



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN: AGRICULTURAL
EDUCATION AND EXTENSION, AGRICULTURAL BIOTECHNOLOGY,
AGRICULTURAL ECONOMICS, BIOLOGY, BIORESOURCE
CONSERVATION AND MANAGEMENT AND BACHELOR OF
EDUCATION SCIENCE**

COURSE CODE: SBT 100/SBT 111/ SBT 114

**COURSE TITLE: GENERAL BOTANY/SURVEY OF THE PLANT
KINGDOM/BASIC BOTANY**

DATE: FRIDAY 24TH SEPTEMBER, 2021 TIME: 11:00 – 1:00 p.m.

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

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

QUESTION ONE

- a) Illustrate alternation of generations in bryophytes (3 marks)
- b) Elucidate the morphology of *Pteris vittata* (4 marks)
- c) Distinguish pteridophytes from bryophytes (4 marks)
- d) Using a diagram illustrate the transverse section of a *Pinus* leaf (3 marks)
- e) Explain the structural characteristics of spirogyra (3 marks)
- f) Explain terrestrial adaptations of vascular plants (3 marks)
- g) Explain evolutionary adaptations that enabled plants to overcome challenges of living on land (3 marks)
- h) Explain how conifers are adapted to living in their habitat (3 marks)
- i) With an illustration describe peristome of bryophytes (4 marks)

QUESTION TWO

Discuss the divisions in gymnosperms (20 marks)

QUESTION THREE

Discuss the economic importance of fungi (20 marks)

QUESTION FOUR

Describe the characteristics of pteridophytes (20 marks)

QUESTION FIVE

Write an essay on the classification of angiosperms (20 marks)