Accounting & Finance For Bankers

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Simple interest

- Simple interest is the flat rate interest paid each year as a fixed percentage of the principal amount.
- Interest = **P*T*R**

P= principal
T=time/period
R= rate of interest.

- Amount= P (1+TR)
- PMT function in spread sheet does this calculation.

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Compound interest

- Interest charged on both principal and interest is compounding interest. Interest can be compounded at monthly quarterly , half yearly or yearly intervals.

- Amount (fv) = P (pv) $(1 + r)^{\mathbf{n}}$

P(pv)= principal/present value
n = no of instalments
r= rate of interest per instalment period./100 R/n Amount (fv) = maturity value./future value

- P (pv) = $\dfrac{\text{Amount}}{(1 + r)^{\mathbf{n}}}$

- Rule72 gives the no of years it takes to double the principal for a given rate of interest.

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Annuities

- Annuities are essentially series of fixed payments required from or paid to at a specified frequency over the course of a fixed period of time. The most common payment frequencies are yearly, half yrly, qtly or mly.
- Two types:
  - – Ordinary annuity – payments at end of each period. (Int on bonds).
  - – Annuity due – payments at beginning of each period (Rent)

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Annuities – ordinary and annuity due.

C = cash flow/ annuity r=int for period n=period/instt	Ordinary (end of period)	Annuity due (beginning of period)
Present Value **P =**		
Future value **F =**		

Annuity

- To find Annuity based on

C =Installment amount (annuity)
n = no of installments
P = present value F = future value
r= rate of interest per installment period/100.

Equated Monthly Installments

- Most commonly used repayment method for loans to individuals.

$$\frac{P*r(1+r)^n}{(1+r)^n - 1}$$

P= principal
n = no of instalments
r= rate of interest per instalment period/100.

- Fixed rate and floating rate.
- Floating rate-Emi remains the same where as the period varies.

Sinking fund

- Sinking fund is a systematic accumulation of fund by periodical deposit and investing simultaneously so that at the end of the period, the specified required amount is accumulated. (repayment, depreciation etc)
- Once such a sinking fund is maintained, the book value of the debt or asset is arrived by deducting the outstanding in the fund from the debt/asset.
- Formula used is the same as for Future value

$$C = \frac{Fr}{(1+r)^n - 1}$$

Some problems

- Ravi Deposits a sum of Rs.20000 maturing in 24 months with interest @ 12%. (simple, compounded at Mly/Qly/Hly rests) calculate interest and amount payable to him.
- Ravi Wants to accumulate a sum of Rs.50000- at the end of 3 years to fund an north india trip. He wants to know how much he has to deposit now @ the present rate of interest being12% pa.
- Ravi borrows a sum of Rs.12000/- repayable in 12 monthly installment along with the interest payable for that month @ 10% pa. calculate the monthly installments.

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Some problems

- Ramu wants to invest Rs.1000 at the end of every year/beginning of every year @ 12% pa for five years. What is the maturity value he will get at the end of 5 yrs.
- Ramu wants to know how much he has to invest now at 12% to get an income stream of Rs.1000/- every month end/beginning of every month for next 5 years.
- Ramu wants to accumulate Rs.17000 over five years by investing an equal amount every year at @ 12%. What is the yearly amt to be invested by him.
- **Ramu borrowed a sum of Rs.20000 repayable in 36 monthly installments at 12%p.a. find the EMI.**
- **Ramu wants to invest Rs.20000 so that he receives an annual income stream for the next 5 years. The prevailing rate is 12% pa. What is his annual stream receivable every year.**

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Recap - Future value

How much will I get after 5 years if I invest today Rs.25000 @ 12% pa?	$P(1+r)^{n}$
If I invest every year Rs.5000/- for a period of five years@ interest 12%pa, what will be the maturity value	$F = C * \left\{ \frac{(1+r)^{n} - 1}{r} \right\}$
If I want Rs.25000/- after 5 years, How much amount should I deposit every year for 5 years if int @12%.	$\frac{Fr}{(1+r)^{n} - 1}$

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Recap - Present value

How much should I invest today to get Rs.25000 after 5 years @ 12% interest compounded qly.	$P = \frac{\text{Maturity value}}{(1+r)^{n}}$
How much should I invest now to get a yearly annuity of Rs.5000/- @interest 12%. For 5 years	$P = C * \left\{ \frac{(1+r)^{n} - 1}{r\,(1+r)^{n}} \right\}$
If I invest Rs.25000/- today, How much annuity will I get for 5 years if int @12%.	$C \quad \frac{Pr(1+r)^{n}}{(1+r)^{n} - 1}$

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Bonds

- Bonds are negotiable promissory notes issued by Public/pvt sector companies, Govt or Govt agencies.
- They are debt instruments carrying a fixed rate of interest.
- They can be traded in the market.
- Some bond terminologies:
  - Face value – amt borrowed.
  - Coupon rate – (interest rate mentioned on the inst)
  - Maturity
  - Redemption value - (par value When issued at discount)
  - Market value (quoted in the market).
  - YTM - Its the rate of return wherein the present value of the promised cash flows is equal to the purchase price.

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Some theorems of bond value

•Req rate of return =coupon rate Value of bond = face value • Req. rate of return > coupon rate Value of bond < face value • Req rate of return < coupon rate Value of bond > face value	•Req. rate of return > coupon rate Discount of bond declines as maturity approaches. •Req rate of return < coupon rate Premium of bond declines as maturity approaches.
•Bond price is inversely proportional to the YTM.	• Longer the maturity, greater the change in price to change in YTM
•Change in bond price is greater with a decrease in YTM than with an equal increase in YTM.	•The price of the bond with a higher YTM responds more than a bond with a lower YTM to a change in YTM.

