

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN BIOMEDICAL TECHNOLOGY

BMET 230: MEDICAL AND VETERINARY ENTOMOLOGY

STREAMS: BMET

TIME: 2 HOURS

DAY/DATE: TUESDAY 19/12/2023

11.30 A.M. – 1.30 P.M.

**INSTRUCTIONS:**

- Answer question *one* and *any other two* questions

**Question 1 (Compulsory) (30 marks)**

- Using a suitable diagram only, illustrate the circulatory system in insects (5 Marks)
- Outline different habitats of arthropods giving examples in each case (7 Marks)
- With the aid of a suitable diagram, describe the structure of insect exoskeleton (8 Marks)
- Explain 3 hormone types that are integral to the growth and reproductive functions of insects. (6 Marks)
- Describe the classification of muscular system in insects (4 marks)

**Question Two (20 marks)**

- Describe the benefits of arthropods (10 Marks)
- Discuss the different insect collecting techniques (10 marks)

**Question Three (20 marks)**

Discuss the hosts, life cycle and physical characteristics of the following insect Orders

- Mallophaga (8 Marks)
- Hemiptera (12 marks)

**Question 4 (20 marks)**

- a. Discuss 8 major types of insect legs (8 marks)
  - b. Discuss the utilization of lipids in arthropods (12 Marks)
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