

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
EDUCATION (SCIENCE)**

COURSE CODE: BOT 201E

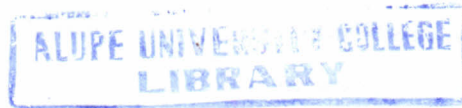
COURSE TITLE: FUNDAMENTALS OF ECOLOGY

DATE: 11TH 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 201E

BOT 201E: FUNDAMENTALS OF ECOLOGY

STREAM: BED (SCIENCE)

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) Differentiate the following terms;
 - i. Autecology and synecology (2 Marks)
 - ii. Parasitism and predation (2 Marks)
- b) Describe capture recapture method of estimating population. (4 Marks)
- c) Give an account of one type of ecological pyramid (1 Mark)
- d) Explain how light affects distribution of plants (3 Marks)

Question Two

- a) Define the following terms
 - i. Biome (1 Mark)
 - ii. Community (1 Mark)
 - iii. Biosphere (1 Mark)
- b) Two species cannot occupy one ecological niche. Explain (2 Marks)
- c) Give an account any two methods of human population growth control. (4 Marks)
- d) Explain how energy flows in an ecosystem (3 Marks)

SECTION B (36 MARKS)

Question Three

Discuss SIX biotic factors of an ecosystem (12 Marks)

Question Four

- a). Describe the process of succession from bare rock to climax community (8 Mark)
- b) Explain how human activities have caused ozone layer depletion (4 Marks)

Question Five

- a) Define the meaning of ecotone plant community (2 Marks)
- b) Discuss the features of ecotonal ecosystem (10 Marks)

Question Six

- a). Explain what is meant by carrying capacity of habitat (2 Marks)
- b). Explain how population carrying capacity is related to environmental resistance in an ecosystem (10 Marks)

Question Seven

- a). Describe how any three edaphic factors affect distribution of plants (6 Marks)
- b). Give an account of the carbon cycle (6 Marks)

