

## **SYLLABUS 0569 SCIENCE: DOUBLE AWARD - SCHEME OF ASSESSMENT FROM 2012**

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

Candidates will sit **two** written papers (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.

<b>SYLLABUS COMPONENTS</b>
<p><b>Paper 1</b> (1 hour 30 minutes)</p> <p>A compulsory paper taken by <b>all</b> candidates.</p> <p>A multiple-choice paper consisting of 60 items each with 4 options.</p> <p>The questions will be based on the core and extended objectives and will be of a difficulty appropriate to grades A to G. The paper will test skills mainly in <b>Assessment Objectives A and B</b>.</p> <p>The paper will be weighted at 30% of the total final available marks.</p>
<p><b>Paper 3</b> (2 hours)</p> <p>A compulsory paper taken by <b>all</b> candidates.</p> <p>The paper consists of short-answer and structured questions worth a total of 100 marks.</p> <p>The questions will be based on the core and extended objectives and will be of a difficulty appropriate to grades A to G. The paper will test skills mainly in <b>Assessment Objectives A and B</b>.</p> <p>The paper will be weighted at 50% of the total final available marks.</p>
<p><b>Practical Assessment</b></p> <p><b>All</b> candidates must be entered for the following component:</p> <p><b>Paper 4 Alternative to Practical</b> (1 hour 30 minutes). This is a written paper designed to test familiarity with laboratory procedures. The total mark for the paper is 60.</p> <p>The purpose of this component is to test appropriate skills in Assessment Objective C.</p> <p>The component is designed to discriminate from grades A to G.</p> <p>The practical assessment will be weighted at 20% of the total final available marks.</p>

## Weighting of Papers

	Weighting (%)
Paper 1	30%
Paper 3	50%
Papers 4 and 6	20%

## ASSESSMENT OBJECTIVES

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The three assessment objectives in Science: Double 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 words 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**

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