

G.C.E PRE-MOCK EXAMINATION

	SUBJECT CODE 565	PAPER NUMBER 2
	SUBJECT TITLE AND SYLLABUS HUMAN BIOLOGY	
ORDINARY LEVEL	DATE	

Time Allowed: Two and a half hour

Answer 3 questions from section A and 2 questions from section B.

Section A:

- a)** Draw a large labeled diagram of an animal's cell as seen under the electron microscope.

b) State the function of the following cellular parts or organelles;

 - Mitochondria
 - Rebosomes
 - Microuillus

c) State the tissue of the body where cell containing the organelle in (b) above are abundantly found. **(10, 6, 4,4mks)**
- a)** Distinguish between internal and external respiration

b) Describe the mechanism by which air is taken into and passed out of the lungs of a mammal.

c) Explain briefly why the amount of oxygen in the atmosphere remains relatively constant. **(5, 12, 3 mks)**
- Describe reproduction in the named mammal (man). In your answer, refer to sexual cycles, mating, nutrition of embryo, birth and parental care (diagrams of the and female reproductive organs are necessary). **(20mks)**
- a)** Make a large fully labeled diagram of the human eye to show its main parts.

b) Explain how the function in image formation and vision.

c) State and explain any two eye defects and how it can be corrected
(8, 6,6mks)
- a)** With the aid of an illustrated diagram, describe how the body responds to a hot object that is touching the hand.

b) Explain fully how a mammal brings about the movement of one its limbs at the knee or elbow joint.

c) Draw a labeled diagram of the human brain. **(8, 7,5mk)**

Section B:

- Using specific examples, describe some of the different effects of man's activity on the environment. **(20mks)**
- a)** what is drug?

b) Explain the harmful effects of the following drugs addictions to health

 - alcoholism
 - smoking

c) How can the following help in the health development of man

 - Exercise
 - Rest and sleep **(3, 9, 8,mks)**

8. a) What is family planning?
 b) How is family planning important to:
 i) The family?
 ii) The State?
 c) Discuss the advantages and the disadvantage of coitus interruptus as a natural method of birth control.
 d) The lone daughter of a blood group A mother and a blood group B father who has agglutinogens A and B on her RBCs gets married to a young man who is heterozygous for blood group B.
 i) Deduce the possible genotypes of the couple.
 ii) Using genotype symbols and diagrams, show the possible genotypes and phenotypes of their offspring..
 iii) Is it possible for the couple to have a child who is of blood group O? Explain your answer. **(2, 6, 4,8mks)**

9. a) What are the benefits of antenatal clinics to a community?
 b) How may the inhabitants of the Regional Head-Quarter of every Region in Cameroon benefit from New Year gift of an ultra modern playground offered by the Head of State?
 c) Write short notes on W.H.O **(8, 8,4mks)**

10. Read the follow passage on two common, HIV/AIDS and Malaria, and answer the questions that follow.

HIV/AIDS is commonly referred to as a pandemic. Its causative agent is HIV. This virus may be transmitted from an infected to a healthy person through sexual intercourse. If the infected person is a man, the virus would be transmitted to the female in semen.

Malaria on the other hand is an endemic disease in the tropics. Its causative agent is transmitted to man by an insect vector. The insect takes up the malaria parasite from human blood, when it takes in a blood meal. The parasite undergoes some development within the female mosquito, and latter it is introduced into other healthy persons by the infected female mosquito when it takes in its blood meal.

Early symptoms of malaria are general body pains, tiredness, among others. The preventive measures taken to control the spread of malaria include:

- i) destruction of the breeding grounds of the vector.
- ii) Preventing contact between man and the vector.
- iii) Killing of the vector.

a) Define the following terms as used in the passage.

- i) Pandemic
- ii) Endemic
- iii) Insect vector
- iv) symptoms

b) What does AIDS means?

c) List two other methods of transmission of the human immune deficiency virus (HIV).

d) Give the name of the insect vector mentioned in the passage.

e) Give the name of the causative agent of human malaria.

f) State one specific way by which the spread of malaria can be prevented by each of the measures.

i), ii) and iii) listed in the passage.

g) What role is played by saliva in the transmission of malaria?

(10, 1, 2, 1,1,3,2 marks)