



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATION
FOR
THE DEGREES OF BACHELOR OF SCIENCE (FORESTRY &
WILDLIFE)**

**COURSE CODE: FEM 1203
COURSE TITLE: PLANT ECOLOGY**

DATE: 30TH APRIL, 2018

TIME: 1100 - 1300 HRS

INSTRUCTIONS TO CANDIDATES

- (a) Select ONLY TEN Questions (7 marks each)**
- (b) Illustrate your answers with well labeled diagrams where appropriate**

ANSWER ANY TEN QUESTIONS (7 MARKS EACH)

1. Explain the decrease in energy up the trophic levels on an energy pyramid. **(7marks)**
2. Briefly explain the processes leading conversion of atmospheric nitrogen into nitrates in the soil **(7marks)**
3. Briefly explain the flow of energy in an ecosystem using the First and second laws of thermodynamics **(7marks)**
4. What are features of Shrubland biomes? Give four examples of parts where they are found. **(7marks)**
5. a) Describe any **FOUR** kinds of biotic interactions in a community. **(4marks)**
b) State three uses of phosphorous in organisms. **(3marks)**
6. a. What is a peat? **(1mark)**
b. State **SIX** characteristics of the Tundra biome. **(6marks)**
7. Briefly describe inhibition succession in plants. **(7marks)**
8. a) Outline any **THREE** factors that affect grasslands worldwide. **(3marks)**
b) State **FOUR** types of temperate grasslands. **(4marks)**
9. State any **SEVEN** factors that influence distribution of plant communities. **(7marks)**
10. Outline **SEVEN** uses of data on primary production. **(7marks)**
11. State **THREE** advantages and four disadvantages of primary production measurement methods. **(7marks)**
12. a) What is plant succession? **(2marks)**
b) State any **FIVE** types of primary successions (Priseres). **(5marks)**
13. With the aid of an illustration, describe the parts of generalized population growth curve. **(7marks)**
14. Outline **SEVEN** types of terrestrial biomes. **(7marks)**
15. a) Distinguish between benthic and pelagic communities. **(2marks)**
b) Briefly describe stratification in lakes in summer and winter. **(5marks)**

END//