

BOT 101E



**ALUPE UNIVERSITY**  
**COLLEGE**

*... Bastion of Knowledge...*

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OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

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## UNIVERSITY EXAMINATIONS

### 2018 /2019 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER REGULAR EXAMINATION

**FOR THE DEGREE OF BACHELOR OF  
EDUCATION (SCIENCE)**

**COURSE CODE: BOT 101E**

**COURSE TITLE: GENERAL BOTANY**

**DATE: 13<sup>TH</sup> DECEMBER, 2018**

**TIME: 9.00 AM – 12.00 PM**

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### INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**BOT 101E**

**BOT 101E: GENERAL BOTANY**

**STREAM: BED (SCIENCE)**

**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) Outline the roles of the following parts of a flower;
  - i. Anther (1 Mark)
  - ii. Sepal (1 Mark)
  - iii. Ovary (1 Mark)
  - iv. Petal (1 Mark)
- b) Name two meristems in plants (2 Marks)
- c) Describe the components of a lichen (4 Marks)
- d) Highlight two functions of roots in plants (2 Marks)

**Question two**

- a) Outline any three economic importance of algae (3 Marks)
- b) Describe the process of photosynthesis in plants (3 Marks)
- c) Highlight three characteristics that make bryophyta different from fungi (3 Marks)
- d) Describe the glycolysis process in plants. (3 Marks)

**SECTION B (36 MARKS)**

**Question three**

- a) Explain alternation of generation with respect to pteridophyta (8 Marks)
- b) Discuss the role of bacteria in soil fertility (4 Marks)

**BOT 101E**

**Question four**

- a). Compare and contrast monocots and dicots (6 Mark)
- b) Outline four general features of gymnosperms (4 Marks)
- c) Explain how the xylem vessel is adapted to its function (2 Marks)

**Question five**

- a) Explain how fungi obtain their food (3 Marks)
- b) Give an account of evolution reproductive structures in plants (5 Marks)
- c) Describe the habitat of algae (4 marks)

**Question six**

- a). Name the reproductive structures of ferns (2 Marks)
- b). Plants require carbon (IV) oxide during the day but take in oxygen during the night. Explain. (3 Marks)
- c) State the general characteristics of protozoa (7 Marks)

**Question seven**

- a). State four general characteristics division zygomycota of fungi (4 Marks)
- b). Compare and contrast the structure of wind and insect pollinated flowers (8 Marks)

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