

Biology 3
710

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

JUNE 2015

ADVANCED LEVEL

Subject Title	Biology
Paper No./Title	Paper 3- Practical
Subject Code No.	710

FIRST GROUP

Three hours

Answer ALL FOUR questions. The allocation of marks is shown at the end of each question.

Great importance is attached to the accuracy and labelling of the drawings.

You are reminded of the importance of using a hand lens or a microscope where appropriate.

1. (a) For each of the eight specimens (A to H) provided, state
- the major group (Phylum) to which it belongs,
 - the subgroup (Class) to which it belongs and
 - the scientific or common name.

Your answer should be written in your answer book in columns as shown below.

Specimen	(i)	(ii)	(iii)
A			
B			
C			
Etc.			

(12 marks)

- (b) Using only visible external characteristics of specimens A to H, construct a dichotomous key to separate them. (7 marks)
- (c) State the ecological significance of specimens A, B, C and D to their respective environments. (11 marks)

(Total = 30 marks)

2. (a) Make a large labelled drawing of specimen C. (8 marks)
- (b) Examine specimen B paying particular attention to visible structural adaptations and use them to discuss its mode of reproduction. (12 marks)

(Total = 20 marks)

3. (a) Pin the bird provided on its back on a dissection board or tarred dish and dissect into the perivisceral cavity. Cut and discard the digestive system to display the urinogenital system. (Keep the digestive system for question 4) Make a labelled drawing of your dissection. (13 marks)
- (b) Annotate parts related to excretion and reproduction. (12 marks)

Leave your dissection properly displayed for assessment after the examination.

(Total = 25 marks)

4. (a) Cut small chunks of liver, pancreas and gizzard from the dissected bird in question 3 (a) above. Carefully macerate the tissues of each of these organs in a mortar with a small quantity of water. Filter the juice of each and using the materials provided, investigate the metabolic activity of the tissues and finally classify them by way of a bar graph. Record your procedure, observations and inference. (20 marks)
- (b) Devise and carry out an experiment to justify your investigation. (5 marks)

(Total = 25 marks)