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**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATION**

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY

COURSE CODE: SBT 222

COURSE TITLE: PLANT STRUCTURE AND FUNCTION

DATE: 10TH AUGUST 2023

TIME: 11.00 AM

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

- Q1 (i) Distinguish prokaryotic and Eukaryotic cells (5 marks)
- (ii) Enumerate the functions of a plant cell wall (5 marks)
- (iii) Briefly explain the function of roots and stems in plants (5 marks)
- (iv) What are the differences between xylem and phloem vessels (5 marks)
- (v) Compare and contrast Meristematic and Permanent tissues (5 marks)
- (vi) What are the advantages and disadvantages of vegetative reproduction (5 Marks)
- Q2 Discuss the mechanisms by which water moves in higher plants (20 marks)
- Q3 Describe the types of vascular bundles found in higher plants (20 marks)
- Q4 Name at least five different deficiency symptoms in plants. Describe them and correlate them with the concerned mineral deficiency. (20 marks)
- Q5 With the aid of a diagram, describe the dicotyledon leaf structure (20 marks)