MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATION 2018/2019 ACADEMIC YEAR

SCHOOL OF SCIENCE AND INFORMATION SCIENCES
THIRD YEAR FIRST SEMESTER EXAMINATIONS
FOR THE DEGREE OF BACHELOR OF SCIENCE IN ZOOLOGY

COURSE CODE: ZOO3233
COURSE TITLE: ENTOMOLOGY I

DATE: 23RD APRIL 2019 **TIME: 2.30PM-4.30PM**

INSTRUCTIONS TO CANDIDATES

a) Answer **ALL** questions in section **A** and **any two** questions in section **B**

b) Illustrate your answers with suitable diagrams and give examples wherever appropriate.

SECTION A: Answer ALL questions in this section. Each question carries 3marks

1. Explain any three evolutionary innovations in insects.
(3marks)

2. Distinguish between exopterygota and endopterygota . (3marks)

3. Explain insect adaptations to conserve moisture (3marks)

4. Describe the structure of insect neurons
(3marks)

5. Classify insect respiratory system on the basis of the number and distribution of the functional spiracles.
(3marks)

6. Explain how honey bees can be effective management for pollination.
(3marks)

7. State the functions of insect antennae.
(3marks)

8. Name any three insects which produce toxins/venom and their effects.
(3marks)

9. Name three categories of allele-chemicals and their functions. (3marks

10. State the general characteristics of social insects. (3marks)

SECTION B: Answer Any Two Questions Each question carries 20 marks

11. Discuss the economic importance of class insecta. (20marks)

12. Describe a typical insect leg and the adaptations. (20marks)

13. Discuss migration in insects with reference to Locusts (*Schistocerca gregaria*). (20marks)

14. Describe the structure and functions of insect integument (20marks)

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