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Bonds

- Present value of the bond (cost of debt capital) =

Present value of income stream + present value of face value of the bond.

$$\left\{\sum_{t=1}^{n} \frac{I}{(1+kd)^t}\right\} + \frac{F}{(1+kd)^n}$$

Kd= cost of capital/ Req rate of return
T= period
N= period of maturity
F=face value/ redeemable value
I =income stream

- Yield to maturity of bond. YTM
  - We have to calculate yield by using the above formula.
  - We use two rates above the actual coupon rate and find out a higher and lower value than its current price. Then using linear interpolation method we find the YTM.

$$\frac{\text{Higher value -- Market value}}{\text{Higher value – lower value}}$$

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Bonds - contd

- Duration of bond.- (Macaulay duration)
  - Investors have two types of interest rate risks
    - Reinvestment of annual interest.
    - Capital gain/loss on sale of bond on liquidation, at the end of the holding period.
    - When market interest rate rises, there is profit on the first count but there is a loss on liquidation.
    - And vice versa.
    - But there is a holding period for each bond wherein the two risk balance each other.
    - i.e the Profit/Loss on reinvestment = Loss/profit on liquidation.
    - This holding period is called duration of bond.

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Calculation of duration of bond

Calculate duration of bond if coupon rate 8% YTM -6% time for maturity 5 years face value of bond 100000/-.

Year (t)	Cashflow (v)	Present value (P) $(1+i)^{-n}$	Present value of cash flow (PV)	PVT
1	8000	0.9433962	7547.17	7547.17
2	8000	0.8899964	7119.97	14239.94
3	8000	0.8396193	6716.95	20150.86
4	8000	0.7920937	6336.75	25347.00
5	108000	0.7472582	80703.88	403519.41
Total			108424.73	470804.39

Duration of bond

$$\frac{\Sigma PVT}{\Sigma PV} = 4.34$$

Inventory valuation

- Accounting standard defines inventory as tangible property held
  - For sale in the ordinary course of business
  - in the process of production for such sale(such as stock in process)
  - For use in the production if goods or services for sale, including maintenance supplies & consumables other than machinery and spares.
- Three components of inventory are
  - Raw materials, Stock in process or Work in process, Finished goods
- Valuation methods –
  - First in first out
  - Last in first out
  - Average cost – weighted average
  - Base stock
  - Adjusted selling price --- arrive total selling price less fixed margin.
- Methods of taking inventory-
  - Periodic , Perpetual.

Capital budgeting

- Future value
  - Value * $(1+r)^n$
- Present value
  - $\frac{\text{Value}}{(1+r)^n}$
- Investment appraisal method
  - NPV method – comparing present value of future cash flows of project to the capital investment. A better project is one which has a higher NPV.
  - IRR method – It is the rate at which NPV of the project is 0. In other words, it is the rate at which the present value of cash flows is equal to the amount invested. If the IRR is more than the cost of capital the project should be taken. A better project is one which has a better IRR compared to the cost of capital.

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Net Present value method and Internal rate of return method.

- Net present value = Sum of present value of cash flows streams – investment value.

$$E \frac{C}{(1+r)^n} - I$$

- Pay back method – time taken to recover the investment.
- **Internal rate of return** = Use different rates to arrive at a positive value of NPV and negative value of NPV very near to "0". Then use linear interpolation.

The NPV above 0 (positive value) divided by the sum of NPV above o and below o (positive + negative) multiplied by the difference in the respective rates will give the % rate to be added to the rate which gave the positive PVA. This rate is the IRR.

15% is giving an NPV of say Rs.+191440

20% is giving an NPV of say Rs.—105646

so a change in 5% has changed the NPV with Rs.297086

$$\frac{191440 * 5}{297086} = 3.2\ \%$$

So IRR = 15 + 3.2 =18.2

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Depreciation

- Depreciation is
  - The allocation of the cost of the asset over a period of time for accounting & tax purposes. (AICPA)
  - The decline in the value of the asset due to wear and tear or obsolescence, etc.
- Methods of calculating depreciation:
  - Straight line method. (cost-residual value)
  - Declining balance method or written down value method or diminishing balance method.
  - Sinking fund method.
  - Double declining balance method
  - Sum of the years digits method (5,4,3,2,1).
  - Accelerated depreciation system.

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Comparison of different depreciation methods.

Asset cost – 50000/- residual value 2000/- period -5yrs.

Method	Year 1	Year 2	Year 3
Straight line method – 20%	9600	9600	9600
Declining balance method	9600	7680	6144
Double declining balance (40%)	19200	11520	9600
Sum of the years (5 4 3 2 1)	16000	12800	9600

In sinking fund method, a separate fund is created and the depreciation is invested. The interest earned on the fund is also credited to the fund. At the end of the period the fund balance (the depreciation amt invested along with accumulated interest) is transferred to the asset a/c. The balance in the asset a/c is then Transferred to profit and loss a/c.

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Foreign exchange

- A general mechanism by which a bank converts currency of one country into another.

<u>Fundamentals of forex:</u>

- – Every country has its own currency and possession of that currency is useful in that country only generally.
- – Exchange of one currency for another is put through by banks only as bookkeeping entries in both the centres.
- – Almost all exchange of one currency for another are effected by banks with the help of credit instruments.

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Forex

- Direct quote – The price of one unit of foreign currency in terms of local currency.
    - Us$ 1 = Rs.49.
- Indirect quote - The price of the local currency in terms of foreign currency. (upto 1.8.93)
    - Rs.1/- = $0.0200
- Some basic rate arithmetics:
    - – Cross rate – Rate of Euro arrived through US $.
    - – Value date –date when actual exchange of currency takes place.

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Types of exchange rates:

- Cash/ready – exchange on the date of deal.
- TOM – exchange on the next working day.
- Spot – exchange on the second working day.
- Forward – exchange after certain period after spot date. The rate quoted as margins can be:
  - Premium – Its added to buying/selling rate.
  - Discount – Its deducted from buying/selling rate.
  - At par- when spot and forward are the same.
- Forward points:
  - Supply and demand for the currency for the settlement date.
  - Market view on the development in interest / forex market.
  - Interest rate differentials between the countries.
- euro 1 = US$1.3180/90 (euro buying/selling)
  - One month forward – 24-19 (discount) 15-18 (premium)
- Arbitrage – operation by which one can make risk free profits by undertaking offsetting transactions. Interest rate arbitrage-borrow in one centre and lend in higher centre making profits. Exchange rate arbitrage-buy one currency and sell for another currency.

