

BOT 210



ALUPE UNIVERSITY
COLLEGE

... Bastion of Knowledge ...

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**OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH**

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: 10TH DECEMBER, 2018

TIME: 2.00 PM – 5.00 PM

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

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)

