

GEO 110



ALUPE UNIVERSITY

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

UNIVERSITY EXAMINATIONS

2023/2024 ACADEMIC YEAR

**FIRST YEAR FIRST SEMESTER REGULAR MAIN
EXAMINATION**

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

COURSE CODE: GEO 110

**COURSE TITLE: THE EARTH'S PHYSICAL
ENVIRONMENTS**

DATE: 20TH DECEMBER, 2023

TIME: 2.00pM – 5.00PM

INSTRUCTION TO CANDIDATES

- **SEE INSIDE**

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

GEO 110: THE EARTH'S PHYSICAL ENVIRONMENTS

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) Briefly discuss the concept of Earth-sun relations. (4 marks)
- (iii) Explain briefly characteristics of the following layers of atmosphere.
- Troposphere (4 Marks)
- Mesosphere (4 Marks)
- (b) (i) Describe the term physical environment? (2 marks)
- (ii) Discuss the History and Future of Physical Environment. (10 Marks)
- (c) Briefly describe the important future trends in physical environment studies and research. (6 Marks)

Question Two

- a) Highlight four major characteristics of rocks (4 Marks)
- b) Using a well labelled diagram, describe the formation of mechanically formed sedimentary rocks. (6 Marks)
- c) Explain three reasons why sedimentary rocks are widespread in the coastal plain of Kenya. (3 Marks)
- d) Using well labelled diagrams describe two major causes of crustal isostatic adjustments. (8 Marks)

Question Three

- a) Elucidate the role of **ANY TWO** of the following processes of the water cycle.
- i. Percolation (4 Marks)
 - ii. Evapotranspiration (4 Marks)

- iii. Surface runoff (4 Marks)
- iv. Infiltration (4 Marks)

b) Explain importance of hydrological cycle to human activities. (12 Marks)

Question Four

a) Describe the theory of continental drift theory citing the evidences that supports it. (12 Marks)

b) Explain how the following features of faulting process were formed

- (i) Horst Mountain (4 Marks)
- (ii) Rift valley (4 Marks)

Question Five

a) With an aid of well labeled diagram, describe world pressure and wind patterns. (10 Marks)

b) Explain the effects of world pressure and wind patterns to world climatic zones. (10 Marks)