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Calculation of forward points

- **Calculation of rate differential :**

$$\frac{\text{Spot rate * interest rate differential * forward period}}{\text{100 * no of days in a year.}}$$

Exercise:

spot exchange rate : 1 euro = 1.5000

Interest rate : Euro market-3%

USA -6%

Forward period : 90 days.

No of days in a year : 360 days.

- Forward differentials is also called as the swap rate.
- Forward differential = spot rate – forward rate.

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Accounting

- American institute of certified public accountants (AICPA) defines accounting as:
  - an art of recording, classifying and summarising
  - in a significant manner
  - And in terms of money,
  - Transactions and events,
  - Which are in part at least of financial character
  - And interpreting the results thereof.

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Types of accounting-evolution

- Stewardship accounting
- Financial accounting
- Cost accounting
- Management accounting
- Social responsibility accounting
- Human resources accounting
- Inflation accounting

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Accounting standards

- ASB constituted by ICAI 21-4-1977.
- 29 accounting standards.
- Accounting standards mandatory for:
  - Enterprises whose scrips are listed or to be listed on a recognised stock exchange in India.
  - Other enterprises whose annual turnover exceeds Rs.50 crores.
- Sec 211 of the companies act –
  - Financial statements should comply with the AS
  - If not the cos must disclose the following:
    - Deviation
    - Reasons for the deviation
    - The financial effects of the deviation.
- SEBI and companies act require auditors to qualify the audit reports that do not conform to mandatory accounting standards.
- Sec.217(2m) also casts responsibility on the board of directors to comply with mandatory accounting standards.

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Some important Accounting Standards (Accounting Standards board)

AS 1	Disclosure of Accounting policies
AS 2	Valuation of inventories
AS 3	Cash flow statements
AS 4	Contingencies & events occurring after the B/S date.
AS 5	Net profit/loss for the period, prior period items & changes in accounting policies.
AS 6	Depreciation accounting
AS 9	Revenue recognition
AS 10	Accounting for fixed assets
AS 11	The effects of changes in forex rates.
AS 13	Accounting for investments.
As 21	Consolidated financial statements
AS 26	Intangible assets
AS 28	Impairment of assets
AS 29	Provisions, contingent liabilities and contingent assets.

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ACCOUNTING CONCEPTS

Concepts are the fundamental ideas or basic assumptions underlying the theory and practice of financial accounting.

At the recording stage	At the reporting stage
Business entity concept	Going concern concept
Money measurement concept	Accounting period concept
Realisation concept (sale-order)	Matching concept
Historical record concept	Materiality concept
Cost concept	
Dual aspect concept	

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ACCOUNTING CONVENTIONS

Conventions denote customs and traditions, which have been accepted as a guide for reporting financial statements.

Convention of full disclosures –Contingent liabilities –Market value of invstm	Convention of conservatism –Anticipate no profits, provide for all possible losses. –Provision for doubtful debts, –Contingency reserve –Value the stocks at lower of cost or market value.
Convention of materiality	Convention of consistency –Method of depreciation.

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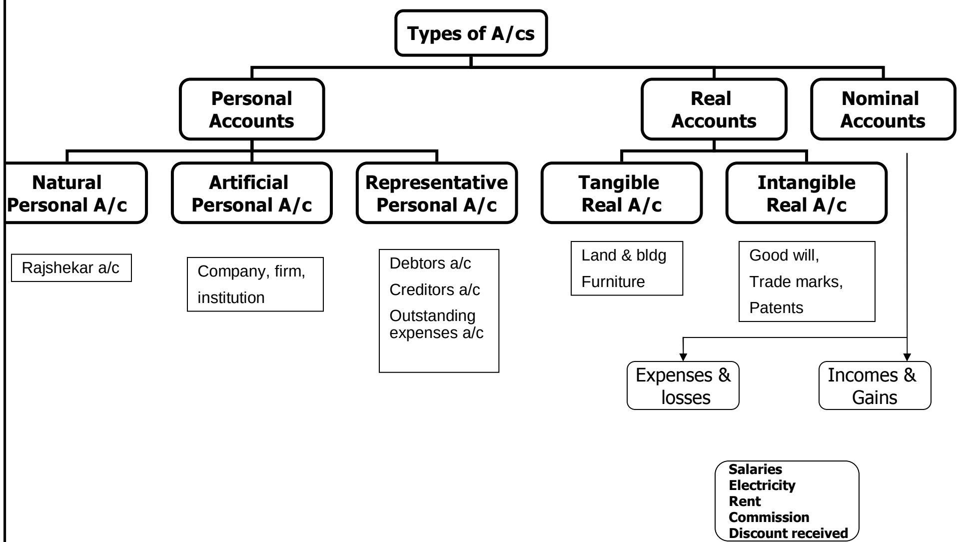
Types of Accounts



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Type of accounts – R, N ,P

Capital a/c	Stocks A/c
Creditors a/c	Sundry debtors a/c
Bank loan a/c	Bills receivable a/c
Profit and loss a/c	Loss on sale of asset a/c
KSFC a/c	Outstanding salary a/c
Cash a/c	Land and buildings a/c
Bank a/c	Furniture a/c
Good will a/c	Purchases a/c
Salaries a/c	Sales a/c
Commission recd a/c	Commission receivable a/c

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Rules of debit and credit

Types of accounts

- **Personal**
  - Debit
    The Receiver
  - Credit
    The Giver
- **Real**
  - Debit
    what comes in
  - Credit
    What goes out
- **Nominal**
  - Debit
    Expenses & losses
  - Credit
    Incomes & gains

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The process of accounting of transactions.

