

MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR FIRST YEAR SECOND SEMESTER

SCHOOL OF NATURAL RESOURCE, TOURISM & HOSPITALITY DIPLOMA IN TOURISM AND WILDLIFE MANAGEMENT.

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

DATE: 6TH DECEMBER, 2022 TIME: 1430-1630

INSTRUCTIONS

Answer <u>ALL</u> questions in section A and any <u>THREE</u> questions in section B. Give illustrations and examples where necessary.

SECTION A: COMPULSORY (25 Marks)

1. Distinguish the following terms;

5 marks

- i. Economic botany, paleobotany and ethnobotany
- ii. Omega taxonomy and Gamma taxonomy
- iii. Active forest management and passive forest management.
- iv. Plant morphology and plant anatomy
- v. Crossbreeding and inbreeding
- 2. Describe **two** climatic and **two** edaphic factors that affect the distribution of plant communities in a given ecosystem. **4 marks**
- 3. Identify and describe **four** plant features that are used in plant identification and classification. **4 marks**
- 4. Write short notes on:

i. plant hormones

7marks

ii. **5** different plant vegetations of East Africa.

5marks

SECTION B: Attempt **ANY THREE** questions. (45 marks)

1. Plant disease is defined as the state of local or systemic abnormal physiological functioning of a plant, resulting from the continuous, prolonged 'irritation' caused by pathogenic organisms. Explain 5 pathogens and the diseases that they are likely to cause to plants. In that note provide way in farmers can manage the plant diseases in their farms.

15marks

2. Discuss Adaptation of different plant communities to their different environment. **15 marks**

3.

- i. Explain how sustainable development could come into play in forest management.5 marks
- ii. With relevant examples, explain the benefits that accrue with active forest management 10 marks

4.

i. What is an herbarium?

3 marks

ii. With well-illustrated diagrams, describe the steps involved in herbarium technique 12 marks