x 0.5 = 400 + 2000 = 2400 cr 4. Repricing liabilities = (SB + FD) = 1000

x 0.5 + 3000 x 1 = 500 + 3000 = 350dcr.
Repricing assets = (Call money + cash credit) = 400 x + 4000 x 0.5 = 400 + 2000 = 2400 cr.
Gap = 3500 — 2400 = 1100 cr negative (liabilities more than assets)

Answers: 1-c 2-b 3-d 4-c

Case Study.— 12

Problem: International Bank purchased 8% gkivt. securities, with face value of Rs.1000 at Rs.1060 each for 8.510' jrield. Due to change in yield to 9%, the value of the securities declined to Rs.1020.

01 On the basis of above information, calculate change in basis point value for each basis point increase in the yield.: a)Rs.40 b)50 paise c) 80 paise d) inadequate information

02 If there is increase in yield by 100 basis points, instead of 50 basic points as above, during this period, what will be price of security: a)Rs.960 b)Rs.980 c)Rs.1040 d) Rs.1080

03 The bank decides to sell the security immediately, to stop the loss. How much it will lose on the sale transaction ?: a) Rs.20 per bond b)Rs.30 per bond c)Rs.40 per bond d) inadequate information.

Explanation:

1. Change in value / change in yield = (1060-1020) / (9.00 — 8.50) = Rs.40 / 50 basis points = 80 paise
Change in basis point = Change in value / change in yield = (10601020) / (9.00 — 8.50) = Rs.40 / 50 basis points = 80 paise. Change for 100 basis points = 80 p x 100 = Rs.80. Value = Old price change = 1060- 80-= 960
3. Loss = purchase price — current value at which it can be sold = 1060 -1020 = Rs.40

Answers: 1-c 2-a 3-c

CASE STUDY 13- Calculation of Admissible Additional Tier 1 and Tier 2 capital as per Basel III

Universal bank calculated the capital adequacy ratios as under:

Common Equity Tier 1 Ratio	8.5% of risk weighted assets 2.5% of risk weighted assets
Capital conservation buffer	
PNCPS / PDI	3.5% of risk weighted assets
Tier 2 capital issued by bank	2.5% of risk weighted assets
Total capital available	17% of risk weighted assets

As per Basel III rules of RBI, for the purpose of reporting Tier 1 capital and CRAR, any excess Additional Tier 1 (AT1) capital and Tier 2 (T2) capital will be recognised in the same proportion as that applicable towards minimum capital requirements. At min 9% total capital, the max AT1 can be 1.5% and T2 can be max 2%.

On the basis of given information, answer the following questions:

01 What is the amount of total CET1 capital:a)9% b)10% c)11% d)12%
Explanation: Total CET1 = CET1 + CCB = 8.5% + 2.5% = 11%

02 What is the amount of PNCPS / PDI eligible for Tierl? a)3% b)2.5% c)2.125% d)1.375%
Explanation: PNCPS / PDI eligible for Tier 1 = 1.5 / 6 x 8.5 = 2.125%

03 What is the amount of PNCPS / PDI not eligible for Tier I?:a)3% b)2.5% c)2.125% d)1.375%
Explanation PNCPS / PDI not eligible for Tier 1 = 3.5 - 2.125 =1.375%
04 What is the amount of Tier 2 eligible for CRAR? a:2% b:2.5% c:2.833% d:0.333%
Explanation: Tier 2 eligible for CRAR = 2 / 6 x 8.5 = 2.833%
05What is the amount of PNCPS / PDI eligible for Tier2?: a:2% b:2.5% c:2.833% d:0.333%
Explanation: PNCPS / PDI eligible for Tier 2 = 2.833 - 2.5 = 0.333%
06 What is "Ate amount of PNCPS / PDI not eligible foi Tier 2 capital?: a:1.375% b:1.042% c:2.125% d:0.333%
Explanation: PNCPS / PDI not eligible for Tier 2 = 1.375 - 0.333 = 1.042%
07What is the total amount of eligible capital?: a)17% b)16.43% c)15.96% d)14.13%
Explanation :Total CETI = CETI + CCB = 8.5% + 2.5% = 11% PNCPS / PDI eligible for Tier 1= 1.5 / 6 x 8.5 = 2.125%PNCPS / PDI not eligible for Tier 1 = 3.5 - 2.125 = 1.375% Tier 2 eligible for CRAR = 2 / 6 x 8.5 = 2.833%PNCPS / PDI eligible for Tier 2 = 2.833 - 2.5 = 0.333%PNCPS / PDI not eligible for Tier 2 = 1.375 - 0.333 = 1.042% Total capital available := CETI + AT1 + T2 = 11% + 2.125 + 2.833 = 15.958 or 15.96%

Answers : 1-c 2-c 3-c 4-c 5-d 6-b 7-c

CASE STUDY NO.14

Based on the following information, answer following questions.
Family Bank Ltd. has invested Rs. 300000L- on 31.03.2005 in __following Securities

Sr. No.	Security Name	Face Value (Rs.)	Yield %	Price (Rs.)	Cost (Rs.)
1	8% 001 Loan 2011	100000	6.52	107.30	107300
2.	10% 001 Loan 2014	200000	6.73	122.05	244100

The yields on these securities have undergone change as on 31.12.2005. Yield and price of above securities became as under:

Sr. No.	Security Name	FaceValue (Rs.)	Yield %	Price (Rs.)	Market Value (Rs.)
1_	8% 001 Loan 2011	100000	6.73	105.63	105630
2.	10% GOI Loan 2014	200000	7.06	118.54	237080

Using the above given data, answer the following five questions. Computation of price I yield to nearest 2 decimals only.

(1) Find the change in Basis Point Value for every basis point increase in yield for 8% GOI Loan 2011 on 31.12.2005 over 31.03.2005

(1) 9.75 Paise (2) 7.95 Paise (3) 5.75 Paise (3) 5.97 Paise

(2) Find the change in Basis Point Value for every basis point increase in yield for 10% GOI Loan 2014 on 31.12.2005 over 31.03.2005_

(1) 6.30 Paise (2) 7.95 Paise (3) 10.64 Paise (4) 3.60 Paise

(3) If the yield is increased by 100 basis points over March 31, 2005, what would be the price of 10% GOI Loan 2014?

(1) Rs. 111.41 (2) Rs. 112 (3)`Rs. 100 (4) None of these

(4) Had the Family Bank Ltd. decided to sell these two securities on 31.12.2005 at prevailing yield to stop loss, the loss would have been

(1) Rs. 51400 (2) Rs. 42710 (3) Nil Loss (4) Rs. 8690

(5) The prices of given securities have fallen as a result of increase in yield. This is due to: (1) Bonds are maturing beyond 5 years

(2)Investors are not interested for longer period bonds and hence they are sold at a discount

(3) Bond prices are inversely proportional to change of interest rates

(4)Bonds prices are directly proportional to change in interest rates.

CASE STUDY NO. 15

11.50% Central Government Stock 2011 was issued on 24.11.2000 with Maturity on 24.11.2011. The Coupon of 11.50% is payable half yearly on 24th November and 24th May every year. At Yield to Maturity (YTM) of 6.80 percent, the bond is quoted at Rs_ 121.07 on 15.06.2006. The Duration of the Bond is 4.30 years. Answer the following questions

1. At 6.80% YTM, the 11.50% Central Government Stock 2011 is a

(1) Premium bond for the purchaser (2) Discount bond for the purchaser
(3) Par bond for the purchaser (4) Information insufficient to opine

2. 'Years to Maturity' of the Bond if the purchase date is 15.06.2006 shall be

(1) 6 years (2) 11 years (3) 5.44 years (4) 5 years

3. The Modified Duration of the Bond at 6.8% YTM shall be

(1) 5 years (2) 6 years (3) 5.44 years (4)4.02 years

CASE STUDY NO. 16

DC Bank, a cooperative'bank allowed huge loans amounting to Rs.750 cr to the group companies of Mis CDR, against overpriced shares of group companies. The bank used to issue their pay orders to the borrower without real cash balance in their account or enduring funding requirements as necessary in case of pre-paid instruments. CDR used to

have account with bank B having branch in Mumbai. The branch had discounted the pay order issued by DC Bank amounting to Rs.75 cr and presented these through clearing house. But DC Bank could not provide funds. Resultantly, the pay orders were dishonoured. The clearing house regulator put embargo on DC Bank. Bank B yet to recover Rs.70 cr from CDR. The investigation revealed on the day of collapse of DC Bank, 65% of the discounted pay orders by Bank B belonged

to DC Bank. Bank has held its manager responsible for inadequate management control. It was talso found that around 60% of total loans given by DC Bank were restricted to 10 entities. The collapse of the DC Bank had a chain reaction in other cooperative banks. Based on the above facts, answer the following questions:

1 Bank B's loss of Rs.70 cr in discounting the pay orders is falling under:

a) credit risk b) operational risk c)market risk d)combination of credit risk and operational risk

2 DC Bank's outstanding loans to CDR group was more than 40% of their capital funds. Such high exposure to a single group by a bank is against the regulatory guidelines to avoid:

a) concentration risk b)systemic risk c)funding risk d)reputational risk

3 If the regulator has put embargo or ordered liquidation of DC Bank, the effect as a result of this could lead to:

a) legal risk b)systemic risk c)counterparty risk d)liquidity risk

4 As per existing guidelines of RBI, the DC Bank is required to disclose their exposure to capital market under

a) segment reporting b)transactions with related parties c)exposure to sensitive sectors

d) maturity pattern of assets and liabilities

CASE STUDY NO.17

Based on the following information, answer following questions

Rating migration of Loan Accounts based on their internal Rating Module for Fair Growth Bank Ltd. between 31.3.05 to 31.3.06 are given in the following tables.

Last Rating	No. of Accounts	Present Rating							Default
		AAA	AA+	AA	A+	A	BBB	C	
AAA	50	35	8	2	2	1	1	1	
AA+	50	5	30	7	5	-	1	1	1
A	100	-		-	10	80	6	2	2
BBB	200	-	-		10	-	120	30	40
C	30	-	-	-	-	-	5	20	5

Standard migration pattern for A' rated Borrowers shows a default Probability of 0.2% and 'BBB' rated Borrowers shows a default probability of 20%. Based on the given data, answer the following five questions.