- When financial transactions happen, both the aspect of the transactions are recorded in the primary book called Journal.
- These entries are then posted to the respective ledger accounts.
- Periodically these ledger accounts are balanced.
- These balances are then extracted to a statement called Trial balance.
- On the trial balance agreeing, the financial statements are prepared from the accounts in the trial balance.
- Financial statements include:
  - Profit and loss account
  - Balance sheet
  - Funds flow/cash flow
  - Auditors report
  - Directors report.

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Journal

- It is an account book in which transactions are originally **recorded**.

Format of a journal

Date	Particulars	L.F	Amount. (Dr.)	Amount. (Cr.)

Narration : after every journal entry the details of the entry are recorded in brief to know later.

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Subsidiary Books

- **Sub division of journal book into subsidiary books, for ease of working**

  Example:
  - **Cash Book**
  - **Purchases Book**
  - **Sales Book**
  - **Sales Return Book**
  - **Purchase Return Book**
  - **Bills Payable Book**
  - **Bills Receivable Book**
  - **Petty cash book**
  - **Journal proper**

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Cash Book

- It is a special journal where all cash receipts and cash payments are recorded
- Types of cash book:
  - Single column cash book – Only cash column
  - Two column cash book- Cash with bank or discount columns
  - Three column cash book – Cash, Bank and Discount columns

DR **CR**

Date	Particulars	**Dis-count**	**Bank**	Cash	Date	Particulars	**Dis-count**	**Bank**	Cash

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Petty cash book-

Petty Cash Book – Petty expenses are recorded. Avoids detailed recording of petty expenses in the cash book.

Simple p.cash book and analytical P.cash book.

Simple P.cash book is similar to cash book.

Analytical petty cash book :

Amount received	Date	particulars	Vch no	Total debit amt	stationery	postages	Convey-ance	News papers	miscellaneous

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Format of a Purchase Book

Date	Particulars	Invoice No.	L.F.	Details	Amount (Rs.)

- credit purchases of materials stores and consumables are recorded in this book

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Format of purchase returns book

Date of Return	Name of the party	Details	L.F.	Debit note	Amount (Rs.)

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Format of a Sales Book

Date	Particulars	Invoice No.	L.F.	Details	Amount (Rs.)

- Credit sales of stocks/consumables etc are recorded in this book.

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Format of the Sales returns book

Date of Return	Name of the party	Details	L.F.	Credit note	Amount (Rs.)

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Format of Bills Payable book

Sl no	Date given	To whom given	Payee	Where payable	Date of bill	term	Due date	LF	Rs	Remarks

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Format of Bills Receivable book

Sl no	Date recd	From whom received	Drawer ptor	acceptor	Where payable	Date of bill	Term	Due date	LF	Rs	Remarks

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Ledger

Format of a ledger

Name of the account

Dr **Cr**

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount

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Journalising entries –an example.

- Raju Brought capital by cash Rs.25000/-
- Deposited Rs.15000/- in bank.
- Purchased goods from Ashoka Rs.10000/-.
- Sold goods to Madhav Rs.25000/-
- Purchased goods for cash Rs.5000/-
- Sold goods for cash Rs.10000/-
- Paid cash to ashoka Rs.10000/-
- Received from Madhav Rs.24500/- in full settlement through cheque.
- Paid salaries Rs.5000/-
- Received commission Rs.2000/-

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Some terminologies in accounting

Assets	Liabilities
Fixed Assets	Term liabilities
Current Assets	Current liabilities
Intangible Assets	Prepaid expenses
Fictitious Assets	Inc earned but not recd
Cost of production	Inc recd in adv.
Cost of sales	Outstanding exp.
Gross profit/net profit	Working capital
Depreciation	Net working capital
PAT	Contingent liabilities
Cash accruals/PBDT	Operating cycle
Write off	Inventory
RBDD/provisions	Non operating income/exp.

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Bank reconciliation statement

- The bank a/c maintained by the customer in his book is a mirror account of the Pass book issued by the bank.
- When the customer deposits cash/cheques or withdraws/issues cheques, he immediately enters the cash book. The bank however enters the pass book only on realisation or payment of the cheques. So in the meanwhile there will be difference between the balance shown by cash book and the pass book.
- Similarly the bank debits charges and also cheques returned uncleared. It also credits interest and direct credits recd through ECS/dividends etc. Till it is entered by the customer in his cash book, the balances between the pass book and cash book will differ.

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Causes of differences between cash book & pass book

Causes & position of cash book	Effect in cash book (Debit balance)	Effect in Pass book (credit balance)
Cheques issued but not presented for payment	Would immediately appear on the credit side. Balance would come down	No entry till it is presented for payment
Cheques deposited into the bank but not yet credited	Would immediately appear on the debit side. Balance would go up.	No entry till the cheques are cleared.
Bank charges Interest on overdraft Amount paid by the bank on SI. Dishonour of cheque deposited.	No entry till the customer gets the intimation.	Debited in the pass book immediately. Balance would come down.
Interest credited by bank Amount collected by bank on SI. Direct credits recd by bank	No entry till the customer gets the intimation.	Credited in the pass book immediately. Balance would go up.
Errors	Over casting, under casting, wrong entries etc	Wrong entries, wrong balancing etc

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Bank reconciliation statement

- There are four possibilities of balances given to reconcile to the other:
  - Debit balance in the cash book
  - Credit balance in the cash book (over draft)
  - Credit balance in the pass book
  - Debit balance in the pass book (over draft)
- The accounting treatment in respect of the two marked similarly is the same.

