



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER**

**SCHOOL OF TOURISM & NATURAL RESOURCES
MANAGEMENT
DIPLOMA IN TOURISM AND WILDLIFE
MANAGEMENT**

**COURSE CODE: NDTW 131
COURSE TITLE: INTRODUCTION TO PLANT
COMMUNITIES OF EAST AFRICA**

DATE: 5TH DECEMBER, 2018

TIME: 0830 – 1030 HRS

INSTRUCTION TO CANDIDATES

- This paper has two sections A & B.
- Answer question **ONE** in section A and any **TWO** in section B.

SECTION A: QUESTION ONE IS COMPULSORY (30MKS)

QUESTION 1

- (a) Distinguish between plant morphology and plant physiology. (2mks)
- (b) Identify and describe **four** vegetative features of plants that are used in plant classification. (8mks)
- (c) Describe **six** abiotic factors affecting plant distribution in a given ecosystem. (6mks)
- (d) State **four** reasons why morphological features of plants are largely used in plant taxonomy. (4mks)
- (e) Explain the various ways in which pathogens cause plant diseases. (4mks)
- (f) Describe any **Four** types of plant fossils (4mks)
- (g) Name two reproductive features used in classification of plants. (2mks)

SECTION B: ANSWER ANY TWO QUESTIONS (40MKS)

QUESTION 2

- (a) What are biological interactions? (2mks)
- (b) Distinguish between the following terms as used in plant ecology. (4mks)
- i. Ammensalism and Commensalism
 - ii. Predation and parasitism
- c) Describe the elements making up disease quadrangle. (4mks)
- (d) While giving examples distinguish between essential and beneficial elements of plant nutrition. (4mks)
- (e) State **six** reasons for harvesting trees in forest management. (6mks)

QUESTION 3

(a) Distinguish between the following terms as used in plant pathology.

(i) Plant disease and plant injury (2mks)

(ii) Signs and symptoms (2mks)

(b) State **two** ways in which plant genes can be transformed. (2mks)

(c) Explain **five** ways in which plant genetics differ from animal genetics? (5mks)

(d) Define the term plant systematic. (1mk)

(e) State the function and deficiency symptoms of the following elements in plant growth. (8mks)

Element	Function	Deficiency
Calcium		
Nitrogen		
Iron		
Magnesium		

QUESTION 4

(a) (i) What is forest management? (1mk)

(ii) Describe **six** harvesting methods used in forest management. (6mks)

(iii) State **three** ways in which forest fire is harmful to the forest. (3mks)

(b) Distinguish between ethnobotany and economic botany. (2mks)

(c) State **five** characteristics of plants (5mks)

(d) Explain **three** ways of plant defense against herbivory. (3mks)