



KIBABII UNIVERSITY

**MAIN CAMPUS
SPECIAL/SUPPLEMENTARY EXAM**

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF EDUCATION SCIENCE/ BACHELOR OF
SCIENCE IN BIOLOGY**

COURSE CODE: SBT 222

COURSE TITLE: PLANT STRUCTURE AND FUNCTION

DATE: 12th October, 2018 **TIME:** 3:00 -5:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer Question One **compulsory (30mks)** and any other Two Questions **(20mks)** each.

TIME: 2 Hours

KIBABII observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

SBT 222: PLANT STRUCTURE AND FUNCTION

QUESTION ONE (30MKS)

- a) State and explain **FIVE** conditions necessary for seed germination (5 marks)
- b) Briefly describe the structure and composition of the plant cell wall (5 marks)
- c) Using a well labelled diagram, briefly describe the structure of an angiosperm flower (5 marks)
- d) State **FIVE** characteristic features of meristematic cells (5 marks)
- e) Outline any **FIVE** difference between a dicot and a monocot stem (5 marks)
- f) Explain any **FIVE** anatomical adaptations of mesophytes to their environment (5 marks)

QUESTION TWO

Discuss the process of transpiration in plants (20 marks)

QUESTION THREE

The complex tissues are heterogeneous in nature, being composed of different types of cells performing diverse functions. Discuss (20 marks)

QUESTION FOUR

Discuss the process of photosynthesis and respiration in plants giving their similarities and differences (20 marks)

QUESTION FIVE

Discuss the major types of tissues system in plants giving their cell composition and functions. (20 marks)