

GENERAL CERTIFICATE OF EDUCATION BOARD
General Certificate of Education Examination

JUNE 2025

ORDINARY LEVEL

Subject Title	BIOLOGY
Paper No.	Paper 2
Subject Code No.	0510

Duration: Two and Half Hours

Answer FIVE questions, ALL THREE (3) from SECTION A and any TWO (2) from SECTION B

All questions carry 20 marks each. For your guidance, the approximate mark for each part of a question is indicated in brackets.

Begin each question on a new page.

Give labelled diagrams where these will make the answers clearer.

You are advised to read carefully through the question paper before you begin your answers.

You are reminded of the necessity for good English and orderly presentation in your answers.

In calculations, you are advised to show all the steps in your working, giving your answer at each stage.

SECTION A
Answer ALL 3 questions.

1. (a) Describe or draw a labelled diagram of the external structure of an Agama lizard. (9 marks)
 (b) How are birds adapted to their mode of feeding? (6 marks)
 (c) How is water important to plants? (5 marks)
 (Total = 20 marks)

2. (a) Define:
 (i) Seed dispersal.
 (ii) Gestation. (3, 3 marks)
 (b) State the agents of seed dispersal. (3 marks)
 (c) Differentiate between insect and wind pollinated flowers. (6 marks)
 (d) How is the human embryo protected? (5 marks)
 (Total = 20 marks)

3. (a) List four(4) water pollutants and five(5) air pollutants. (4, 5 marks)
 (b) Describe the effect of bush burning in the environment. (6 marks)
 (c) How can water pollution be controlled? (5 marks)
 (Total = 20 marks)

SECTION B
Answer any 2 questions.

4. (a) (i) What is transpiration?
 (ii) List the environmental factors that affect the rate of transpiration (3, 6 marks)
 (b) How is the process of transpiration important to plants? (6 marks)
 (c) Using a potometer, describe how the rate of transpiration can be measured in a leafy shoot. (5 marks)
 (Total = 20 marks)

5. (a) List the parts of the mammalian eye. (9 marks)
 (b) Describe the function of the eye in image formation. (6 marks)
 (c) How is the eye adapted to viewing far objects? (5 marks)
 (Total = 20 marks)

6. (a) What is:
 (i) Digestion,
 (ii) Absorption,
 (iii) Assimilation? (4, 2, 3 marks)
 (b) Describe the digestion of protein in mammals. (6 marks)
 (c) How is the ileum adapted to its absorptive functions? (5 marks)
 (Total = 20 marks)

7. (a) Define:
 (i) Aerobic respiration,
 (ii) Fermentation. (5, 4 marks)
 (b) Describe the qualities of a good respiratory surface. (6 marks)
 (c) Using an experiment, explain how heat is released during respiration. (5 marks)
 (Total = 20 marks)