1. Find out the percentage of 'AAA' rated borrowers which remained at the same rating level for the observation period.

(1) 35% (2) 50% (3) 70% (4) 10%

2. At the end of the observation period, the number of 'AAA' rated borrowers remained at

(1) 40 (2) 55 (3) 35 (4) 100

3. The Percentage (%) of migration of borrowers from 'A' and 'BBB' category to default category are and

(1) 20%, 40% (2) 20%, 40% (3) 2%, 20% (4) 0.2%, 40%

4. Going by the Standard Migration Rating, which type of Rating module the regulator will advise the bank the follow?

(1) Both 'A' and 'BBB' rated borrowers (2) Only 'A' rated borrowers (3) 'BBB' rated borrowers (4) none

5. At the end of the observation period the number of default category borrowers remained at

(1) 40 (2) 54 (3) 133 (4) 48

CASE STUDY NO. 18

The Modern Bank Limited, through its internal modules has assessed the default probabilities of its loan products by tracking last 5 years data given below. Use the give PD table and information below to answer the next five questions:

Default Probabilities

Rating	3 years	5 years
AAA	0.05%	0.15%
AA	0.20%	0.50%
A	0.30%	0.70%
BBB	0.90%	2.00%
BB	7.00%	12.0%
B	20.0%	30.0%
CCC	35.0%	40.0%

BPLR of the bank is 10% p.a. which is applicable to AAA rated loans for a repayment period of up to 3 years and for every additional one year the load factor is 50 basis points. For lower rating loan, the load factor 100 by for AA rated, 200 by for A rated, 300 by for BBB and 400 by on BB rated loans up to 3 years. For longer repayments, additional 50 by is demanded for each additional year. Using the PD table and above information, answer the following questions: 1 Which loan below has the highest expected credit loss (assume that all the loans are due at maturity without amortization)

a 3-year loan of Rs.500 lac to a counterparty with a credit rating of A.

have account with bank B having branch in Mumbai. The branch had discounted the pay order issued h' DC I and amounting to

Rs.75 cr and preSented these through clearing house. But DC Bank could not provide funds. Resultantly, the pay orders were dishonoured. The clearing house regulator put embargo on DC Bank. Bank B yet to recover Rs.70 cr from CDR. The investigation revealed on the day of collapse of DC Bank, 65% of the discounted pay orders by Bank
B belonged to DC Bank. Bank has held its manager responsible for inadequate management control. It was also found that around 60% of total loans given by DC Bank were restricted to 10 entities. The collapse of the DC Bank had a chain reaction in other cooperative banks. Based on the above facts, answer the following questions:
1 Bank B's loss of Rs.70 cr in discounting the pay orders is falling under.
a) credit risk b) operational risk c)market risk d)combination of credit risk and operational risk
2 DC Bank's outstanding loans to CDR group was more than 40% of their capital funds. Such high exposure to a single group by a bank is against the regulatory guidelines to avoid:
a) concentration risk b)systemic risk c)funding risk d)reputational risk
3 If the regulator has put embargo or ordered liquidation of DC Bank, the effect as a result of this could lead to:
a) legal risk b)systemic risk c)counterparty risk d)liquidity risk
4 As per existing guidelines of RBI, the DC Bank is required to disclose their exposure to capital market under:
a) segment reporting b)transactions with related parties c)exposure to sensitive sectors
d) maturity pattern of assets and liabilities

CASE STUDY NO.17

Based on the following information, answer following questions
Rating migration of—Loan Accounts based on their internal Rating Module for Fair Growth Bank Ltd. between 31.3.05 to 31.3.06 are Given in the following tables.

Last Rating	No. of Accounts	Present Rating							
		AAA	AA+	AA	A+	A	BBB	C	Default
AAA	50	35	8	2	2	1	1		
AA+	50	5	30	7	5	-	1		
A	100	-	-	-	10	80	6	2	2
BBB	200	-	-	-	10	-	120	30	40
C	30	-	-	-	-	-	5	20	5

Standard migration pattern for 'A' rated Borrowers shows a default Probability of 0.2% and 'BBB' rated Borrowers shows a default probability of 20%. Based on the given data, answer the following five questions.
1. Find out the percentage of 'AAA' rated borrowers which remained at the same rating level for the observation period.
(1) 35% (2) 50% (3) 70% (4) 10%
2. At the end of the observation period, the number of 'AAA' rated borrowers remained at
(1) 40 (2) 55 (3) 35 (4) 100
3. The Percentage (%) of migration of borrowers from 'A' and 'BBB' category to default category are and
(1) 20%, 40% (2) 20%, 40% (3) 2%, 20% (4) 0.2%, 40%
4. Going by the Standard Migration Rating, which type of Rating module the regulator will advise the bank the follow?
(1) Both 'A' and 'BBB' rated borrowers (2) Only 'A' rated borrowers (3) 'BBB' rated borrowers (4) none
5. At the end of the observation period the number of default category borrowers remained at
(1) 40 (2) 54 (3) 133 (4) 48

CASE STUDY NO. 18

The Modern Bank Limited, through its internal modules has assessed the default probabilities of its loan products by tracking last 5 years data given below. Use the give PD table and information below to answer the next five questions:
Default Probabilities

Rating	3 years	5 years
AAA	0.05%	0.15%
AA .	0.20%	0.50%
A	0.30%	0.70%
BBB	0.90%	2.00%
BB	7.00%	12.0%
B	20.0%	30.0%
CCC	35.0%	40.0%

BPLR of the bank is 10% p.a. which.is applicable to AAA rated loans for a repayment period of up to 3 years and for every additional one year the load factor is 50 basis points. For lower rating loan, the load factor 1000? ker A.A rated, 200 by for A rated, 300 by for BBB and 400 by on BB rated loans up to 3 years. For longer repayments, additional 50 by is demanded for each additional year. Using the PD table and above information, answer the following questions:
1 Which loan below has the highest expected credit loss (assume that all the loans are due at maturity without

amortization)
a 3-year loan of Rs.500 lac to a counternarty with a credit rating of A.b 5-year loan of Rs.15 lac to a counterparty with a credit rating of BB.
c 5-year loan of Rs.4000 lac to a counterparty with a credit rating of AA.
d 3-year loan of Rs.200 lac to a counterparty with a credit rating of BBB.
2 Bank has given loan to M rated corporate for a period of 5 years of which 2 years has lapsed without any default. Present o/s is Rs.200 lac. The company has drawn the loan to the fullest extent (EAD 100% and the LG .13 45%). Using the probability of default table given above, find the appx expected loss from the loan:
a Rs.18000 b Rs.15000 c Rs.45000 d Rs.27000
3 Going by the bank's risk priority policy of loan, which of the following loan accounts return will be lowest:
a BBB rated loan of 4 years repayment period b A rated loan of 3 years repayment schedule
c one year BB rated loan with a ken on LIC policy of surrender value equal to 50% of loan amount
d AAA 5-year loan
4 The bank is considering a loan proposal of Rs.50 lac which is A rated as per its internal rating module. The borrower is asking for a 5 year repayment schedule. As credit risk manager, you are assigned to calculate the rate of interest to the loan taking into pricing of the bank. The interest rate should be:
a 12% b 11% c 15% d 13%
5 The bank had 250 BBB accounts which were rated as on 31.03.04 and 8% accounts migrated to default category as on 31.03.05. The no. of additional defaults accounts as on 31.03.05 is:
a 8 b 20 - c 12 d 16

CASE STUDY NO. 19

Firm X and Firm Y approach Bank-A for a term loan of Rs.50 lac each. X has a higher credit rating (AAA) and Y has (A) rating. Interest rate quoted by the bank for Firm X is 10% fixed and LIBOR as floating rate and for Firm Y A is 14% fixed and LIBOR+2% floating. Firm X wants floating rate and firm Y wants a fixed rate loan. The borrowers wishing to capitalize on the interest rate in the respective fixed and floating interest rate markets available to them, have entered into a interest rate swap, so as to gain on the interest rate equally between them.
Based on the above information answer the following questions:
1. The effective rate to X and Y, if they enter into an interest swap would be:
a LIBOR less 1% for firm X b Fixed 10% less 1% for X
c LIBOR less 4% for Y d Fixed 14% less 1% for Y
Which of the above statements is correct:
(1) a and b are correct (2) a and c are correct
(3) a and d are correct (4) none of the above
2 If the above swap is concluded, which of the following statement would be true
a X will borrow at fixed rate b Y will borrow at fixed rat
e Y will borrow at floating rate d X will borrow at floating rate
Which of the above statements is correct:
1 only a is true 2 a and b are true 3 a and c are true 4 a and d are true
3 In the above type of swap, which statement given below is not correct:
a principal amount is exchanged at the time of agreement (b) X will pay firm Y at LIBOR
c Y will borrow at LIBOR + 2% (d) Interest differential will be netted and settled between X and Y
4 The above type of interest rate swap is called:
a plain vanilla swap b basis swap c amortising swap d step up swap
5 The following statements are given in this connection:
a the interest rate swap can be concluded for a notional sum
b the above type of swap is an exchange traded swap
c the swap is independent of the respective borrowings of firm X and Y from the bank
d the difference in interest rate will be paid or received by either parties at specified intervals. Which of the above statements is correct
1 a and b are correct 2 a, b and c are true
3 a, b, c and d are true 4 a, c and d are true

CASE STUDY NO.20

A bank gets a FCNR deposit of USD 5 million for 3 years. The bank converts USD 4 millions to Indian Rupees the rate of USD 1 = INR 45. It leaves rest of the balance in its Nostra Account. The assets and liabilities of *the Dank in* US Dollars show the position as below:
FCNR Deposit USD 50,00,000; Nostro Account USD10,00,000; Position AccountUSD 40,00,000
1. State which of the following statements is correct

(a) Bank has overbought position of USD 4 million
(b) Bank has oversold position of USD 1 million
(c) Bank has oversold position of USD 4 million
(d) Bank has overbought position of USD 1 million

2. Foreign exchange rate of USD moves up to Rs. 46. In this situation

(1)The Bank stands to lose Rs. 4 mio (2) The bank stands to gain Rs. 4 mio
(3)The Bank stands to loSe Rs. 1 mio (4)The Bank stands to gain Rs. 1 mio

3. Foreign exchange rate of USD moves to Rs. 44. In this situation

(1)The Bank stands to lose Rs. 4 mio (2)The Bank stands to gain Rs. 4 mio
(3)The Bank stands to lose Rs. 1 mio (4)The Bank stands to gain Rs. 1 mio

4. Bank has overnight limit of USD **1** million. Considering this, which of the following forex transaction will have to be done by the bank's dealer?

