

OFFICE OF THE DEPUTY PRINCIPAL ACADEMICS, STUDENT AFFAIRS AND RESEARCH
UNIVERSITY EXAMINATIONS 2020 /2021 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER MAIN EXAMINATION

## FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

COURSE CODE: BOT 201 E COURSE TITLE:<br>FUNDAMENTALS OF ECOLOGY

DATE: $\quad 8^{\text {TH }}$ MARCH 2021
TIME: 2.00 P.M - 5.00 P.M
INSTRUCTIONS TO CANDIDATES

- SEE INSIDE


## REGULAR - MAIN EXAM

## BOT 201 E: FUNDAMENTALS OF ECOLOGY

STREAM: B. EDS

## 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.

## SECTION A (24 MARKS)

## Question One

a) Explain the following terms as used in ecology
i) Biotic community
(2 Marks)
ii) Niche (2 Marks)
iii) Exponential growth (2 Marks)
b). Explain ecological approach to Man-Environment Relationship.

## Question Two

a) Define community
b) Explain community concept as one of the most important ecological principles.
c) Explain the law of thermodynamics

## SECTION B (36 MARKS)

## Question Three

a. Define the law of tolerance and give an example from your area.
b. Discuss the factors that contribute to the rapid growth of human population? (8 Marks)

## BOT 201 E

## Question Four

Using a well labelled diagram, explain the nitrogen cycle

## Question Five

Explain the importance of studying ecology

## Question Six

Discuss four factors that affect population size

## Question Seven

Discuss the impact of unchecked human population growth.

