



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

TIME: 0830 - 1030HRS

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)

//END