(a) Acquire USD assets of at least USD 3 million
(b) Acquire USD assets of at least USD 1 million
(c) Acquire USD liabilities of at least USD 3 million
(d) Acquire USD liabilities of at least USD 1 million

5. If Bank invests entire funds of USD 5 million from the above FCNR deposit in a 3 year USD loan with interest rate of 6 month LIBOR plus 100 basis points, in this situation, which of the following statements is correct?

(1)Bank has basis risk for interest rate (2) Bank has forex risk
(3) Bank has maturity risk (4) None of the above

CASE STUDY NO. 21

Fair Glow Pvt. Ltd. is maintaining a current account with your branch with an average balance of Rs. 40 lakh. Branch head has been pursing with their management to avail credit facility from your bank considering their satisfactory dealings. The company has approached the Branch for investment in their Commercial Paper (CP) issue of Rs. 20 crore. The company requested to subscribe at least Rs. 5 crore in the issue. They have submitted the following papers for the purpose.

(i) Copy of duly Certified Rating Certificate issued by CRIS1L with P2 rating dated 10.01.2008, validity one year from issue date for Rs. 40 crore. (ii) Copy of Board Resolution dated 30.12.2007 for issuance of C.P. maximum upto Rs. 50 crore from the market within a period of one year. (iii) The Company has also submitted papers to confirm that they are eligible to issue CP as per Reserve Bank of India guidelines.

(iv) The company also informed they have successfully completed one tranche of CP issue of Rs. 20 crore for a period of 181 days on 25.03.2008. The Present issue is for a period of 91 days.

1. The first step the branch will take in the matter is to _

(a) Send all papers to Treasury Department for their decision as investments decisions are handled there.
(b) Reject the Proposal of investment in CP as they are not availing credit facilities from the bank.
(c) Sanction Rs. 5 crore Short term loan to them. (d) Agree to subscribe Rs. 5 crore in the CP issue

2. What is the maximum amount the company can now raise through CP issue?

(1) 20 crore (2) 30 crore (3) 40 crore (4)50 crore

3. If the bank decides to invest 5 crore in the issue at a discount of 6% p.a., the discounted price of CP will be _________
(Note Rate to be calculated upto 4 decimal point and amount converted to nearest rupees)

(1) 4,92,52,055/- (2) 5,00,00,000/- (3) 5,30,00,000/- (4) 4,92,63,100/-

4. The maturity date of the CP shall be if the date of issue is 15.06.2008

(1) 14.9.2008 (2) 15.9.08 (3) 30.9.08 (4) 13.9.08

5.Which of the following statements is correct?

(1)The company can prefer to issue CP on different dates with different maturities. (2)The company is required to issue entire issue of CPs on one common date
(3)The company can issue on multiple date but entire issue should have a common maturity date. (4)None

ANSWER TO CASE STUDIES

Case Study No										
14	1	(2)	2	(3)	3	(1)	4	(4)	5	(3)
15	1	(1)	2	(3)	3	(4)	4		5	
16	1	D	2	A	3	B	4	C	5	
17	1	(3)	2	(1)	3	(3)	4	(3)	5	

18	1	C	2	A	3	D	4	D	5	B
19	1	(3)	2	(3)	3	B	4	A	5	(4)
20	1	(3)	2	(1)	3	(2)	4	(1)	5	(1)
21	1	A	2	(1)	3	(4)	4	(1)	5	(3)

CASE STUDY22:

Common Equity Tier 1 Ratio	85.00
Capital conservation buffer	25.00
Total amount of PNCPS / PDI	35.00
Eligible PNCPS / PDI for ATI	21.25
Eligible Tier 1 capital	106.25
Tier 2 capital available	25.00
Tier 2 capital eligibility	28.33
Excess PNCPS / PDI eligible for Tier 2 capital	3.33
Total Eligible catal	134.58

On the basis of given information, answer the following questions:

01 What is the min Common Equity Tier-1 (CET1) capital to support credit and operational risk: a)108 b)66 c)24 d)18 -

02 What is the max Additional Tier-1 (ATI) capital to support credit and operational risk: a)108 b)66 c)24 d)18

03 What is the max Tier 2 (T2) capital to support credit and operational risk: a)108 b)66 c)24 d)18

04 What is the amount of total capital to support credit and operational risk: a)108 b)66 c)24 d)18

05 What is the min Common Equity Tier-1 (CET1) capital to support market risk: a)26.58 b)**19 c)**4.33 d)3.25

06What is the max Additional Tier-1 (AT1) capital to suppkt market risk: a)26.58 b)19 c) 4.33 d)3.25

07What is the max Tier 2 (T2) capital to support market risk: a)26.58 b)19 c)4.33 d)3.25

08What is the amount of total capital to support market risk: a)26.58 b)19 c)4.33 d)3.25

Consolidated solution for the Question I to 8.

Risk Weighted assets: Credit and operational risk Market risk	1200 100
Min CET1 to support credit and operational risk (1200 x 5.5)	66
Max AT1 within Tier 1 capital required to support credit and operational risk ((1200 x 1.5)	18
Max T2 within Tier 1 capital required to support credit and operational risk (1200 x 2)	24
Total capital to support credit and operational risk	108 19
Min CET1 available to suppOrt market risk (85-66)	
Max AT1 capital within Tier 1 capital available to support market risk (21.25 — 18 = 3.25	3.25
Max T2 capital within total capital available to support market risk (28.33 — 24)	4.33

Total eligible capital to support market risk (19 + 3.25 + 4.33)	26.58

Answer s : 1-b 2-d 3-c 4-a 5-h 6-b 7-d 8-a

PRACTICE TEST PAPER NO. 4 (TEST YOUR SELF)

Basel-3 questions

01 RBI implemented the Basel-III recommendations in India, w.e.f: a) 01.01.2013, b. 31.03.2013, c. 01.04.2013, d. 30.09.2013

02 Basel III recommendations shall be completely implemented in India by: 31.03.2020, b. 31.03.2019 c. 31.03.2618 d. 31.03.2017

03 Basel III capital regulations were released by Basel Committee on Banking Supervision (BCBS) during as a Global Regulatory Framework for more resilient banks and banking systems: December 2010, b. March 2011, c. December 2011, d. December 2012

04 Basel III capital regulations are based on 3 mutually reinforcing pillar. These pillars are (1) Pillar-1 minimum capital standards (2) supervisory review of capital adequacy (3) risk management.
all the 3 are correct, b. only 1 and 2 are correct, c. only 1 and 3 are correct, d. only 2 and 3 are correct Under Basel II,

05.Under Basel II the option available to compute capital for credit risk are:-
standardized approach, b. risk management approach, c. advance measurement approach, d. standardized approach,

06. Under Basel III, the options available to compute capital for operational risk are :
standardized approach, b) risk management approach, c) advance measurement, approach, d) basic indicator approach,

07.Under Basel III, the options available to compute capital for market risk are :
standardized approach, b) risk management approach, c) advance, measurement approach, d) basic indicator approach

08.Certain specific prescription of Basel II capital adequacy framework will continue to apply along with Basel III (parallel run), till:
31.03.2019, b) 31.03.2018, c) 31.03.2017, d) 31.03.2016

09. A bank in India is to comply with capital adequacy ratio requirements at (1) consolidated (group) level after consolidating the assets liabilities of its subsidiaries / joint ventures (2) solo level (3) overseas operations of the bank under (I) and (2).
a)1 and 2 only correct, b) 1 and 3 only correct, c) 2 and 3 only correct, d) 1 to 3 all correct.

10. In India, the banks are required to maintain a minimum Pillar 1 capital to risk weighted assets ratio (or minimum total capital to risk weighted assets ratio) of as on
a) 8%, 31' Mar each year, b) 9%, 31" Mar each year, c) 8%, ongoing basis, d) 9%, ongoing basis.

11. The banks in India are required to compute Basel III capital ratios in the following manner (1) Common equity Tier I capital ratio (2) Tier I capital ratio (3) Tier 2 capital ratio (4) Total capital to risk weighted asset ratio a) I to 4 all, b) 1,2 and 4 only, c) 1, 3 and 4 only, d) 1 and 4 only

12. Tocalculate capital adequacy ratio, the banks are to take into account, which of the following risk:
credit risk and operational risk only, b) credit risk and market risk only, c) market risk and operational risk only, d) credit risk, market risk and operational risk.

13.Which of the following statement regarding the Total regulatory capital under Basel III is correct:
total regulatory capital is sum total of Tier I capital and Tier 2 capital, b) Tier I capital is called `aning-concern' capital and Tier 2 capital is called 'gone-concern' capital, c) Tier I capital comprises common equity Tier I and additional Tier I, d) all the above.

14 As per Basel III implementation in India, Common Equity Tier 1 capital must be % of risk weighted assets on ongoing basis: a: 5.5% b: 7%, c: 9% d: 11%

15. Asper Basel III implementation in India, minimum Tier 1 capital must be % of risk weighted assets on ongoing basis:
a: 5.5% . b: 7%, c: 9% d: 11%

16. As per Basel III implementation in India, within the minimum Tier 1 capital, the additional Tier capital can be:
a: min 5.5% of risk weighted assets (RWA), b: max 5.5% of RWA, c: min 1.5% of RWA, d: max 1.5% of RWA

17. As per Basel III implementation in India, within total capital of 9% of risk weighted assets, the Tier 2 capital can be:
a: max equal to Tier I capital, b) min equal to Tier I capital c) max equal to 2% of risk weighted assets, d) min equal to 2% of risk weighted assets

18. Which of the following statements is not correct regarding Basel III implementation in India:
a) minimum common equity Tier I ratio should be 5.5% of RWAs, b) capital conservation buffer, c) (CCB) consisting of common equity, should be 2.5% of RWAs, d) maximum additional tier 1 capital should be 1.5% of RWAs, e) minimum common equity Tier I ratio plus capital conservation buffer should be 7%

19. Which of the following statements is not correct regarding Basel III implementation in India:
a) minimum Tier I capital ratio should be 8%, b) Tier 2 capital should be max 2%, c) minimum total capital ratio should be 9%, d) minimum total capital ratio plus capital conservation buffer should be 11.5%

