SYLLABUS 0568 SCIENCE: SINGLE AWARD - SCHEME OF ASSESSMENT FROM 2012

Candidates will be assessed on both the core and the extended objectives. All candidates must enter for **three** components.

Candidates will sit **two** written components (Papers 1 and 3) and **one** practical skills assessment component (Paper 4). Candidates will be graded on a scale A* – G. Candidates failing to achieve grade G will be unclassified (U) and no grade will appear on the certificate.

SYLLABUS COMPONENTS

Paper 1 (50 minutes)

A compulsory paper taken by **all** candidates.

A multiple-choice paper consisting of 40 items each with 4 options.

The questions will be based on the core and extended objectives and will be of a difficulty appropriate to grades A to G. The questions will test skills mainly in **Assessment Objectives A** and **B**.

The paper will be weighted at 30% of the total final available marks.

Paper 3 (1 hour 15 minutes)

A compulsory paper taken by **all** candidates.

The paper consists of short-answer and structured questions worth a total of 70 marks.

The questions will be based on the core and extended objectives and will be of a difficulty appropriate to grades A to G. The questions will test skills mainly in **Assessment Objectives A** and **B**.

The paper will be weighted at 50% of the total final available marks.

Practical Assessment

All candidates must be entered for the following component:

Paper 4   **Alternative to Practical** (45 minutes). This is a written paper designed to test familiarity with laboratory procedures. The total mark for the paper will be 40.

The purpose of this component is to test appropriate skills in Assessment Objective C.
The component is designed to discriminate between grades A and G.

The practical assessment will be weighted at 20% of the total final available marks.

Weighting of Papers

	Weighting (%)
Paper 1	30%
Paper 3	50%
Papers 4	20%

ASSESSMENT OBJECTIVES

The three assessment objectives in Science: Single Award are:

A Knowledge and understanding,

B Handling information and solving problems,

C Experimental skills and investigations.

A description of each assessment objective follows;

A   KNOWLEDGE AND UNDERSTANDING

Candidate should be able to demonstrate knowledge and understanding of:

1. the concepts, laws, theories and principles of Science;
2. the vocabulary, terminology, conventions of Science, including symbols, quantities and units;
3. applications of Science Award and of their technological, economic, environmental and social implications;
4. the significance of information and communication technology in the day-to-day life and in the world of work.

Questions assessing these objectives will often begin with words such as: *define, state, describe, outline, etc.*

B   HANDLING INFORMATION AND SOLVING PROBLEMS

Candidates should be able to:

1. solve problems as they relate to day-to-day life, including some of a quantitative nature;
2. use information to identify patterns, report trends, draw inferences, make predictions and propose hypotheses;
3. locate, select, organise and present information from a variety of sources;
4. translate information from one form to another;
5. manipulate numerical and other data;
6. present explanations for phenomena, patterns and relationships.

Questions assessing these objectives may contain information which is unfamiliar to candidates. In answering such questions, candidates are required to take principles and concepts in the syllabus and apply them to the situations described in the questions.

Questions assessing these objectives will often begin with works such as: *discuss, predict, suggest, calculate, determine, etc.*

C   EXPERIMENTAL SKILLS AND INVESTIGATIONS

Candidates should be able to:
1. follow a sequence of instructions;
2. use appropriate techniques, apparatus and materials;
3. handle instruments, apparatus and materials safely;
4. make and record observations, measurements and estimates;
5. interpret and evaluate observations and data;
6. plan investigations and/or evaluate methods and suggest possible improvements;
7. convert acquired skills into creative innovations;
8. apply knowledge and draw conclusions.

SPECIFICATION GRID

Assessment Objective	Weighting
A Knowledge with understanding	50% (not more than 25% recall)
B Handling Information and Problem Solving	30%
C Experimental Skills and Investigations	20%