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Bank reconciliation statement

Particulars		
Balance as per cash book (debit) **Balance as per pass book (debit-over draft)**		
ADD •Cheques issued but not yet presented for payment. •Cheques issued and recorded twice in the cash book. •Interest credited by bank •Amount collected by bank on SI. •Direct credits recd by bank •Amount deposited but not recorded in cash book •Debit side (receipts) of the cash book under cast.		
Deduct •Cheques deposited but not yet cleared •Bank charges •Interest on overdraft •Amount paid by the bank on SI. •Dishonor of cheques deposited. •Credit side (Payments) of the cash book under cast.		
Balance as per pass book (credit) **Balance as per cash book (credit-over draft)**		53

Trial balance

- Trial balance is
  - an extract of debit and credit balances of various ledger accounts including cash and bank balances
  - as on a particular date
  - in order to establish the arithmetical accuracy of the transactions recorded in the books of accounts and
  - to facilitate preparation of final accounts.
- Gross trial balance and net trial balance.
- Always note that
  - **Assets and Expenses will have Debit balances.**
  - **Liabilities and Income will have Credit balances.**

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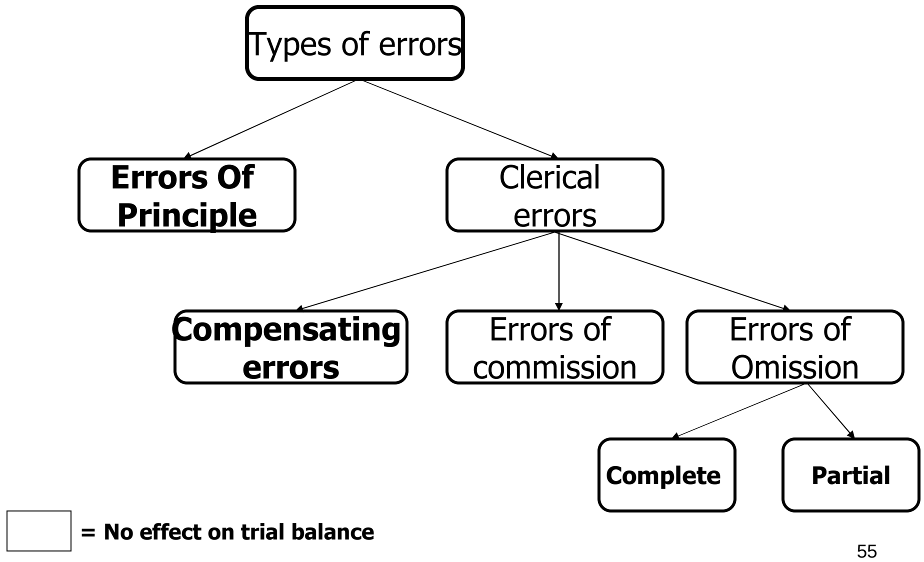
Types of errors



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Treatment of errors before and after preparation of trial balance

- Before preparation of trial balance.
  - One sided error- no entry is required. Just strike the wrong entry and correct it.
    - Rent paid Rs.90/- posted in rent a/c as Rs.900/-
  - Two sided error – Pass rectification entry.
    - Rent paid of Rs.400/- wrongly posted to postages.
      - Rent a/c Dr
      - To postages a/c
    - Goods purchased from ram for Rs.500/- taken to sales book.
      - Sales a/c dr 500
      - Purchases a/c dr 500
      - To Ram a/c 1000

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Treatment of errors before and after preparation of trial balance

- After preparation of trial balance –
  - After preparation if there is difference in the trial balance it is transferred to suspense a/c.
  - This difference will be on account of one sided errors only.
  - While auditing, when the difference are traced out, rectification entries are passed by debiting or crediting the suspense a/c and the respective a/cs
    - The purchases book was under cast by Rs.500/- (This means that the purchases a/c is short by Rs.500/-single sided)
      - Purchases a/c Dr 500

        To suspense a/c 500
    - The amount of Rs.500 recd from Ram was not entered in cash book. (It's a double sided entry - cash and ram)
      - Cash a/c Dr 500

        To Ram a/c 500

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Trial balance

- Adjusting entries –
  - Entries made for adjustment of receivables and payables for the year in the final accounts.
- Closing entries –
  - Entries made for transfer of all revenue items (income and expenditure) to Trading and profit and loss account are called closing entries.

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Capital and revenue expenditure

- An expenditure is treated as revenue or capital expenditure based on
  - Nature of an expense -
    - Recurring (salary, wages, raw materials) - Revenue
    - non recurring – (furniture, L&B etc) - capital
  - Effect on revenue earning capacity -
    - Expenses which generate revenue only for the current accounting period – Revenue
    - Expenses which generate revenue for more than one accounting period – capital
  - Benefit from the expenditure –
    - If Benefit is for short duration – Revenue
    - If benefit is for long duration – capital

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Capital and revenue expenses

- Capital expenditure appears generally in Balance sheet and revenue expenditure generally appear in Profit and loss a/c.
- Deferred revenue expenditure – preliminary expenses, underwriting commission, Pre-operative expenses, heavy advertisement expenses.
- Capital receipt – debentures, loans, capital issue
- Revenue receipt – commission, sales etc.

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Instruments of credit

Promissory note (sec.4 of NI act 1881)	Bills of exchange (sec 5 of NI act 1881)
•An instrument in writing	•An instrument in writing
•Containing an unconditional undertaking	•Containing an unconditional order
•Signed by the maker	•Signed by the drawer
	•Directing a certain person
•To pay a certain sum of money	• To pay a certain sum of money
•Only to or to the order of a certain person	•Only to or to the order of a certain person
•Or to the bearer of the instrument.	•Or to the bearer of the instrument.
Parties : **Maker, payee**	**Parties :** **Drawer, Drawee, payee**

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Bill of exchange

Stamp

20, D.N.Road
Mumbai
13th Nov 2009

Two months after date, pay me or my order a sum of Rupees Ten thousand only for value received

Rs.10000/-
To
Mr.Mehta
121, khaji street
Mumbai

Accepted

Mehta
Signature 15/07/2009

Suresh
signature

Promissory note

Stamp

121, khaji street
Mumbai
13th Nov 2009

Two months after date, I promise to pay suresh or his order a sum of Rupees Ten thousand only for value received

Rs.10000/-
To
Mr. Suresh
20, D.N.Road
Mumbai

Mehta
signature

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Some terminologies – bills of exchange.

