



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR

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

BOT 315: PLANT ECOLOGY II

DATE: 24TH APRIL 2018

TIME: 1100 -1300HRS

Instructions

Answer **ALL** questions in section **A** and any other **TWO** questions in 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. Competition (1 mark)
 - b. Biome (1 mark)
 - c. Trophic cascade (1 mark)
2. As an ecologist, describe the types of experiments you would use in your research. (3 mks)
3. Describe the **Alfred Wegener** Theory. (3 mks)
4. Define; give examples and roles of biological hotspots. (3 mks)
5. Describe briefly the impacts of land use and land use changes on plant communities. (3 mks)
6. Explain briefly, what would happen if you removed a keystone species from an ecosystem. (3 mks)
7. Describe the plant composition from pioneer to climax community in a primary succession. (3 mks)
8. 'Is the ban on GMOs in Kenya justifiable?' Explain briefly (3 mks)
9. How can the abundance and diversity of living organisms in tropical ecosystems be explained? (3 mks)
10. Give three major conservation strategies employed in the Mara-Serengeti ecosystem. (3 mks)

SECTION B (40 MARKS): ANSWER ANY TWO QUESTIONS

11. Describe in detail, the macroclimate and microclimate in relation to plant communities. (20 mks)
12. Account for typical flora and fauna of the major terrestrial biomes. (20 mks)
13.
 - a. Categorize environmental stressors (12 mks)
 - b. Describe the role of fire as a disturbance agent in a grassland (8 mks)
14. Write an essay on "the human footprint" and its impact on plant communities. (20 mks)

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