20. As per Basel III, which of the following is an element of Common Equity component of Tier I (1) common shares i.e. paid up equity capital (2) stock surplus i.e. share premium (3) statutory reserves (4) capital reserves representing surplus arising out of sale proceeds of assets (5) balance in profit and loss account at the end of the previous year.
a) 1 to 5 all, b) I to 4 only, c) 1,4 and 5 only, d) 1, 2 and 3 only
21. As per Basel III, which of the following can be included in Additional Tier I capital (1) Perpetual Non-cumulative Preference shares — PNCPS (2) stock surplus or share premium resulting from issue of Additional Tier I instruments (3) Debit capital instruments eligible to be included in additional Tier I.
a) 1 to 3 all, b) 1 and 2 only, c) 1 and 3 only, d) 2 and 3 only
22. As per Basel III, Tier 2 capital comprises which of the following (1) general provisions and loss reserves (2) debt capital instruments issued by bank (3) preference share capital instruments with redeemable or cumulative feature (4) revaluation reserve (5) stock surplus i.e. share premium resulting from issue of Tier 2 eligible instruments.
a) 1 to 5 all, b) 1 to 4 only, c) 1, 4 and 5 only, d) 1, 2 and 3 only.
23. As per Basel III, general provisions and loss reserves are included in Tier-2 capital maximum to the extent of: 1.25% of total risk weighted assets under standardized approach and 0.6% of total risk weighted assets under IRB approach
a) 0.6% of total risk weighted assets under standardized approach and 0.6% of total risk weighted assets under IRB approach
b) 0.6% of total risk weighted assets under standardized approach and 1.25% of total risk weighted assets under IRB approach
c) 1.25% of total risk weighted assets under standardized approach and 1.25% of total risk weighted assets under IRB approach.
24 As per Basel III, the value of revaluation reserve is to be taken at % discount to include in Tier 2 capital:-
a: 60% b: 55%, c: 50% d: 45%
25 As per Basel III, adjustments / deductions are required to be made from Tier I and Tier 2 capital, relating to which of the following (1) goodwill and other intangible assets (2) deferred tax assets (3) Investment in own shares (treasury stock) (4) investment in capital of banking, financial or insurance entities :
1 to 4 all, b) 1 and 2 only, c) 1 and 3 only, d) 1 only
26 As per Basel III, the investment of a bank in the capital of a banking or financial or insurance entity is restricted to which of the following:
a) 10% of capital funds (after deductions) of the investing bank, b) 5% of the investee bank's equity capital, c 30% of paid up capital and reserves of the bank or 30%, of paid up capital of the company, whichever is lower. d all the above
27 The net stable funding ratio (NSFR) under Basel-III will be implemented in India from:
a 01.01.2017, b 01.04.2017, c 01.01.2018, d 01.04.2018
28. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach, does not match in respect of which of the following:
a. Fund & non-fund based claims on Central Govt. 0%, b Fund and non-fund based Central Govt. guaranteed claims — 0%, c Fund and non-fund based State Govt. guaranteed claims — 0%
D Fund and non-fund based claims on State Govt. — 0%.
29 Under Basel III, the risk weight for capital charge for credit risk on the *basis* of standardized approach, does not match in respect of which of the following:
a) Claims on RBI or DICGC 0%, b) Claims on Credit Guarantee Fund Trust for MSE — 0%, c) Claims on Credit Risk Guarantee Fund Trust for Low Income Housing — 0%, d) Claims on ECGC — 0%.
30. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach, does not match for claims on foreign governments (based on rating of international rating agencies such as S & P, Fitch, Moody's Rating), in respect of which of the following:
AAA to AA rating — 0%, b: BBB rating — 20%, c: Below B rating — 150%, d: unrated — 100%
31. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach, does not match for claims on foreignpublic sector enterprises (based on rating of S & P, Fitch, Moody's Rating), in respect of which of the following:
a: AAA to AA rating — 20%, b: A rating — 20%, c: BBB to BB rating — 100%, d: unrated — 100%.
32. Under Basel III, what is the risk weight for capital charge for credit risk on the basis of standardized approach, for claims on Bank for International Settlements, International Monetary Fund, Multi lateral Development Banks:

a: 0% b: 10%, c: 20% d: 50%.

33. Under Basel III, the risk weight is % for capital charge for credit risk on the basis of standardized approach, for claims on banks incorporated in India and foreign bank branches in India, where they meet the level of common equity Tier I capital and applicable CCB:
a: 0% b: 10%, c: 20% d: 50%

34.Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach, does not match for claims on foreign banks (based on rating of international rating agencies such as S & P, Fitch, Moody's Rating), in respect of which of the following:
a) AAA to AA rating — 20% b) BBB rating — 50%, c) Below B rating — 150% d) unrated — 150%,

35. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach for long term loans, does not match for claims on domestic corporates, AFC and NBFC-IFC (based on rating of internal rating agencies such as CRISIL, CARE, ICRA etc.), in respect of which of the following:
a) AAA rating — 20%, b) A rating — 50%, c) BBB —100%, d) unrated — 150%

36. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach for short term loans, does not match for claims on domestic corporates, AFC and NBFC-IFC (based on rating of internal rating agencies such as CRISIL, CARE, ICRA etc.), in respect of which of the following: a) AI+ - 20%, b) A2 — 50%, c) A3 — 75%, d) A4 —150%

37. Under Basel III, the risk weight is % for capital charge for credit risk on the basis of standardized approach, for claims included in regulatory retail portfolio: a 20% b: 50%, c 75% d: 100%

38. Under Basel III, which of the following is part of the regulatory retail portfolio (1) mortgage loans which qualify as claim secured by residential property or commercial real estate (2) consumer credit or personal loans or credit card receivables (3) capital market exposure (4) venture capital exposure.
a) I and 3 only, b) 2 and 4 only, c) 1 to 4 all, d) none of the above

39. Under Basel III, to consider a claim as part of regulatory retail portfolio, which of the following condition is stated correctly: (1) orientation criteria i.e. the exposure to individual person or to small business, where total average annual turnover in small business is less than Rs.50 or (2) granularity criteria i.e. no aggregate exposure to one counterpart is more than 02% of overall regulatory retail portfolio (3) maximum retail exposure to one counterpart does not exceed the threshold limit of Rs. I cr.
a) 1 to 3 all, b) 1 and 2 only c) I and 3 only, d) 2 and 3 only

40. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach for home loan up to Rs.20 lac where loan to value (LTV) ratio is 90% is : a) 20% b) 50%, c) 75% d) 100%.

41. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach for home loan of above Rs.20 lac up to Rs.75 lac, where loan to value (LTV) ratio is 80% is : a) 20% b: 50%, c 75% d: 100%

42. Under Basel III, the risk weight for capital charge for credit risk as per standardized approach for home loan of above Rs.75 lac, where loan to value (LTV) ratio is 75% is :- a) 20% b: 50%, c 75% d: 100%

43. Under Basel III, the risk weight is for capital charge for credit risk on the basis of standardized approach for commercial real estate — residential housing: a) 20% b: 50%, c) 75% d: 100%.

44. Under Basel III, the risk weight is for capital charge for credit risk on the basis of standardized approach for exposure to commercial real estate:- 20% b: 50%, c: 75% d: 100%.

45. Under Basel III, for home loan purpose, the loan to value ratio (LTV) ratio is calculated as :
a) (principal + other charges) / (realizable value of mortgage property), b) (principal + accrued interest + other charges) / (realizable value of mortgage property) c) (principal + accrued interest) /

(realizable value of mortgage property), d) (principal + accrued interest + other charges) / (cost of mortgage property)

46. Bank's exposure for dwelling unit to an individual shall be treated as exposure to commercial real estate, as per Basel III:- a: 2n^{d}b: 3rd, c 4th d: 5th

47. As per Basel III implementation, the risk weight for unsecured portion of NPA for credit risk as per standardized approach is % if the specific provision is less than 20% of the outstanding in NPA account:- 150% b: 100%, c: 75% d: 50%

48. As per Basel III implementation, the risk weight for unsecured portion of NPA for credit risk as per standardized approach is % if the specific provision is at least 20% of the outstanding in NPA account:- a 150% b: 100%, c: 75% d: 50%

49. As per Basel III implementation, the risk weight for unsecured portion of NPA for credit risk as per standardized approach is % if the specific provision is at least 50% of the outstanding in NPA account:- a 150% b: 100%, c: 75% d: 50%

50. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach for which of the following exposure, does not match: a) venture capital — 150% b) consumer credit or personal loans— 125%, c) credit card -125%, d) capital market exposure 100%

51. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach is % for staff loans secured by superannuation benefits or mortgage of flat / house: 20% b:50%, c 75% d: 100%

52. Under Basel III, the risk weight for capital charge for credit risk on the basis of standardized approach is % for staff loans other than secured by superannuation benefits or mortgage of flat / house, being eligible under regulatory retail portfolio: a: 20% b: 50%, c 75% d: 100%

53. Under Basel III,under standardized approach, the total risk weighted off-balance sheet credit exposure is calculated by taking into account, the credit conversion factor (CCF). In which of the following, the CCF is not correctly stated: - a) direct credit substitutes such as financial guarantee or standby LC — 100%, b) performance guarantees 50%, c) self liquidating short term LC covering trading in goods — 50%, d) note issuance facilities and revolving underwriting facilities -50%

54. Credit enhancements under Securitization exposure, that are first loss positions, is to be risk weighted at _% under Basel III requirements:- A: 125% b: 375%, c: 625%, d: 1111%

55. Out of the following, which are domestic credit rating agencies, approved by RBI for the purpose of credit rating to determine risk weight for rated exposures (1) Brickwork (2) CARE (3) Fitch (4) CRISIL (5) Moody's (6) SMERA (7) Standard & Poor:- a 1, 2, 4, 7, b: 1, 2, 4, 6, c: 1,2 3,4, d: 1, 2, 4, 5

56 To be eligible for risk weighting purposes under Basel Ill, the rating from a credit rating agency approved by RBI, should be in force and confirmed from the monthly bulletin of the concerned rating agency. The rating agency should have reviewed the rating at least once during the previous months. A 6 months, b: 9 months, c: 12 months, d: 15 months

57. Under Basel III, which of the following are eligible as collateral for credit risk mitigation purpose: (1) cash (2) gold (3) Central or State Govt. securities (4) Kissan Vikas Tatra or National Saving Certificates (5) Life insurance policies and units of mutual funds (6) debt securities rated or unrated.
a: 1 to 6 all, _ b:A 2 to 6 only, cz to 5 only, dt 3 to 5 only

58. As per Basel HI requirements, modified by RBI, call option on Additional Tier 1 instrument (PNCPS and PDI) will be permissible at the initiative of the issuer after the instrument has run for at leastyears. a) two years b) three years c) five years d) ten years

59. As per Basel III, the risk of losses in on-balance shee and off-balance sheet positions arising from movements in market prices is called :- a) credit risk, b) market risk, c) pricing risk, d) liquidity risk

60. The market risk positions, that are subject to capital charge requirement, includes which of the following positions, under Basel III: a) risk pertaining to interest rate related instruments in the trading book, b) risk pertaining to equities in the trading book, c) forex risk including open positions in precious metal d) all the above.

