(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY AND BACHELOR OF SCIENCE IN BIORESOURCE CONSERVATION AND MANAGEMENT

COURSE CODE: **SBT 121**

COURSE TITLE: **CRYPTOGAMIC BOTANY**

DATE: FRIDAY 1st OCTOBER, 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 3 printed pages. Please Turn Over

QUESTION 1

a) Define cryptogams giving examples of plants in this group. (3 Marks)

b) State the Main feature of division:

i. Bryophyta
ii. Thallophyta
iii. Pteridophyta (3 Marks)

c) How does Algae differ from Riccia and Marchantia? (4 Marks)

d) Using diagrams only illustrate the life cycle of a moss plant (5 Marks)

e) Name the division that is called the 'amphibian of plant Kingdom' and state their ecological role (2 Marks)

f) Define the following (3 Marks)

vii. Gemmae
viii. Alternation of generation
ix. Asexual reproduction

g) Distinguish between the following

i. Gametophyte and sporophyte (3 Marks)
ii. Oospore and zygospore (3 Marks)

h) What is homologous Theory about evolution of Bryophtes (2 Marks)

i) State **Two** characteristics of bryopsida (2 Marks)

QUESTION 2

a) Describe the ecology and distribution of cryptogams (10 Marks)

b) Explain ways of managing a cryptogamic herbaria (10 Marks)

QUESTION 3

Explain systematics of cryptogams (20 Marks)

QUESTION 4

Explain the general morphology of ferns and its Life cycle (20 marks)

QUESTION 5

a) Describe sexual reproduction in pteridophytes (10 Marks)

b) Compare Bryopsida and Marchantiopsida. (10 Marks)