



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
THIRD YEAR END OF FIRST SEMESTER**

**SCHOOL OF SCIENCE AND INFORMATION
SCIENCES
FOR
BACHELOR OF SCIENCE**

**COURSE CODE: ZOO 3222
COURSE TITLE: ARTHROPOD BIOLOGY**

**DATE: 24TH APRIL, 2019
10.30AM**

TIME: 0830AM -

INSTRUCTIONS TO CANDIDATES

- Answer all the questions in **SECTION A** and **ANY TWO** questions from section B.
- Illustrate your answers with suitable diagrams and give examples wherever necessary.

SECTION A: Answer all the questions (30 MARKS)

1. Describe the major differences between trilobites and chelicerates.
(3 marks)
2. Explain how arthropods affect human comfort and health. **(3 marks)**
3. Describe three distinguishing morphological features of arthropods.
(3 marks)
4. Explain the economic importance and evolutionary significance of copepods.
(3marks)
5. Discuss the regulation of ecdysis and formation of arthropod cuticle.
(3 marks)
6. Explain the mode of nutrition among arachnids **(3 marks)**
7. Give a brief account of arthropod species abundance. **(3 marks)**
8. Describe the structure and functions of a book lung in a spider. **(3 marks)**
9. Give an account of occurrence and functions of a chromatophore among Crustaceans. **(3 marks)**
10. Outline reproduction among the Crustacea **(3 marks)**

SECTION B: ANSWER ANY TWO questions 40 MARRKS

- 11.** Compare and contrast the anatomy and behaviour of the following aranean families: Pholcidae, Araneidae and Agelenidae. (20 marks)
- 12.** Discuss social organization among insects. (20 marks)
- 13.** Discuss reproduction and care of young in oribatid mites. (20 marks)
- 14.** Describe the role of the rat flea in disease transmission **(20 marks)**

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