- Types of bill- Demand bill, usuance bill
- Days of grace – 3 days. If holiday previous working day.
- Holder
- Holder in due course
- Acceptance of bill
- Honouring of bill (on or after due date)
- Retirement of bill (before due date)
- Rebate.
- Dishonouring of bill – Non acceptance, Non payment
- Negotiation of bill
- Purchase of bill
- Discounting of bill
- Endorsement of bill
- Accomodation bill
- Noting – noting the fact of dishonour on the bill by notary.
- Protesting – certificate issued by notary public"protest".
- Noting charges.
- Notary public- Govt officer who exercises powers & functions- protest of NI.
- Dividend-amt rec from insolvent estate. Bad debts – amt irrecoverable.

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Entries of Bills of Exchange

Books of Drawer	Books of Drawee
sundry debtor a/c Dr To. Sales a/c	Purchases a/c Dr Cr. Sundry creditors
Bill drawn by drawer and sent to drawee for acceptance	
On receipt of the accepted bill Bills receivable a/c Dr. To Sundry debtor a/c	On receipt and acceptance of bill sundry creditors a/c Dr To Bills payable a/c
On receipt of payment Cash/Bank a/c Dr To bills receivable a/c.	On payment Bills payable a/c Dr. To cash/bank a/c
On bill returned unpaid Sundry debtor a/c To bills receivable a/c To bill return charges.	On bill returned unpaid Bills payable a/c Bill return charges a/c To sundry creditors a/c

Consignment account

- Consignment is the dispatch of goods by its owner to his agent for the purpose of selling.
  - Principal – consignor.
  - Agent – consignee.
  - Consignment outward
  - Consignment inward and Proforma invoice.
  - Account sale – a statement prepared by consignee showing details of sales, expenses, commission due to him and how the sale proceeds is being settled.
  - Commission – ordinary and del–credere (consignee bears the bad debts, commission and collection charges).
  - Loss – Normal loss and abnormal loss.
- Ownership and risks rests with the consignor.
- A/cs maintained are : consignment a/c, Goods sent on consignment a/c, consignee's a/c

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Joint venture

- Joint venture is
  - An agreement between two or more persons
  - To contribute money or money"s worth
  - To carry on a specific job or venture and
  - share the profit or loss arising therefrom and
  - On completion of the specific venture the agreement shall be terminated.
- The persons are called co-venturers.
- Accounting is done on venture basis.
- Accounts maintained are : Joint bank a/c, joint venture a/c, Co-venturer's a/c.

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Leasing and hire purchase

- Leasing is defined as
  - Contract between two parties (lease agreement)
  - Wherein the owner of an asset (Lessor)
  - Transfers his right of use of the asset (leased asset)
  - To another party (lessee)
  - On payment of a fixed rent periodically (lease rentals)
- Types of leases
  - Finance or capital lease –(primary period - cost of the asset recovered- secondary period-nominal rental) .(long period- non cancelable)
  - Operating lease – short period. Cancellable. (telephone)
  - Service lease – (lease for cost of maintenance)
  - Leveraged lease. (Agreement including a financer, lessor and lessee)

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Accounts of Non trading concern.

- Service organisations - Educational institutions, sports clubs, hospitals, charitable trusts etc who are established without a primary intention of earning profits.
- Receipts consists of membership fees, tuition fees, subscriptions, donations etc.
- Books of accounts maintained : journals, property register, membership register, donations register, General ledger, cash book, subsidiary registers such as students register, patients register etc.
- Final accounts –
  - Receipts and payments account (cash book)
  - Income and expenditure account (profit and loss a/c)
  - Balance sheet or statement of assets and liabilities.

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Single entry system

- Single entry system of book keeping is one in which as a rule only records of cash and of personal accounts are maintained ignoring the two fold aspect of bookkeeping.
- The profit or loss under the system can be ascertained by
  - Net Worth Method
  - Conversion Method – (Entries required for Preparation of final accounts are gathered from subsidiary books).
- The statement of assets and liabilities is prepared like balance sheet.
- The statements are prepared based on vouchers, receipts, personal accounts and cash books as well as previous statements.

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Balance sheet equation

Liabilities	Assets
capital	Assets
Liabilities	

Assets = Capital + Liabilities

Capital = Assets – Liabilities

Liabilities = Assets – Capital

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Hire purchase and installment sale

Hire purchase sale	Installment sale
▪ Wherein the seller (hirer purchase seller)	▪Wherein the seller
▪Takes a down payment and	▪ May take a down payment or not
▪ Collects the balance price of the goods in installments (hire charges)	▪Collects the price of the goods in installments.
▪ From the buyer (hirer)	▪From the buyer
▪ who takes possession of goods on the date of agreement.	▪Who takes possession of the goods on the date of sale
▪ Whereas the ownership passes on to the buyer on payment of the last installment.	▪ and also the ownership of goods passes on to the buyer on the date of sale itself.
▪The seller can take back the goods if there is any default in payment of the hire amount.	▪The seller cannot take back the goods legally if installments are unpaid but can sue for the same.
▪Cannot sell the goods.	▪Can sell the goods.
▪Loss of goods to be borne by seller.	▪Loss of goods to be borne by buyer.