61. The trading book of a bank is subject to market risk. As per Basel III, which of the following is not included in the trading book for capital adequacy purpose:- securities under HFT and AFS, b) open gold positions and forex positions, c) trading positions in derivatives, d) securities under HTM

62. If a security has matured and remains unpaid, it attract capital for risk on completion of 90 days delinquency period:- credit risk, b: market risk, c: operational risk, d: at discretion of the bank

63. For market risk, the minimum capital requirement is expressed in terms of two separately calculated charges which are:- a) specific risk and general market risk, b: special risk and general risk, c: liquidity risk and liquidation risk, d) counterparty credit risk and trading partner's risk.

64. The capital requirement for general market risk is designed under Basel III to capture the risk of loss arising from change in :- a prices of securities, b: market value securities, c: interest rate on securities, d: all the above

65. The capital charge for specific risk under market risk will be % or capital charge in accordance with the risk warranted by external rating of the counterparty, whichever is higher, under Basel HI. A: 9.00%, b: 9.75%, c: 10.50%, d: 11.25%

66 The capital charge for general market risk under the market risk will be % on gross equity position, under Basel HI.
a: 9.00%, b: 9.75%, c: 10.50%, d: 11.25%

67. Under Basel III, the risk weight for open foreign currency and open gold position is:-
a: 50% b:75%, c: 100% d: 125%

68. The capital charge (CAR) for open foreign exchange positions and open gold positions, under Basel HI, for market risk is:- a 6% b: 7%, c: 8% d: 9%

69. The aggregate capital charge for market risk is the sum total of capital charge for (1) interest rate (2) equity investment (3) forex and gold open positions:- a) 1 to 3 all, b) 1 and 3 only, c) 1 and 2 only, d) 2 and 3 only

70. Under Basel III, the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events is called :- a) credit risk, b) operational risk, c) market risk, d) reputation risk

71. As per Basel III, which of the following is part of operational risk :- a) legal risk, b) reputational risk, c) strategic risk, d) all the above.

72. Under Basel HI, by using the Basic Indicator Approach, banks must hold capital for operational risk equal to the average over the previous years of a fixed percentage (denoted as alpha) of positive annual gross income. a) 2 years, b) 3 years, c) 5 years, d) at bank discretion

73. Under Basel III, by using the Basic Indicator Approach, banks must hold capital for operational risk equal to the average over the prescribed no. of previous years, at % (denoted as alpha) of positive annual gross income. a: 8% b: 9%, c: 12% d: 15%

74. For the purposeof calculation of capital charge for • operational risk under basic indicator approach, the gross income means:- a net interest income, b: net non-interest income, c: net interest income + net non-interest income, d: net interest income minus net non-interest income.

75. Forthe purposeof calculation of capital charge for operational risk under basic indicator approach, the gross income means:- a net profit + provisions and contingencies, b: net profit + provisions and contingencies + operating expenses, c net profit + operating-expenses, d: provisions and contingencies + operating expenses.

76 The risks that the banks are generally exposed to and are not captured or not fully captured in regulatory

CRAR include which of the following:- a settlement risk, liquidity risk, b: reputational risk, strategic risk, c: risk of under-estimation of credit risk under standardized approach, d: all the above.

77. Under Pillar-2 of Basel III, the banks are required to have a Board approved ICAAP and assess capital accordingly. ICAAP stands for:
a: Internal Capital Adequacy Assessment Procedure, b) Internal Capital Approval Assessment Process
a) Internal Capital Adequacy Assessment Process, d) Internal Capital Assessment Approved Process

78. As per Basel III requirements, modified by RBI during Sept 2014, banks can issue Tier 2 capital instruments with a minimum original maturity of at least years.
a two years, b three years, c five years, d ten years

Risk Management Questions

79 Which of the 'following better explains the meaning of risk :- a loss arising on happening of some event, b loss arising on non-happening of some event, c probability of loss that could arise due to uncertainty, d probability of risk that could arise due to uncertainty, e risk due to loss as a result of uncertainty

80 Market risk is the risk of loss in (a) on-balance sheet positions (b) off balance sheet positions (c) arising from movement in market prices:- a a to c all are correct, b only a and c correct, c only b and c correct, d only a and b correct

81 Risk that is associated with inability/failure of banks in payment of amount representing clearing cheques presented by different banks:- a liquidity risk, b settlement risk, c credit risk, d legal risk e clearing process risk.

82. Risk that could arise due to legal actions or uncertainty of interpretations of contracts and agreements is called:- a) legal risk, b) contract risk, c) country risk, d) uncertainty risk, e) counter-party risk

83. A bank finds it difficult to repay the short term deposits on maturity to its deposits because the funds of the bank are locked in long term loans or investments. The risk arising from this situation is called:
a Interest rate risk, b Liquidity risk, c Operational risk, d Market risk, e Credit risk.

84. When failure of the financial system affects other systems such as insurance market or forex market, such risk is:- a liquidity risk, b settlement risk systemic risk, d systematic risk, e clearing process risk

85 Market risk takes the form of (which one is not correct):- a commodity price risk, b interest rate risk c loan default risk d liquidity risk.

86 The risk that loss may arise on account of trading in SLR and other securities by a bank is classified as:
a credit risk, b investment fluctuation risk c trading risk, d operational risk, e market risk

87. The risk that the interest rate of different assets and liabilities may change in different magnitude iscalled? A) Embedded Risk, b) Maturity Risk, c) Basis Risk, d) Price Risk

88. Exposure to uncertainty in economic value of *an* investment that could not be marked to market is called:- a) trading risk, b) business risk, c) market risk, d) liquidity risk, e) investment risk,

89. A foreign exchange dealer forgets to square the over bought position in a foreign currency. It is a..
a) foreign exchange risk, b) settlement risk, c) liquidity risk, d) operational risk

90. Risk that is associated with failure of internal processes of a bank or business organization:
a) settlement risk, b) procedural risk, c) operational risk, d) credit risk

91. A bank has failed to meet its obligation on account of a payment on due date due to its incapacity to pay. What kind of risk it is:
a) credit risk, b) liquidity risk, c) settlement risk, d) payment risk, e) all the above

92. Risk associated with changes in the credit profile of the borrowers and counter parties, is called:
a) credit risk, b) market risk, c) counter-party risk, d) liquidity risk, e) a and b –above
93. The customer service in a bank branch, has been disrupted for 2 hours, due to failure of the central server. What type of risk it is:
a reputation risk, b systemic risk, c operational risk, d settlement risk
94. When the bank is selling 3rd party products, which type of risk is involved:- a reputation risk, b operational risk, c credit risk, d liquidity risk e Financial Sector Terms
95 When the objective is to follow the best practices to conduct the affairs of a company or bank in a transparent manner for giving fair deal to all the stake holders, this is called:
a implementation of prudential guidelines, b organisational restructuring, c corporate governance, d corporate restructuring, e autonomy
96 Replacement of relatively high -cost debt with that of lower cost borrowing to take advantage of falling interest rates is called:
a debt replacement, b derivative, c credit enhancement, d credit risk management, e debt swap
97 In capital market, the term 'Market cap' is the product of a market price *x* authorised capital, b market price x paid up capital, c market price x outstanding no. of shares, d market price x shares e b and d
98. A banking system under which the banks are to raise low cost funds and invest such funds in low risk assets such as govt. securities, is known as:
a) narrow banking, b) universal banking, c) rural banking, d) risk management banking asset liability management banking
99. An entity established or incorporated outside India which proposes to make investment in India and which is registered as such, in accordance with the SEBI Regulations is called:
a) Indian Depository Receipt b) Foreign Institutional Investor c) Foreign Direct Investment, d) Foreign Currency
Convertible Bond
100. market provides a platform for trading of existing securities and price discovery thereof:
a) primary market, b) secondary market, c) money market, d) insurance market
101. Red Herring Prospectus is issued by a for a) company, to raise funds through commercial paper, b) company, to raise funds from bank for a long term project, c) company, to raise capital from market under book building process in which the price of the share is not disclosed., d) bank, to raise funds from the overseas lenders.
102. An investment by non-resident entity/person resident outside India in the capital of an Indian company on a long term basis, is called :- a Indian Depository Receipt, b Foreign Institutional Investment, c Foreign. Direct Investment
D ForeignCurrency Convertible Bond
103.What is an Indian Depository Receipt?
a) deposit account with a public sector bank, b) A depository account with any of Depositories in India c) An instrument in the form of depository receipt created by an Indian depository against underlying equity shares of the issuing company, d An instrument in the form
of deposit receipt issued by Indian depositories
104. When Reserve Bank injects liquidity in the monetary economy of the country, this is done through which of the following mechanisms?
a) increase in CRR, b) repo, c) increase in SLR, d) change in bank rate, e) liquidity adjustment facility
105. The receivables of various loans and obligations are put together and distributed amongst investors through marketable securities, in which of the following: a) leasing, b) factoring, c) securitization, d) venture capital, e) forfeiting
106. The process in which the electronic holding of share replaces the paper securities: a) demutualisation b) rematerialisation, c) electronic shares d) dematerialsation,
107. The term 'Green-shoe option' is used in relation to:- a) environment audit, b) 2d green revolution, c) capital mobilized by plantation companies d) option to retain that portion of the

equity that has been subscribed by the public over and above the issued amount e) option to return the amount of capital that has been received in excess of the issued amount

108. Which of the following instruments represent the share in Indian companies in India being traded in America/Europe? a) GDR/ADR, b) IDR/ADR, c) GDR/IDR, d) Zero Coupon Bonds Debentures

109. The stock-index futures contracts are the contracts relating to:- a) stocks of commodities b) stocks of industrial products stocks/shares being traded at stock exchanges, c) stocks of d) infotech companies

110) ESOP stands for:- a) efficient servicing of promises, b) employees' service option projects, c) employees stock option plan, d) effective system of projects

111) The term CBLO in connection with short term market related borrowing, stands for:- a) collateralized banking and lenders' obligation, b) common borrowing and lending obligation c) collateralized borrowing and lending obligation d) collateralized borrowing and lending organization

112) The demat shares of a public sector undertaking can be converted in to physical shares. This process is called:- a) re-issue of shares, b) dematerialisation of shares c) re-materialisation of shares d) demutualisation of shares, e) forfeiture of shares

113) Interest rate on a debt security (say Govt. bonds) which issuer pays to holder till maturity:-
a) interest, b) yield, c) floating rate, d) coupon rate

114) When buying or selling of securities is done by a person having access to privileged information, it is known as? a) Secular trading, b) Insider trading, c) Over trading, d) Unauthorized trading, e) Any of the above

115) The term 'round tripping' in case of Foreign Direct investment relates to: a) coming back of domestic money as FDI b) use of FDI funds out of country, c) sending back foreign money as export, d) a and c above.

