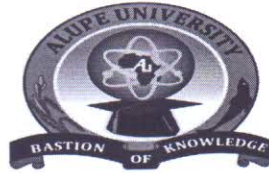


GEO 311E



**ALUPE UNIVERSITY**

**OFFICE OF THE DEPUTY VICE CHANCELLOR  
ACADEMICS, RESEARCH AND STUDENT AFFAIRS**

---

# **UNIVERSITY EXAMINATIONS**

## **2023/2024 ACADEMIC YEAR**

**THIRD YEAR FIRST SEMESTER REGULAR MAIN  
EXAMINATION**

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

**COURSE CODE: GEO 311E**

**COURSE TITLE: BIOGEOGRAPHY**

**DATE: 21<sup>ST</sup> DECEMBER, 2023**

**TIME: 9.00AM – 12.00PM**

### **INSTRUCTION TO CANDIDATES**

- **SEE INSIDE**

**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**GEO 311E: BIOGEOGRAPHY**

**STREAM: BED (Arts)**

**DURATION: 3 Hours**

---

**INSTRUCTIONS TO CANDIDATES**

- i. Answer Question **ONE** and any other **TWO** questions.*
- ii. Maps, sketches and diagrams should be used whenever they serve to illustrate the answer.*
- iii. Do not write on the question paper.*

**Question One**

a) Make brief notes on the following concepts as applied in Biogeography.

- |                                     |          |
|-------------------------------------|----------|
| i) Biosphere                        | (3Marks) |
| ii) Ecosystem                       | (3Marks) |
| iii) Competition                    | (3Marks) |
| iv) Environmental Impact Assessment | (3Marks) |

b) Explain ANY FOUR reasons why plants are central to understanding biogeography.

(8 Marks)

c) Describe FIVE thematic areas in biogeography

(10 Marks)

**Question Two**

a) Examine FIVE ways in which Xerophytes are adapted to their environment

(10 Marks)

b) Explain the role of fire in species diversity in grassland ecosystem

(10 Marks)

**Question Three**

- a) Highlight FIVE important concepts of succession (10 Marks)
- b) Discuss climatic factors responsible for distribution of plants and animals using relevant example for each. (10 Marks)

**Question Four**

- a) Examine the differences between;
- i) Pyramid of numbers and Pyramid of biomass (5 Marks)
- ii) Autotrophs and heterotrophs (5 Marks)
- b) There are various types of ecosystems in the world, discuss any two with reference to East Africa (10 Marks)

**Question Five**

- a) Explain FIVE causes of forest degradation in Kenya. (10 Marks)
- b) Suggest ways through which forest degradation in Kenya can be reversed (10Marks)

\*\*\*\*\*