GROUP 3 - SCIENCES

Biology (0610)

Content Overview

Candidates study the following topics:

1. Characteristics and classification of living organisms
2. Organization of the organism
3. Movement in and out of cells
4. Biological molecules
5. Enzymes
6. Plant nutrition
7. Human nutrition
8. Transport in plants
9. Transport in animals
10. Diseases and immunity
11. Gas exchange in humans
12. Respiration
13. Excretion in humans
14. Coordination and response
15. Drugs
16. Reproduction
17. Inheritance
18. Variation and selection
19. Organisms and their environment
20. Biotechnology and genetic engineering
21. Human influences on ecosystems

Assessment Overview

All candidates take three papers.

Candidates who have studied the Core subject content, or who are expected to achieve a grade D or below, should be entered for Paper 1, Paper 3 and Paper 6. These candidates will be eligible for grades C to G.

Candidates who have studied the Extended subject content (Core and Supplement), and who are expected to achieve a grade C or above, should be entered for Paper 2, Paper 4 and Paper 6. These candidates will be eligible for grades A* to G.

Chemistry (0620)

Content Overview

Candidates study the following topics:

1. The particulate nature of matter
2. Experimental techniques
3. Atoms, elements and compounds
4. Stoichiometry
5. Electricity and chemistry
6. Chemical energetics
7. Chemical reactions
8. Acids, bases and salts
9. The Periodic Table
10. Metals
11. Air and water
12. Sulfur
13. Carbonates
14. Organic chemistry

Assessment Overview

All candidates take three papers.

Candidates who have studied the Core subject content, or who are expected to achieve a grade D or below, should be entered for Paper 1, Paper 3 and Paper 6. These candidates will be eligible for grades C to G.

Candidates who have studied the Extended subject content (Core and Supplement), and who are expected to achieve a grade C or above, should be entered for Paper 2, Paper 4 and Paper 6. These candidates will be eligible for grades A* to G.

Physics (0625)

Content Overview

Candidates study the following topics:

1. General Physics

1.1 Length and time

1.2 Motion

1.3 Mass and weight

1.4 Density

1.5 Forces

1.6 Momentum (Extended candidates only)

1.7 Energy, work and power

1.8 Pressure

2. Thermal Physics

2.1 Simple kinetic molecular model of matter

2.2 Thermal properties and temperature

2.3 Thermal processes

3. Properties of waves, including light and sound

3.1 General wave properties

3.2 Light

3.3 Electromagnetic spectrum

3.4 Sound

4. Electricity and Magnetism

4.1 Simple phenomena of magnetism

4.2 Electrical quantities

4.3 Electric circuits

4.4 Digital electronics (Extended candidates only)

4.5 Dangers of electricity

4.6 Electromagnetic effects

5. Atomic Physics

5.1 The nuclear atom

5.2 Radioactivity

Assessment Overview

Candidates who have studied the Core syllabus content, or who are expected to achieve a grade D or below should be entered for Paper 1, Paper 3 and either Paper 5 or Paper 6. These candidates will be eligible for grades C to G.

Candidates who have studied the Extended syllabus content (Core and Supplement), and who are expected to achieve a grade C or above should be entered for Paper 2, Paper 4 and either Paper 5 or Paper 6. These candidates will be eligible for grades A* to G.