116) In order to obtain cash for its credit sales, the duly accepted domestic sale invoices are assigned by the seller in favour of a 3rdparty. Such purchase of receivables by the 3rd party with or without recourse is called: a securitization, b factoring, c bills discounting, d forfeiting, e any of above

117 Branches of banks distribute to their customers as corporate agents, insurance products of other insurance companies, which is called:
a underwriting business, b bancassurance, c referral business, dany of the above

118 Ais a contract where the purchaser of the option has the right but not the obligati on to either purchase or sell and the seller of the option agrees to sell or purchase an agreed amount of a specified currency at a price agreed in advance and denominated in another currency :
a interest rate swap, b forward rate agreement, c currency option, dforeign exchange forward

119 When a company instead of fixing the price of new share, invites bids and allows the market to fix the price of the share, the process is called:
a private placement, b price search, c book-building, d initial public Offering, e market price fixation

120 The temporary loans that are allowed by RBI to Govt. from time to time to meet the mismatch position are called: a) treasury bills
b dated securities, b ways and means advances, c) ad hoc treasury bills

121 In the capital market, the term *arbitrage* is used with reference to which of the following?
A Purchase of securities to cover the sale, B Sale of securities to reduce the loss on purchase, c Simultaneous purchase and sale of securities to make profits from price variation in different markets, d Any of the above

122 The contract notes that are issued by Foreign Institutional Investors (FIIs) to their clients (not registered with SEBI), investing in Indian stock market:
a depository receipt, b derivative, c option, .d participatory notes

123 A is a type of transferable financial instrument traded on a local stock exchange of a country

but represents a security issued by a foreign publicly listed company:
a depository receipt, b derivative, coption, d participatory notes

124 All the sales practically become cash sale to the seller in respect of :
a Leasing, b Acceptance credit, c Factoring, d Buyer's credit

125 In order to obtain cash for its credit sales, the duly accepted domestic sale invoices are assigned by the seller in favour of a 3rd
party. Such purchase of receivables by the said 3rd party with or without recourse is called:
a securitization, b factoring, c bills discounting, d forfeiting

126 Which of the following methods can be conveniently used for providing finance to infrastructure projects:
a securitization, b factoring, c credit syndication, d consortium financing, e take out financing

127 Narrow money is the term in monetary aggegates which is represented by:- a M 1 b M 2 , c M3 d M4

128 In banking, the banks offer all types of financial services to expand their business that include high risk products and medium risk products also:- a retail banking, b universal banking, c wholesale banking, d narrow banking

129 When an existing non-profit organisation is converted into a for-profit company, the process is called :
a Dematerialization, b Demutualization, c Re-materialization, d Re-rnutualization

130 A is a financial contract between two parties to exchange interest payments for a 'notional principal' amount on settlement date, for a specified period from start date to maturity date. a) nterest rate swap, b) forward rate agreement, c) interest rate future, d) foreign exchange forward.

131.What is meant by the term reverse REPO out of the following:
a) injecting liquidity by the Central Bank of a country through purchase of govt. securities, b) absorption of liquidity from the market by sale of govt. securities, c) Balancing liquidity with a view to enhance economic growth rate, d) Improving the position of availability of the securities in the market.

132 A is a financial contract between two parties exchanging or swapping a stream of interest payments for a `notional principal' amount on multiple occasions during a specified period.
a interest rate swap, bforward rate agreement, c interest rate future, d foreign exchange forward

133 Transformation of certain processes and procedures with a view to empower the bank with contemporary technologies, business solutions and innovations that enhances the competitive advantages is called:
a business process modifications, b business process re-engineering, c best practices code, dbusiness re-modeling

134 A ______- is an over-the- counter contract under which a purchaser agrees to buy from the seller, and the seller agrees to sell to the purchaser, a specified amount of a specified currency on a specified date in the future at a known price denominated in another currency:
a) interest rate swap, b) forward rate agreement c) interest rate future, d) foreign exchange forward

135. When an unlisted company issues fresh securities for the first time, it is called: a) initial public offering, b) rights issue, c) follow-on public offering d) bonus shares

136. A negotiable security issued outside India by a Depository bank, on behalf of an Indian company, which represents the local Rupee denominated equity shares of the company held as deposit by a Custodian bank in India, is called : a) Derivative, b) Depository receipt, c) FDI, d) Indian Depository receipt.

137. The depository receipts listed and traded in the US markets are known as :- a) Global Depository Receipts b) Indian Depository Receipts, c) American Depository Receipts, d) Derivative Instruments A

138. bond giving the investor the option to get the value of bond equal to an equity share, at a pre-determined exchange price, is called: a) coupon bonds, b) convertible bonds c) commercial paper d) zero coupon bonds
139. The depository receipts listed and traded anywhere/elsewhere other than in United States, are known as:- a) Global Depository Receipts b) Indian Depository Receipts c) American Depository Receipts, d) Foreign Currency convertible bond
140. In which of the following kinds of financing the banks can take up financing for medium term (5-7 years) out of the very long term nature of the projects (1520 years):- a) Securitization, b) Take out financing, c) Project participation d) Consortium
141. Process of artificially increasing or decreasing prices of a security:- a) insider trading, b) circular trading, c) price rigging, d) any of the above
142. Interest spread refers to: a) surplus of interest earned over interest expended b) interest earned on loans less the provisions
d) interest earned on loans and investments less provision e) none of the above
143. The market based approach aimed at neutralizing part or whole of• the monetary impact of foreign exchange inflows is termed: a) sterilization, b) neutralization, c) globalization, d) liquidity adjustment
144. The term broad money is known as:- a) M1 b) M2, c) M3 d) M4
145. What is an American Depository Receipt? a) An instrument denominated in US dollars, b) An instrument issued to non-resident c) investors, aaainst ordinary shares, d) An instrument fulfilling the features given in A and B, d A or B
146. There are certain financial instruments whose prices are derived from the price of the underlying currency or interest rate or stocks etc. These are known as:- a Securitisation, b Derivatives, C Leasing, d Factoring e Venture Capital Funding
147 Which of the following is not an instrument of derivatives:- a forwards, b options, c futures a to c, e none of these
148 An option that provides to the option holder, a right to sell, without an obligation to sell , is called: a put option, bcall option, c American option, d European option
149 An option that provides to the option holder, a right to purchase, without an obligation to purchase, is called:
a put option, b call option, c American option, d European option
150 An option that can be exercised any time during its validity period, is called:- a put option, b call option, c American option, d European option
151 An option that can be exercised on a specified day,. during its validity period, is called:-
a put option, b call option, c American option, d European option
152 What is an option ? a a right to sell only without obligation to sell, b a right to purchase only without obligation to purchase, c a right to sell or purchase, d without obligation to sell or purchase, d obligation to purchase or sell without any right to sell or purchase
153 Where exercising the option provides gain to the buyer, it is called
a at the money, b in the money, c out of money, d above the money
154 Where exercising the option results in loss to the buyer, it is called:-
a at the money, b in the money, c out of money d above the money
155 Where exercising an option provides gain or loss to the buyer, it is called
a at the money, b in the money, c out of money d above the money, e) Govt. Securities
156: Gilt-edged market deals in: a: Worn currency notes, b) Bullion and gold, c) Govt. securities, d) Corporate bonds, e) all kinds of capital market securities
157 In respect of investment in securities, the process under which the value of the securities is taken into account at their current market price is called:- a pricing of securities, b marking to market, C valuation of d securities any of the above
158 The securities that are purchased by banks with the intention to take advantage of

price movement or interest movement, are classified as:
a held till maturity, b available for sale, c held for trading, d fluctuating securities

159 A govt. security that has been authorised to be issued but has not been issued actually, as yet called:
a gilt-edged security, b approved security, when, as and if issued, d ways and means advance, e treasury bill
160 What is the maturity period of treasury bills issued by Govt. of India:- a 14 and 91 days, b 91 & 182 days, c 14 & 182 days, d 91,182 & 364 days, e) none of the above
161 Ways and means advances of the Central Govt. are payable within a period of?
a 10 days b 18 days, b: 15 days d c) 20 days, d) 14 days
162 The maturity period of a cash management bill can be:- a less than 364 days, b less than 182 days, C less than 91 days, d any period at discretion of the Govt.
163 Under WMA RBI has allow the States to run overdrafts for consecutive working days from Feb 01, 2001 instead of the then 10 Days:- a 09 days b I 1 days, c 14days d 15 days, e Call and Notice Money
164 The market for short term financial assets instruments, that are close substitutes of money, is called:- money market b) capital market c) forex market d) financial market
165. Under market, the funds are transacted by banks on an overnight basis:
a) money market, b) call money market, c) notice money market d) term money market
166. Under notice money market, the funds are transacted by banks for:- a) one day, b) overnight, c) 2 to 14 days d) 15 days and above

167. On a fortnightly average basis, the prudent limit fixed by RBI in respect of outstandingborrowing
transactions in call and notice money for the participating banks is:

a) 100% of capital of bank b) 100% of capital + reserves of the bank, c) 100% of capital fund of the bank, d) 100% of net worth of the bank.
168. As per the prudent limit fixed by RBI in respect of outstanding borrowing transactions in call and notice money for the participating banks, the banks can borrow a maximum of on any day, during the fortnight:-
a 110% of their capital fund, b 120% of their capital fund, c 150% of their capital fund, d 125% of their capital fund
169. On a fortnightly average basis, the prudent limit fixed by RBI in respect of outstanding lending transactions in call and notice money for the participating banks is:-
a 10% of capital of bank, b 15% of capital + reserves of the bank, c 25% of capital fund of the bank, d 30% of net worth of the bank
170 As per the prudent limit fixed by RBI in respect of outstanding lending transactions in call and notice money for the participating banks, the banks can borrow a maximum of on any day, during the fortnight:
a 20% of their capital fund, b 30% of their capital fund, c 50% of their capital fund, d 50% of their net worth

Certificate of deposit and Commercial Paper

171 Which of the following features of certificate of deposit is correct (1) CD is a negotiable market instrument (2) CD is issued in demat form or as a usance promissory note (3) CD is issued at a discount to face value:- a 1 to 3 all, b 1 and 2 only, c 2 and 3 only, d1 and 3 only
172. Which of the following statement regarding amount of certificate of deposit is correct:

a) minimum amount is Rs.1 lac and maximum Rs. I cr b) minimum amount is Rs 1 lac without any maximum but multiple should be of Rs.5 lac, c) minimum amount is Rs.1 lac without any maximum but multiple should be of Rs.2 lac, d) minimum amount is Rs.1 lac without any maximum but multiple should be of Rs.1 lac

173. Certificate of deposit issued by banks can have a maturity period of:- a) 15 days to 12 months, b) 15 days to 6 months, c) 15 days to 3 months, d) 7 days to 12 months

174. Which of the following statement regarding certificate of deposit is correct (1) banks can grant loan on security of CD (2) banks can buy back the CDs before maturity (3) CD can be freely transferred any time after issue (4) CRR and SLR is applicable on CD:- a) I to 4 all, b) 2 and 4 only, c) 3 and 4 only, d) 1 and 4 only

175. Commercial Paper (CP) is an unsecured money market instrument issued in the form of:- a) a debenture certificate, b) a share certificate, c) a usance promissory note, d) a bill of exchange.