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Ratio analysis

- Accounting ratios are relationships expressed in mathematical terms between accounting figures which are connected/ related to each other in some manner.
- Classification of ratios:

Traditional classifications	Functional classifications
Profit and loss a/c ratios	Profitability ratios
Balance sheet ratios	Turnover ratios
Composite ratios – (both P&L & B/s)	Solvency ratios –Short term solvency –Long term solvency

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Profitability ratios

Over all profitability ratio (ROCE) –long term funds	Operating profit / Capital employed * 100
Earning per share ratio	Net profit after tax & preference dividend / Number of equity shares
Price earning ratio P/E ratio	Market price per eq. share / Earnings per share
Gross profit ratio	Gross profit / Net sales * 100
Net profit ratio	Net operating profit / Net sales * 100
Debt service coverage ratio	Cash accruals . / Interest + installments

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Turnover ratios

Stock turnover ratio	Cost of goods sold / Average inventory
Debtors turnover ratio	Credit sales or total sales / average sundry debtors
Debt collection period ratio (days)	Avg sundry debtors * 365 / total credit sales/sales
Creditors turnover ratio	Credit purchases or total purchases / Average sundry creditors
Current assets turnover ratio	Credit sales or total sales / current assets

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Solvency ratios

Long term solvency ratios	
Fixed assets ratio	Net fixed assets+trade investment / Capital employed (Long term funds)
Debt equity ratio	Total outside liabilities / Tangible net worth or Long term liabilities / Tangible net worth
Short term solvency ratios	
Current ratio	Current assets / Current liabilities
Liquidity ratio	Liquid assets/quick assets / Current liabilities

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Partnership

- Sec 4 of Indian partnership act defines partnership as
  - Relation between persons
  - Who have agreed to share the profits
  - Of a business
  - Carried on by all
  - Or any one of them acting for all.
- According to companies act 1956 & amendment bill 2003
  - The minimum no of partners is 2.
  - The maximum no of partners is 10 in respect of banking companies
  - The maximum no of partners is 20 in respect of other than banking companies
  - The maximum no of partners is 50 if they are professional partners. (companies amendment bill 2003)
  - Any association more than this limit has to be registered as a company for otherwise it is illegal.

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Partnership

- The agreement of partnership can be oral or written.
- The document containing the written agreement is partnership deed.
- If no agreement or when the deed is silent in respect of any issues , the relevant provisions in the partnership act will apply.
- Registration of partnership is not compulsory but an unregistered firm or its partners cannot file suit against third parties for recovery of their dues whereas the third parties can file suit against them.
- Salary, Interest on capital or drawings is not allowed unless there is an agreement to the contrary.
- Partner's loan carries 6% interest unless otherwise agreed upon.
- Maintenance of partners capital – two methods
  - Fixed capital
    - Capital a/c
    - Current a/c
  - Fluctuating capital

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Partnership

- Types of partners
  - Minor partner
  - Active partner
  - Sleeping partner
  - Nominal partner/quasi partner.
  - Secret partner
  - Partner by estoppel/holding out
  - Sub partner
- Liability of a partner : The partners liability is not only unlimited it is joint and several.
  - The partners are liable for the firms debts even out of their personal property.
  - The creditor can recover the complete dues by proceeding against all the partners or any one of the partner who is liable to pay the dues in full. However such a partner can claim the other's share from other partners later.

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Partnership - Goodwill valuation

- Goodwill is the value of the reputation of the established business over and above its tangible assets.
- The necessity of valuation arises:
  - Change in the profit sharing ratio
  - Admission of a new partner
  - Retirement, death or expulsion of an existing partner.
  - Sale of business.
- Three types of valuation-
  - Average profit method – (past 4 or 5 yrs avg profit * multiplier)
  - Super profit method – (avg profit – expected ROR on capital emp) * multiplier
  - Capitalisation of profit method. (exp ret = CE, act ret=cap req?) (dif bet cap req –cap emp)

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Retirement /death of the partner

- The following accounting aspects to be taken care of
  - Treatment of balance in his capital and current a/cs
  - Treatment of his share of goodwill
  - Treatment of his share of profits and reserves.
  - Treatment of his share of revaluation of assets and liabilities.
  - Treatment of the following till the date of retirement:
    - Profits
    - Interest on capital and drawings,
    - Salary etc.

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Admission of a partner

- The following accounting aspects to be taken care of:
  - Revaluation of assets and liabilities
  - Treatment of good will
  - Capital to be brought in
  - Adjustment regarding accumulated reserves, losses etc,
  - Capital accounts of the partners.
  - Deciding about the new profit sharing ratio.

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Partnership

- Admission of a partner
  - a : b = 3:2 c : 2/10 share is given. Find new ratio of the three partners.
  - a:b=3:2 a:b:c = 4:3:3 Find the sacrifice of a and b.
  - Goodwill to be brought in by the new partner. Or created , shared and or w/o
- Retirement of a partner:
  - a:b:c = 3 : 2 : 2. b retired. Find new ratio.
  - Goodwill to be raised. Retained/w/o

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Banking companies – final accounts

- Requirement as per RBI and Banking reg act_
  - The accounts shall be closed on 31st march of every year.
  - The Profit and loss a/c and Balance sheet to be as per the prescribed format given in the third schedule of the Banking Regulation Act.
  - 3 copies of the financial statements prepared under sec 29 and auditor's report as per sec 30 of the banking regulation act must be submitted to RBI within three months of the closure of the financial year. RBI has discretion to extend by another three months.
  - Rule 15 of the act further states that the financial statement must be published in a well circulated newspaper in the place the banking company has its head quarters within 6 months from the date of closure of the financial year.
  - It is now made mandatory for the banks to furnish quarterly results in respect of important parameters.

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Some peculiarities of bank accounting

- Every transactions are recorded as soon as it takes place. Many cases transactions takes place and gets recorded simultaneously.
- Vouchers are being posted to respective ledgers directly. No journals.
- As vouchers forms the basis for information, all possible details are recorded on the vouchers.
- Daily summary and daily trial balance of general ledger.
- General ledger Balances are tallied on a daily basis.

