



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

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MAY – AUGUST 2021

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DEPARTMENT OF COMMUNITY HEALTH AND DEVELOPMENT

REGULAR PROGRAMME

CHD 214: MEDICAL ENTOMOLOGY AND VECTOR CONTROL

Date: AUGUST 2021

Duration: 3 Hours

INSTRUCTIONS: Answer all Questions

SECTION A: ANSWER ALL QUESTIONS

(30 Marks)

1. What is meant by the term “Arthropoda”? Name two classes of arthropods **(3 Marks)**
2. Define the following terms: **(3 Marks)**
 - a) Ectoparasite
 - b) Vector
 - c) Obligate parasite
3. Describe what is meant by “Entomophobia” **(1 Mark)**
4. What is “complete” and “incomplete” metamorphosis in the insect life cycle? **(3 Marks)**
5. In most insects the thorax is divided into 3 parts. Name the two parts in which the wings commonly arise. **(2 Marks)**
6. Name at least one parasite that is transmitted by the following vectors: Sand flies, Tsetse flies, and Ixodidae ticks. **(3 Marks)**
7. Name two species of mosquitoes that transmit malaria to humans. **(1 Mark)**

8. Name two characteristics that separate *Glossina* (tsetseflies) from all other flies. (2 Marks)

9. Where on the human body are the lice “Phthirus” and “Capitis” usually found? (2 Marks)

10. List four arboviral infections of humans, and for each one, mention the most effective method of vector and disease control. (4 marks)

11. Describe how plague transmission occurs in humans. (6 marks)

SECTION B: ESSAY (ANSWER ALL QUESTIONS) (40 Marks)

1. Describe in detail the effects of insects on man. (10 Marks)

2. Arthropods in the class insecta have their bodies segmented into three distinct regions. With the aid of a well labeled insect diagram, list the segments that comprise the insect’s body. List at least two appendages that are found on each segment and their functions. (10 Marks)

3. Describe the life cycle of the snail-borne schistosomiasis infection, both in the snail intermediate host and the human definitive host. (10 Marks)

4. Describe the life cycle of the malaria parasite in the anopheles mosquito. (10 Marks)

END