



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER MAIN 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: 15TH February, 2021. **TIME:** 2:00 -4:00 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) Explain three innovations that trace the evolution of the plant kingdom (3 marks)
- b) Distinguish between the three types of ascocarps (3 marks)
- c) Explain forms of gametic fusion in lower plants (3 marks)
- d) Describe how the sporophytes of pteridophytes are adapted to living in their habitats (4 marks)
- e) Distinguish pteridophytes from higher plants (4 marks)
- f) Draw the male and female plants of *Marchantia sp* (3 marks)
- g) Outline three sub-classes of bryopsida indicating their common names (3 marks)
- h) How is the leaf of *Sphagnum sp* adapted to its function (4 marks)
- i) Elucidate three growth patterns exhibited by the thallus of lichens (3 marks)

QUESTION. TWO

Describe the characteristics of the class bryopsida (20 Marks)

QUESTION THREE

Discuss reproduction in lichens (20 Marks)

QUESTION FOUR

Write an essay on the main classes of fungi (20 Marks)

QUESTION FIVE

Discuss the ecological adaptations of algae (20 Marks)