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Bank Balance sheet-Third schedule - form A

Balance sheet as on 31st March 2012

Capital and Liabilities	Schedule No	Amount
Capital	1	
Reserves & surplus	2	
Deposits	3	
Borrowings	4	
Other liabilities & provisions	5	
Total		
Assets	**Schedule No**	**Amount**
Cash and balance with RBI	6	
Balance with Banks & Money at call and short notice	7	
Investment	8	
Advances	9	
Fixed assets	10	
Other assets	11	
Total		
Contingent Liabilities	12	

Profit and loss a/c-Third schedule - form B

Profit and loss account for the year ended 31st March 2012

	Schedule No	Amount
Income		
–Interest earned	13	
–Other income	14	
Total		
Expenditure		
–Interest expended	15	
–Operating expenses	16	
–Provision and contingencies		
Total		
Profit/loss		
–Net profit/loss of the year		
Total		
Appropriations		
–Transfer to statutory reserves		
–Transfer to other reserves		
–Transferred to government proposed dividend		
–Balance c/0 to balance sheet		
Total		

Additional disclosures prescribed by RBI

• capital adequacy ratio	•Provision on standard assets
•Capital adequacy ratio-tier I capital	•Interest income as % to working funds.
•Capital adequacy ratio-Tier ii capital	•Non interest income as % to working funds.
•% of share holding of Govt of India	•Operating profit as % to working funds.
•Subordinated debt raised as Tier II capital.	•Return on assets.
•Gross value of investments	•Business (dep+adv) per employee
•Provisions towards dep.in value of investmts.	•Profit per employee
•Movement of provisions towards ---do-----.	•Maturity pattern of loan and advances
•Repo transactions	•Maturity pattern of investment securities.
•Non SLR investment portfolio	•Maturity pattern of deposits.
•Forward rate agreement/Interest rate swap.	•Maturity pattern of borrowings
•Exchange traded interest rate derivatives	•Foreign currency assets and liabilities.
•% of Net NPA to Net advances.	•Exposure to real estate sector
•Movement in NPAs	•Exposure to cap market-invstmt in eqty shares
•Provisions made towards NPAs	•Bank financing for margin trading
•Movement of provisions made towards NPAs	•Details of single/group borrower limit exceeded
•Details of loan assets subject to restructuring	•Disclosure of penalties imposed by RBI
•Restructuring under CDR	•Consolidated financial statements-AS 21
•Financial assets sold for asset reconstruction.	•Segment reporting – AS-17
•Provisions made for income tax for the yr.	•Related party disclosure-As18.
•Exposure to country risk	•Other disclosure as required under relevant AS

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Company accounts

- A company is an
  - Incorporated association and
  - An artificial person
  - Created by law
  - For the purpose of starting a trade or business
  - and to share the profit arising therefrom
  - with a perpetual succession
  - and a common seal
  - with a Large no of share holders
  - having limited liability and
  - holding shares which are freely transferable
  - But having no role in the day to day management which is given to the elected board of directors

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Types of companies

On the basis of Incorporation	On the basis of Ownership	On the basis of Liability
Chartered company Bk of England	Private company Min 2 ,max-50	Company limited by shares
Statutory company LIC	Public company Min -7,Max - unlimited	Company limited by Guarantee
Registered company Wipro ltd	Government company Not less than 51% held by Govt	Company with unlimited liability
Foreign company HSBC ltd	Holding company Not less than 51% shares of another company is held by this company.	
	Subsidiary company Not less than 51% of its shares is held by another company.	

Shares and share capital

- Types of shares:
  - Equity shares
  - Preference shares
    - Cumulative
    - Participating
    - Redeemable
- Types of share capital:
  - Authorised capital
  - Issued capital
  - Subscribed capital
  - Called up capital
  - Paid up capital

Some issues

- Memorandum of association
- Articles of association
- Prospectus or statement in lieu of prospectus
- Private placement
- Certificate of incorporation
- Certificate to commence business
- Bonus shares
- Rights shares
- Calls in arrears and calls in advance
- Forfeiture of shares
- Share premium
- Share discount

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VERTICAL FORM

Source of funds.	Sch no	Cur yr	Pre. yr
a) Capital			
b) Reserves& surplus			
2. Loan Funds			
a) Secured loans			
b) Unsecured loans			
TOTAL			
APPLICATION OF FUNDS			
1.FIXED ASSETS			
Gross Block			
Less depreciation			
Net block			
Capital work in process			
2. INVESTMENTS			
3. Current assets, loans& advances			
Inventories			
Sundry debtors			
Cash and bank bal			
Other current assets			
Loans and advances			
Less			
Current liabilities & provisions:			
Liabilities			
Provisions			
NET CURRENT ASSETS			
4. a) Misc Expenditure not w/o			
b) Profit and loss a/c			
TOTAL			

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HORIZONTAL FORM

LIABILITIES			**ASSETS**		
			CA, Loans& Advance		
Unsecured loans					
TOTAL			**TOTAL**		

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Profit and loss account for the year ended 31st March 2009

	Sch no.	Cur.Yr	Prev. Yr

Sales and other income
Add increase/decrease in stock of finished/semi finished goods
Less Manufacturing and other expenses
    interest
    depreciation			

Net profit before tax Less provision for tax			

Net profit after tax
Add Balance c/f from previous year
Less Disposable profit set aside for
    General reserve
    Proposed dividend			

Surplus carried to balance sheet			

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Profit and loss appropriation a/c

	Amount		Amount
To Interim dividend pd To Proposed dividend To short provision for Income tax To General reserve To Debenture redemption Reserve To capital redemption reserve To balance carried forward to next year		By Balance carried over from previous year By net profit for the year By excess provision for income tax.	

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Computerized accounting

- Accounting done by using software through computers are called computerised accounting.
- Backup of data primary.
- Some of the accounting softwares are
  - Tally (various versions)
  - Ex, accounting software
  - Banc 2000
  - B@nks-24 core banking software
  - A.U.D.I.T.O.R and A.U.D.I.T.I.M.E cash basis software for professionals and their accounts.
  - MEFCOMP accounting software for professional
  - Quick FA.

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NEVER GIVE UP!
Thank you
All the best
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