



*(Knowledge for Development)*

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

**FIRST YEAR SECOND SEMESTER**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY.**

**COURSE CODE: SBT 121**  
**COURSE TITLE: CRYPTOGAMIC BOTANY**

**DATE: 25<sup>TH</sup> JULY 2022**      **TIME: 8.00 – 10.00 AM**

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**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 the following terms as used in this course (1 Mark).  
i. Isogamy (1 Mark).  
ii. Zoospore (1 Mark).  
iii. Heterothallic (1 Mark).  
iv. Pyrenoids
- b) Distinguish between *Selaginella* and *Pteridium*. In your opinion which of the two is more advanced (3 Marks).
- c) Using a diagram illustrate a *Sphagnum* leaf (3 Marks).
- d) Describe any four general characteristics of cryptogams (4 Marks).
- e) Describe the role of water in the liberation of antherozoids (3 Marks).
- f) Describe the stem of Pteridophytes and give in details the types of shoots that can be found on the stem (3 Marks).
- g) Briefly explain the classification and Nomenclature among the *Lichens* (3 Marks).
- h) With diagrams distinguish the two forms of rhizoids found in cryptogams (3 Marks).
- i) With illustrations; elucidate the growth forms of Lichens (4 Marks).

## QUESTION TWO

Describe the characteristics of the division Pteridophyta. (20 Marks).

## QUESTION THREE

Discuss the economic importance of Lichens (20 Marks).

## QUESTION FOUR

Write an essay on Hook and crozier method of Ascus formation in Ascomycetes (20 Marks).

## QUESTION FIVE

Write an essay on preparation of Cryptogamic herbaria specimens (20 Marks).