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(Knowledge for Development)

**KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2021 / 2022 ACADEMIC YEAR**

FIRST YEAR SECOND SEMESTER

MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY.

COURSE CODE: SBT 121

COURSE TITLE: CRYPTOGAMIC BOTANY

DATE: 9TH MAY 2021

TIME: 2.00 - 4.00 PM

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) Distinguish the following terms as used in this course
- i. Oogamy (1 Mark).
 - ii. Aplanospore (1 Mark).
 - iii. Akinete (1 Mark).
- b) Name the three classes of Bryophytes and give the distinguishing features of each (3 Marks).
- c) Explain the three forms of spores in *Chlorophyceae* (3 Marks).
- d) Explain parthenogenesis in cryptogams (3 Marks).
- e) What are the common characteristics between Bryophytes and Pteridophytes (3 Marks).
- f) Distinguish the three forms of ascocarps found in Fungi (3 Marks).
- g) Illustrate the vertical section of the thallus of *Riccia* and describe the distinct regions (3 Marks).
- h) Explain how Sphagnum leaf is adapted to its function (3 Marks).
- i) Outline the cross section of the stem and leaf of *Funaria* (3 Marks).
- j) Illustrate the typical lifecycle of a cryptogam (3 Marks).

QUESTION TWO

Describe reproduction in Lichens (20 Marks).

QUESTION THREE

Discuss the characteristics of the main groups in Fungi (20 Marks).

QUESTION FOUR

Write an essay on the structure of Bacillariophyceae (20 Marks).

QUESTION FIVE

Describe reproduction in the genus *Selaginella* (20 Marks).