

**Human Biology 2**  
**0565**

**CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD**

General Certificate of Education Examination

**JUNE 2016**

**ORDINARY LEVEL**

Subject Title	Human Biology
Paper No.	2
Subject Code No.	0565

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**Two and a half hours**

You are required to answer **FIVE** questions choosing **THREE** from Section A and **TWO** from section B. All the questions carry equal marks and marks allocated to parts of questions are indicated.

Extra questions answered from each section shall **NOT** be marked.

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

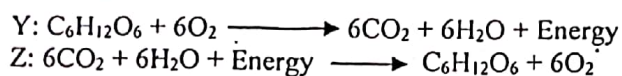
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Turn over

**SECTION A**

**Answer THREE questions from this section**

1. Below are two physiological reactions which take place in living cells.



- (a) (i) Identify the physiological processes
- (ii) What are the differences between processes Y and Z?
- (b) Explain how oxygen from the atmosphere enters the blood stream.

(2, 5, 13 marks)

- 2. (a) Draw a large and neatly labeled diagram of a motor neurone.
- (b) Briefly describe how a nerve impulse is transmitted along a motor neurone.
- (c) Define the term reflex action, giving an example.

(7, 10, 3 marks)

- 3. (a) How does blood function as a transport medium?
- (b) Describe the mechanism of blood clotting on the site of a wound.
- (c) A woman who is Rh<sup>-</sup> marries a man who is Rh<sup>+</sup>.
  - (i) Explain what happens if her first baby is Rh<sup>+</sup>.
  - (ii) Explain what happens to subsequent pregnancies.

(10, 5, 5 marks)

- 4. (a) Define the following words:
  - (i) Sexual intercourse
  - (ii) Fertilization
  - (iii) Sex-linked genes
- (b) What are the disadvantages of feeding babies with cow milk?
- (c) List the signs and symptoms of sexual maturity in humans.

(3, 3, 3, 6, 5 marks)

- 5. (a) Distinguish between the following pairs of words:
  - (i) Antigens and Antibodies.
  - (ii) Active immunity and Passive immunity.
- (b) How is the body naturally protected from invading pathogens and harmful substances?
- (c) Suggest why it has not been possible to produce a vaccine for malaria.

(3, 5, 9, 3 marks)

**SECTION B**

**Answer TWO questions from this section.**

6. (a) How is water useful in the body of humans?  
(b) Describe the process by which water is purified in a large scale.  
(c) (i) What is an intermittent water supply?  
(ii) State the causes of intermittent water supply in Cameroon.
- (6, 10, 4 marks)

7. (a) With the aid of an illustrated diagram ONLY, show how nitrogen circulates in nature.  
(b) Define the following ecological terms:  
(i) An ecosystem  
(ii) A community  
(iii) A population  
(c) Explain the role of primary producers and decomposers in an ecosystem.
- (10, 5, 5 marks)

8. (a) Distinguish between Refuse and Sewage.  
(b) Briefly explain the following methods of Refuse collection and disposal:  
(i) Incineration  
(ii) Composting  
(iii) Sealing and burying  
(iv) Garbage cans  
(c) State the harmful effects of untreated sewage.
- (4, 4 x 3, 4 marks)

9. Read the following passage carefully and answer the questions that follow:

Recent findings in Social studies reveal that in a majority of post-primary institutions, there is a constant rising rate of teenage parenthood. The female students are the most affected; as they find themselves with unwanted pregnancies. These student expectant mothers usually keep away from regular monthly clinic attendance until delivery.

As a result of this neglect, most of them end up with a Caesarian Section. Worse still, they would be expected to attend monthly clinics after child birth. What an ordeal due to carelessness.

- (a) Explain the phrase 'Expectant mothers'.  
(b) What name is given to the clinic which takes care of expectant mothers?  
(c) State the role of such clinics to the community.  
(d) State five reasons why a surgeon would carry out a caesarian section on a woman.  
(e) Give the name and importance of that clinic which takes care of nursing mothers and their babies.
- (1, 1, 6, 5, 7 marks)

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