



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY
EXAMINATIONS 2
2018/2019 ACADEMIC YEAR**

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

**COURSE CODE: BOT 3211
COURSE TITLE: PLANT ECOLOGY**

**DATE: 25TH APRIL, 2019
1630HRS**

TIME: 1430 -

Instructions

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

This paper consists of 2 printed pages. Please turn over.

SECTION A (30 MARKS): ANSWER ALL QUESTIONS

1. Define the following terms
a. Disturbance (1 mk)
b. Ecological stress (1 mk)
c. Succession (1 mk)
2. Describe the typical flora and fauna of Tundra and Taiga (3 mks)
3. Explain the reasons for the abundance of flora and fauna in the tropical forests (3 mks)
4. Give local and seasonal effects on climate (3 mks)
5. Discuss why the community composition changes as one moves up a mountain and down a continental shelf into the abyssal depths of the ocean (3 mks)
6. Describe three factors of microclimate that affect plant communities (3 mks)
7. Distinguish between primary and secondary forests (3 mks)
8. Describe the economic applications of a biodiverse ecosystem (3 mks)
9. Account for the main causes of biodiversity loss (3 mks)

10. State three conservation measures you would undertake in the Mara-Serengeti ecosystem
(3 mks)

SECTION B (40 MARKS): ANSWER ANY TWO QUESTIONS

11. Classify Kenya in terms of ecological zones **(20 mks)**
12. Discuss the analytical and synthetic characteristics of plant communities **(20 mks)**
- 13.
- a. Describe in detail, the various grassland ecosystems **(12 mks)**
 - b. Distinguish the characteristics of the lotic and lentic ecosystems **(8 mks)**
14. Describe an experimental procedure you would use to study plant populations in the Mara-Serengeti ecosystem **(20 mks)**

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