

**MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER EXAMINATIONS**

**FOR**

**THE DEGREE OF BACHELOR OF SCIENCE (BOTANY)**

*BOT 315: PLANT ECOLOGY II*

**DATE: 27/01/2017 TIME: 0830-1030HRS**

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. Describe the process of disturbance and succession. **(3 marks)**
2. Write short notes on the concept of intertrophic relations. **(3 marks)**
3. Describe the effects of a combination of wind and temperature on distribution of plants. **(3 marks)**
4. Describe the three aspects of light. **(3 marks)**
5. Briefly describe the methods you would use to estimate plant population density. **(3 marks)**
6. Definewetlandsandattempt to classifythevarioustypes of wetlands.  **(3 marks)**
7. Distinguish between primary and secondary forests. **(3 marks)**
8. Describe the adaptations of plants to the savannah environment. **(3 marks)**
9. Describe a transition zone. **(3 marks)**
10. Account for high species diversity in a tropical rainforest.

**(3 marks)**

**SECTION B (40 MARKS): ANSWER ANY TWO QUESTIONS**

1. Discuss the analytical and synthetic characteristics of plant             communities. **(20 marks)**
2. Describe the classification of ecological zones in Kenya. **(20 marks)**
3. Explain how the macroclimate and microclimate affect plant              communities. **(20 marks)**
4. Describe an experimental procedure you would use to study plant             populations in the savannah. **(20 marks)**