

**CHUKA UNIVERSITY**

**SECOND YEAR EXAMINATION BMET 230 : MEDICAL AND VETERINARY  
ENTOMOLOGY**

**STREAM: Y2S1BSc. BIOMEDICAL SCIENCE**

**TIME: 2 HOURS**

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**INSTRUCTIONS**

- i. **Answer Question One and any other Two Questions**
- ii. **Do not write on the question paper**

**Question One (30 marks)**

- a. Briefly discuss the four orders found in the class insecta. (4 marks)
- b. Describe in detail the family Cimicidae of the order of the order Heteroptera. (6 marks)
- c. Discuss in detail any 4 medical conditions related to arthropods. ( 8 marks)
- d. Briefly state the general characteristics of the class Insecta. (5 marks)
- e. Elimination of larvae is one of the ways to control insect breeding. Explain how it can be achieved. (5marks)

**Question Two (20 marks)**

- a. Give a detailed explanation of the life cycle and medical and veterinary importance of the sand fly. (10 marks)
- b. Explain in detail traditional and modern repellants as used to control mosquito. (10 marks)

**Question Three (20 marks)**

- a. Explain in detail the development cycle and bio ecology of the mosquito (10 marks)

- b. Metamorphosis occurs in all insects. But the process differs from insect to insect elucidate. (10 marks)

**Question Four (20 marks)**

- a. Give a detailed explanation of the developmental cycle and medical and veterinary importance of the tsetse fly. (10 marks)
- b. Explain in detail the morphology and systematic of the family simuliidae ( sand flies) (10 marks)