176. For a company to issue commercial paper which of the following conditions to be fulfilled are correctly stated (1) the net worth should be at least Rs.4 cr (2) the company should have been sanctioned working capital limits of Rs.10 cr (3) the loan accounts the company should be classified as Standard loan by its banks (4) it should have a credit rating of at least A3 by an approved credit rating agency.:- a 1 to 4 all, b 1,2 and 4, c I, 3 and 4, d 1 to 3

178. The maturity period of Commercial paper falls within the following range:- a 7 days to 3 months, b 7 days to 6 months, c7 days to 9 months, d 7 days to 12 months

179. The minimum amount of and multiple of commercial paper should be:- a Rs.1 lac, Rs.1 lac, b Rs.1 lac, Rs.5 lac, c Rs.5 lac, Rs.5 lac, d Rs.5 lac and no multiple.

Credit Card Operations

180. The term plastic money relates to which of the following:- a credit card, b prepaid phone card, c plastic sheet notes, d all the above

180 Credit card business can be conducted by banks only if their net worth is at least Rs.
a Rs.100 cr, b Rs.200 cr, c Rs .300 cr, d Rs.500 cr

181 In case of credit card, the customers can lodge a complaint with the banks within a period of :
a 15 days, b 30 days, c 45 days, d 60 days

182 Revolving credit is made available in which of the following:- a a debit card, b a pre-paid card, C a credit card, d all the above

183. In case of a credit card, if a customer protests any bill, the bank should provide explanation or documentary
evidence withina maximum period of days to amicably redress the grievances.
a 10 days, b 15 days, c 30 days, d 60 days

184. In case of a credit card if a complainant does not get satisfactory response from the bank within a maximum period of days from the date of his lodging the complaint, he will have the option to approach the Office of the concerned Banking Ombudsman for redressal of his grievance/s.
a 10 days b 15 days, c 30 days d 60 days

185. In case of acard, the customer can make payment to the extent of balance lying in his account.
a debit card, b smart card, c credit card, d any of the above

Inter-Bank Liabilities

186 In case of bank having higher CRAR of 25% over the regulatory CRAR of 9%, the maximum amount of inter-bank liabilities of a bank can be of net worth of the bank as on March 31 of the previous year:
a 100% , b 150%, c 200%, d 300%

187 The maximum amount of inter-bank liabilities of a bank can be of net worth of the bank as on March 31 of the previous year:
a 100% b 150%, c 200% d 300% e Marginal Standing Facility

188 What is the amount for which the marginal standing facility (MSF) can be availed by

banks from RBI:
a minimum Rs. 1 cr and multiple of Rs.50 lac, b minimum Rs 1 cr and multiple of Rs.1 cr, c minimum Rs.5 or and multiple of Rs.1 cr, d minimum Rs.5 cr and multiple of Rs.5 cr

189 Under the marginal standing facility (MSF), the eligible entities can avail the facility, up to per cent of their respective Net Demand and Time Liabilities (NDTL) outstanding at the end of the second preceding a) 3% b) 1% c) 2%, d) 0.5%

190. Under the marginal standing facility, what is the time period for which the facility can be generally availed from RBI:
a) 10 days and 12 days on Friday, b) 7 days and 9 days on Friday, c 1 day and 3 days on Friday, d RBI discretion

FDI in Banks

191. What is the maximum ceiling on Foreign Direct Investment (FDI) for investment in the equity of private banks in India:
25% b 26%, c 49% d 51%, e 74%

192. What is the maximum ceiling on Foreign Direct Investment (FDI) for investment in the equity of public sector banks in India:
20% b26%, c 49% d 51%, e 74%

193. An infrastructure finance company can deploy _% of its total assets in infrastructure loans:
50%_ b51%, c 74%d 75%

194. Under takeout financing (refinancing) of project loans, the banks can takeover the standard loan from other banks; provided the aggregate exposure of all institutional lenders to such project should be minimum:- a) Rs. Rs.100 cr b) Rs.250 cr c) Rs.500 cr d) Rs.1000 cr

195. RBI treats Core Investment Companies having an asset size of as systemically important core investment companies:- a) Rs.10 crore and above b) Rs.50 crore and above c) Rs.100 crore and above d) Rs.200 crore and above

196. A non-banking financial company which carries on the business of acquisition of shares and securities and satisfies certain conditions, is called:- a) Investment company b) financial company, c) non-bank finance company d) core investment company

197. Core investment companies will be treated as systemically important core investment company, if its assets size is a) Rs. Rs.50 cr and above, b) Rs.100 cr and above, c) Rs.200 cr and above, d) Rs.500 cr and above

198. A core investment company must hold not less than of its net assets in the form of investment in equity shares, preference shares, bonds, debentures, debt or loans in group companies
a) 100% b) 90%, c) 74% d) 60% SEBI Rules

199. The time gap between closure date of a public issue and its listing on stock exchange, has been reduced by SEBI from to
a) 42 days to 30 days b) 30 days to 22 days, c) 22 days to 12 days d) 30 days to 15 days

200. Listedcompanies are required to disclose their quarterly financial results within from close of the quarter:
a) 15 days b) 30 days, c) 45 days **d)** 60 days

201. Listed companies are required to disclose their annual audited results within from close of the financial year:
a 15 days b 30 days, c 45 days d 60 days

202 As per SEBI directives, what is the minimum public shareholding in case of listed companies:
a 10% b 24%, c 25% d 26%, e 49%

Misc. Questions

203 Under which kind of following mechanisms, the D SB returns being submitted by banks to RBI, fall:
a early alert system, b on-site surveillance, c off-site supervision, d risk based supervision system e prevention of money laundering

204 Negotiated Dealing System relates to:- a trading at stock markets, b Settlement of

security dealings
c trading in Govt. securities, d Settlement of share payments, e aandb

205 Which of the following extension of abbreviation does not match:
a BCSBI — Banking Codes and Standards Board of India, b BCBS — Banking Codes and Banking Standards
c BFS — Board for Financial supervision, d BIFR — Board for Industrial and Financial Reconstruction

206 Banks are required to ensure that while preparing their Annual Branch Expansion Plan (ABEP), they should allocate at least of the total number of branches proposed to be opened during a year in unbanked rural (Tier 5 and Tier 6) centres.
20% b 25%, c 33% d 40%

207. To promote a joint venture or a subsidiary for with risk insurance business of underwriting, the minimum net worth of the bank should be: a) Rs.200 cr, b) Rs.500 cr, c) Rs.1000 cr, d) Rs.2000 cr

208. Operating profits in bank's profit and loss ° account refer to:
a) net profits, b) profits before contingencies c) profits before provisions and contingencies, d) profits after provisions and contingencies

209. For banks to enter into insurance sector for underwriting with-risk business, among others, the CRAR should not be less than:- a) 8% b 9%, c) 10% d 11%, e) 12%

210. As per Exchange Traded Currency Options (RBI) Directions 2010, the underlying for the currency option shall be spot rate;
a) Euro-Indian Rupee spot rate b) USD-Indian Rupee spot rate, c) USD & Euro -Indian Rupee spot rate, d) Pound -Indian Rupee spot rate

211. To promote a joint venture or a subsidiary for with risk insurance business of underwriting, the minimum net worth of the bank should be:- a Rs.200 cr, b Rs.500 cr, c Rs.1000 cr, d Rs.2000 cr

212 The term TReDS, in the context of financing of working capital of MSME, means:
a TradeReceivables Discounting System, b Time Receivables Discounting System, c Trade Related Discounting System, d Trade Receivables Distribution System

213 Under the rating system called CAMELS, the term `M' stands for which of the following:
a management of assets and liabilities, b management of nonperforming assets c management of human resources
d management effectiveness, e management policies

214 The letter C in the rating model CAMELS being used by RBI for rating Public Sector Banks represents:
a Capital fund, b Capital adequacy, c Capital contributed to subsidiaries, d b & c

215 RBI's Model for Rating of Indian Banks is known as:- a CAMELS, b CAMEL, c RATING, d e-CAMEL

216 What is Net Interest Income (Nu)? a Difference of interest, earned on assets and non-interest income, b Difference of assets and liabilities, c Difference of interest earned on assets and interest paid on liabilities, d None of the above.

217 What is RBI's objective in asking banks to move from quarterly to monthly system of interest charging ?
A as part of 90 days norms for identification of non- performing advances, B introduction of international standard
C early recovery of interest to increase income of banks, d introduction of simple interest rates

218 What is true with regard to payment of dividend by a commercial bank:
a maximum dividend that can be paid is 33.33%, b maximum dividend payment is 25%, c maximum dividend that can be paid is 40%, d maximum dividend payout ratio is 40%, e

there is no restriction on dividend payment if bank is in profit and CAR is 9%

219 Non-Convertible Debentures may be issued in denominations with a minimum of(face value) and in multiples of
A Rs.l lac, Rs.1 lac, b Rs.5 lac. Rs.1 lac, c Rs.5 lac, Rs.5 lac, d Rs.5 lac, Rs.10 lac

220 Which of the following terms represent 'one basis point':
a one percent, b one tenth of one percent, c one hundredth of a percent, d one hundred percent, e one thousandth of a percent

221 Bombay stock exchange index `Sensex' is based on the value of top blue chip shares of:
a 10 b 20, c 25 d 30, e 50

222 Which of the following category of securities are not required to be marked to market by banks:
a held till maturity, b available for sale, c held for trading, d none of the above

223 The held for trading securities are required to be sold within
a 360 days, b 180 days, c 90 days, d there is no such time constraint.

