

BOT 210

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OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

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## UNIVERSITY EXAMINATIONS

### 2018 /2019 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE  
IN MICROBIOLOGY**

**COURSE CODE: BOT 210**

**COURSE TITLE: CRYPTOGAMIC BOTANY**

**DATE: 10<sup>TH</sup> DECEMBER, 2018**

**TIME: 2.00 PM – 5.00 PM**

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### INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**BOT 210**

**BOT 210: CRYPTOGAMIC BOTANY**

**STREAM: BSc in Microbiology**

**DURATION: 3 Hours**

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**INSTRUCTIONS TO CANDIDATES**

- i. Answer ALL questions from section A and any THREE from section B.*
  - ii. Diagrams should be used whenever they serve to illustrate the answer.*
  - iii. Do not write on the question paper.*
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**SECTION A (24 MARKS)**

**Question One**

- a) Define the following:-
  - i. Leucoplast. (1 Mark)
  - ii. Prophage (1 Mark)
  - iii. Cryptogam (1 Mark)
  - iv. Attenuated viral vaccine (1 Mark)
- b) Enumerate three types of leucoplasts in algae. (3 Marks)
- c) Compare and contrast two unique characteristics in a plant and animal cells. (2 Marks)
- d) Outline three features of bryophytes. (3 Marks)

**Question Two**

- a) Distinguish between homothallic thallus and heterothallic thallus. (2 Marks)
- b) Explain on the diversity of viral shapes. (6 Marks)
- c) State any four economic importance of fungi. (4 Marks)



**SECTION B (36 MARKS)**

**Question Three**

- a) Explain the diverse modes of nutrition in fungi. (6 Marks)
- b) Describe sexual reproduction in mosses. (6 Marks)

**Question Four**

- a) Describe the structure of mycelium in *Rhizopus stolonifer*. (6 Marks)
- b) Draw and label a moss plant. (6 Marks)

**Question Five**

- a) Give an account of the types of lifecycles in algae. (8 Marks)
- b) Outline two features of a viroid. (2 Marks)
- c) State the contributions of the following scientists in the field of botany.
  - i. Wendell Stanley (1 Mark)
  - ii. Beijerinck (1 Mark)

**Question Six**

- a) Give an account of three forms of symbiotic relationship between plants (6 Marks)
- b) Explain on the following terms:-
  - i. Anisogamy (2 Marks)
  - ii. Oogamy (2 Marks)
  - iii. Isogamy (2 Marks)

**Question Seven**

- a) Outline four similarities between sub-division Ascomycotina and Basidiomycotina. (4 Marks)
- b) Classify algae on the basis of photosynthetic pigments. (8 Marks)

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