# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

## A. M. E. C. E. A

### MAIN EXAMINATION

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### JANUARY - APRIL 2015 TRIMESTER

### **FACULTY OF SCIENCE**

## **DEPARTMENT OF NATURAL SCIENCES (BIOLOGY)**

### **REGULAR PROGRAMME**

**BIO 205: GENERAL ENTOMOLOGY** 

Date: April 2015 **Duration: 2 Hours** Instructions: Answer Question ONE and any other TWO Questions. Q1. Define: a) **Tagmatisation** i) Entomology ii) iii) Insect (3 marks) b) List FIVE characteristics of insects that account for their success in their environment. (5 marks) c) List the THREE distinctive tagmala insects show. (3 marks) d) List FOUR different types of antenna in insects based on their modification. (2 marks) List the SIX segments of an insect leg. e) (3 marks) f) List two economic importance of flies. (2 marks) State THREE types of feeding insects. g) (2 marks) Q2. Explain both the beneficial effects and Detrimental effects of insects. (20 marks) Q3. State the Behavioral adaptation of termites and bees as social insects. a) (3 marks) b) Explain what social insects are? (3 marks) Distinguish between termites and ants. c) (3 marks)

- Q4. a) Explain the classification of the insects head according to the basis of the orientation with the mouth part.

  (10 marks)
  - b) Describe the entire process of metamorphosis briefly. (10 marks)
- Q5. a) Draw a clearly and well labeled diagram of an insect of your choice. (10 marks)
  - b) Discuss the eyes as the first structure located in the head (2 types). (10 marks)

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