224 All credit institutions are required to become members of a credit information company under provisions of Credit Information Companies (Regulation) Act 2005. A bank can become member of which of the following:-
A Credit Information Bureau (India) Limited, b Experian Credit Information Company of India Pvt Ltd, c Equifax Credit Information Services Pvt Ltd, d any of these

225 The credit institutions are required to update the credit information on a regular basis at least on basis, to provide the information to Credit Information Companies:
a) Monthly, b) quarterly, c) Half-yearly, d) Yearly

226. The SLR and non-SLR securities of the banks are classified into 3 categories. Which of these is not part of those 3 categories:- a) held till maturity b) available for sale c) held for trading d) none of the above

227. RBI changes the CRR. Which of the following is correct in this connection:- a) reduction in CRR increases the liquidity position within Indian banks, b) increase in CRR increases the liquidity position within Indian banks, c) increase in CRR does not affect the liquidity position, d) decrease in CRR does not affect the liquidity position

228. When Repo rate is reduced by RBI, it leads to :- a)_ reduction of cost to borrowers on bank loans, b) increase in cost of loans to borrowers from banks, c) reduced cost of borrowing by banks from RBI d) increased cost of borrowing by banks from RBI

229. When RBI offers liquidity adjustment facility to banks this leads to (a) improvement in the liquidity position of banks (b) increase in their capacity to lend (c) increase in their deposits (d) improvement in income of banks by more lending a) a to d all, b) b and c, c) b and d, d) c and d

230. What is the objective of securitisation of financial assets?
a) to enable the banks in speedy recovery of bad loans, b) to sell the securities without intervention of the court, only if loan gots bad c) to acquire assets and then sell the same at profit, d) recycling of funds and reduce concentration risk e) a to d all

231. The minimum paid-up equity capital for small finance banks shall be Rs. crore.
a) Rs.100 cr, b) Rs.200 cr c) Rs.300 cr d) Rs.500 cr

232. As per 5E131 guidelines, the mandatory minimum shares buy-back has been increased to % of the amount earmarked for the buy-back, as against existing %,
a) 25% from 10% b) 35% from 25% c) 50% from 25% d) 50% from 30%

233. As per SEBI guidelines, the maximum shares buy-back period has been reduced to months from months. a) 6 months to 3 months b) 9 months to 6 months c) 12 months to 6 months d) 12 months to 9 months.

234. Minimum paid up capital shall be Rs crore to set up and operate TReDS:
a Rs.10 cr, b Rs.25 cr, c Rs.50 cr

235 Payment Banks are allowed to accept which of the following type of deposits:

a recurring deposits, b fixed deposits, c demand deposits, d all the above
Rs.100 cr

236 The small finance banks will extend per cent of its Adjusted Net Bank Credit to the sectors eligible for classification as priority sector lending by RBI. a 32% b 40%, c 60% d 75%

237 At least 50% of loan portfolio of a Small Financing Bank should constitute loans and advances of upto Rs. lakh. a Rs. 5 lac, b Rs.10 lac, c Rs.25 lac, d Rs.50 lac

238 Payments Bankswill initially be restricted to holding a maximum balance of Rs. Per individual customer.

a Rs.10000, b Rs.50000, c Rs.100000, d Rs.200000

239 Apart from amounts maintained as Cash Reserve Ratio with the Reserve Bank on its outside demand and time liabilities, a Payment Bank\ will be required to invest minimum per cent of its "demand deposit balances" in Statutory Liquidity Ratio eligible Government securities/treasury bills with maturity up to one year. 25% b 50%, 60% d 75%

240. The minimum paid-up equity capital for Payments Banks shall be Rs. crore.
a) Rs.100 cr b) Rs.200 cr, c) Rs.300 cr d) Rs.500 cr

ANSWER : PRACTICE TEST PAPER NO. 4

1	C	2	B	3	A	4	B	5	C	6	B	7	C	8	C	9	D	10	D
11	B	12	D	13	D	14	A	15	B	16	D	17	C	18	D	19	A	20	A
21	A	22	A	23	A	24	B	25	A	26	D	27	C	28	C	29	D	30	B
31	B	32	C	33	C	34	D	35	D	36	C	37	C	38	D	39	B	40	B
41	B	42	C	43	C	44	D	45	B	46	B	47	A	48	B	49	D	50	D
51	A	52	C	53	C	54	D	55	B	56	D	57	A	58	C	59	B	60	D
61	D	62	A	63	A	64	C	65	D	66	A	67	C	68	D	69	A	70	B
71	A	72	B	73	D	74	C	75	B	76	D	77	C	78	C	79	C	80	A
81	B	82	A	83	B	84	C	85	C	86	E	87	C	88	B	89	D	90	C
91	C	92	A	93	C	94	B	95	C	96	E	97	C	98	A	99	B	100	B
101	C	102	C	103	C	104	B	105	C	106	D	107	D	108	A	109	C	110	C
111	C	112	C	113	D	114	B	115	B	116	B	117	B	118	C	119	C	120	C
121	C	122	D	123	A	124	C	125	B	126	E	127	A	128	B	129	B	130	B
131	B	132	A	133	B	134	D	135	A	136	B	137	C	138	B	139	A	140	B
142	A	143	A	144	C	145	C	156	B	147	E	148	A	149	B	150	C	151	D
152	B	153	C	154	C	155	A	156	C	157	B	158	C	159	C	160	D	161	A
162	C	163	C	164	A	165	B	166	C	167	C	168	D	169	C	170	C	171	A
172	D	173	D	174	C	175	C	176	C	177	D	178	C	179	A	180	A	181	D
182	C	183	D	184	C	185	B	186	D	187	C	188	B	189	B	190	C	191	E
192	A	193	D	194	D	195	C	196	D	197	B	198	B	199	C	200	C	201	D
202	C	203	C	204	C	205	B	206	B	207	C	208	C	209	C	210	B	211	C
212	A	213	D	214	B	215	A	216	A	217	A	218	D	219	B	220	E	221	D
222	A	223	C	224	D	225	A	226	D	227	A	228	C	229	C	230	D	231	A
232	C	233	C	234	B	235	C	236	D	237	C	238	C	239	D	240	A		

MEMORY BASED RECALLED QUESTIONS

1. Market discipline under Basel-II framework refers to : Disclosure requirements
2. Sundry Creditors is not a part of a bank's balance sheet
3. Provisioning requirement for an advance facility under Doubtful-I category, denoted by code 31, is 100% of shortfall in security plus 20% of Realisable value of secunty
4. For Substandard Secured Assets (code 21), the provision required is 10%oi· the outstanding.
5. Management and control of interest rate risk in a bank is the responsibility of __: ALCO
6. Liquidity is measured by grouping assets and liabilities based on their --------------------: Maturity
7. A negative gap occurs when in a given time bucket ___: Liabilities exceed assets
8. A Transactions beyond two days is a forward transaction.
9. VaR (Value at Risk) is _ : a measure of interest rate risk

10.As per RBI guidelines, Banks which have maintained capital of at least 9 per cent of the risk weighted assets for both credit risk and market risks for both HFT and AFS category as on March 31, 2006 would be permitted to treat the entire balance in the IFR as Tier I capital.
11. Which procedure is essential in validating the VaR estimates?: Back Testing
12.The difference between rates for buying and selling of foreign currency (Bid and Offer rates) is known as---------------- : Spread
13.If a Dealer sells US $ on spot basis, then the settlement of the deal will take place on: 3rd day excluding public holiday.
14.The simultaneous purchasing and selling of different securities so that the composition of portfolio can be changed without significant cost is called --------------------------: Swap Deals
15. From 6.8.2005, All India Financial Institutions/Mutual Funds/Insurance Compa-n-i-es discontinued from participating in lending in Call Money Market.
16.The minimum and maximum CRR that RBI can prescribe under section 42 of RBI Act is: No limit.
17.Treasury bills are issued at discount to face value
18. Portfolio risk is less than weighted average of individual risks in the portfolio because of : diversification effect
19.The Eligible Securities for REPOS and REVERSE REPOS comprises: All SLR transferable Government of India dated Securities/Treasury Bills
20.Commercial Papers can be issued as a stand alone facility with a standby assistance / credit backstop facility from Banks/Fis
21.Daily volatility of a stock is 0.5%. What is its 15 days volatility? : 1.94%
22. Duration of a five year Zero Coupon Bond is : exactly 5 years
23.As per advanced Internal Rating Approach for credit risk, banks will input their own:EDF & LGD
24.In respect of fixed rate repo, the spread between REPO and REVERSE REPO rate w.e.f. 16th Sept 2010 is : 100 basis points
25.A Debenture with a tenor of 5 years, Coupon payable half yearly for first year at 6.5 percent per annum, **2nd** and 3" year at 7.5 per cent p.a. and 4th and 5th year at 8 percent p.a. is called as : Step up Debenture
26. Yield To Maturity (VIM) of a Bond is also called : internal Rate of Return of the Bond
27. Basel-II accord rests on three pillars. First pillar is Capital Requirements, second pillar is Supervisory review process and third pillar is Market Discipline.
28.The Off-Balance Sheet items give rise to ______________________ as long as they are not invoked I devolved: Contingency Risk
29. Risk weighted assets for Operational risk is: Capital for operational risk x 11.11 (100 divided by 9).
30. Basic Indicator Approach (BI**A)** is one of the methods for computation of capital charge for: Operational Risk
31.A negative gap in a time bucket can affect net interest income adversely, if ----------------------------------- There is an increase in interest rate
32.Capital chare for Credit risk under Internal Rating based (IR**B)** approach is a function of Probability of default (PD), Loss given default (LGD). Exposure at default (E**D)** and.: Maturity
33.Which of the following is not appearing as an off-balance sheet item?: Telegraphic Trafer issued
34. For standard assets other than direct advance to agriculture and SME and Commercial Real

Estate, the provision required is _ of the outstanding amount: 0.40%
35.The highest beta factor (in percentage) assigned to different business lines fo operational risk under standardized approach is : 18%
36. Provisioning requirement for an advance facility under Doubtful-III category, denoted by code 33, is 100% of both for shortfall in security and RVS (i:e. 100% of outstanding)
Net interest margin is___:(Interest income - Interest expenses) I Average Total Assets