



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY
EXAMINATIONS
2018/2019 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER
EXAMINATIONS
FOR
THE DEGREE OF BACHELOR OF SCIENCE
(BOTANY) AND BACHELOR OF SCIENCE
(ZOOLOGY)**

**COURSE CODE: BOT 3215
COURSE TITLE: PLANT-ANIMAL
INTERACTIONS**

**DATE: 18TH APRIL, 2019
1030HRS**

TIME: 0830 -

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in section **A** and any other **TWO** selected from section **B**. Illustrate your answers with diagrams and give examples where appropriate.

SECTION A (30 MARKS): ANSWER ALL QUESTIONS

1. Define the following terms

- a. Predation **(1 mks)**
- b. Benevolence **(1 mks)**
- c. Associated defense **(1 mks)**

2. Illustrate the evolutionary process in the Paleozoic era **(3 mks)**

3. Explain the repercussions of coevolution **(3 mks)**

4. Show two examples of reciprocal coevolution **(3 mks)**

5. Describe the consequences of plant-herbivore interactions **(3 mks)**

6. State three orders of herbivorous insect species and give examples

(3 mks)

7. Distinguish between spinescence, pubescence and sclerophylly **(3 mks)**

8. State three benefits of animals to plants **(3 mks)**

9. Describe the impact of Granivory on plant populations
(3 mks)

10. Describe the evolutionary selection of herbivores against
spinescent plants
(3 mks)

SECTION B (40 MARKS): ANSWER ANY TWO QUESTIONS

11. Describe the woody plant-herbivore interactions in semi-
arid savannah ecosystems.
(20 mks)

12. Account for the evolution of insect-feeding habits
through the geographic timescale.
(20 mks)

13. Describe the defense strategies that plants use against
insect herbivores.
(20 mks)

14.

a. Discuss the economic importance of plant-animal
interactions.

(10

mks)

b. Describe the human activities that affect plant-animal
interactions. **(10 mks)**

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