



A Constituent College of Kenyatta University

**UNIVERSITY EXAMINATIONS 2011/2012 ACADEMIC YEAR
1ST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION AND BACHELOR OF SCIENCE**

**COURSE CODE/TITLE: SBT 102: PLANT MORPHOLOGY AND
ANATOMY**

END OF SEMESTER:II

DURATION: 3 HOURS

DAY/TIME:DATE:THURSDAY:8.30 TO 11.30 A.M. DATE:2/8/2012 (NL1)

INSTRUCTIONS

1. Answer **ALL** questions in section **A** and any two in section **B**
2. Illustrate your answers with diagrams where applicable

SECTION A (40 MARKS): ANSWER ALL QUESTIONS

Question One

- a) List three (3) component parts of a higher plant. (3 marks)
- b) State four (4) functions of plant roots. (4 marks)
- c) Describe three (3) food storage types of stems. (3 marks)

Question Two

- a) Describe four (4) (main) component parts of a flower. (4 marks)
- b) State six (6) component parts of a seed. (6 marks)

Question Three

Using a well labeled diagram, illustrate a plant cell as seen under light microscope. (10 marks)

Question Four

- a) List four (4) cellular components of phloem tissue. (4 marks)
- b) Describe the cellular component of the chlorenchyma tissue. (6 marks)

SECTION B (30 MARKS): ANSWER ANY TWO QUESTIONS

Question Five

Discuss the morphology of fleshy fruits. (15 marks)

Question Six

Discuss the adaptations of xerophytes to drought. (15 marks)

Question Seven

Discuss the five (5) modes of asexual reproduction. (15 marks)