

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS.

FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE (GENERAL

BOTA 121: PLANT TAXONOMY AND MORPHOLOGY

STREAMS: B.Sc (BOTA) Y1S2

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 10/04/2019

11.30 A.M - 1.30 P.M.

INSTRUCTIONS:

- Answer ALL Questions in Section A and any other TWO Questions in Section B
- Do not write anything on the question paper

SECTION A: [30 MARKS]

1. List the main parts of a moss sporophyte. [4 Marks]
2. Illustrate the different types of floral placentation. [5 Marks]
3. Outline the types of tap roots for storage. [4 Marks]
4. Discuss briefly the subaerial modification of stem. [4 Marks]
5. Classify indehiscent fruits. [5 Marks]
6. Describe the types of inflorescent that terminates in a flower. [4 Marks]
7. Elaborate the attachment of filament to another lobe. [4 Marks]

SECTION B: [40 MARKS]

8. Discuss the classification of the following:
 - (i) Parenchyma based on function [5 Marks]
 - (ii) Stomata based on arrangement of subsidiary cells [5 Marks]
 - (iii) Xylem vessels based on wall perforation [5 Marks]
 - (iv) Sclereids based on structure [5 Marks]
 9. Discuss the differences between anatomy of a monocot and a dicot stem. [20 Marks]
 10. (a) Draw and label the transverse section of a leaf. [12 Marks]
(b) List the functions of each tissue in the leaf. [8 Marks]
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