

GEO 310



**ALUPE UNIVERSITY**

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

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# **UNIVERSITY EXAMINATIONS**

## **2023/2024 ACADEMIC YEAR**

**THIRD YEAR FIRST SEMESTER REGULAR MAIN  
EXAMINATION**

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

**COURSE CODE: GEO 310**

**COURSE TITLE: CLIMATOLOGY**

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

**TIME: 9.00AM – 12.00PM**

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### **INSTRUCTION TO CANDIDATES**

- SEE INSIDE

**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**GEO 310: CLIMATOLOGY**

**STREAM: BED (Arts)**

**DURATION: 3 Hours**

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**INSTRUCTIONS TO CANDIDATES**

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

**Question One**

- a) Explain the following terms as used in climatology:
  - i. Climate variability (2 Marks)
  - ii. Dynamic climatology (2 Marks)
  - iii. Climate vulnerability (2 Marks)
  - iv. Mitigation (2 Marks)
- b) Outline how climatology relies on meteorology. (4 Marks)
- c) Highlight THREE incidences that point to global warming in Africa. (6 Marks)
- d) According to Kenya Climate Change Working Group adaptation is key in dealing with climate change and variability in Kenya. Discuss appropriate strategies which the country can adopt toward adaptation. (12 Marks)

**Question Two**

- a) Explain how the following factors affect temperature:
  - (i) Cloud cover (3 Marks)
  - (ii) Characteristics of the surface (3 Marks)
  - (iii) Latitude (3 Marks)
  - (iv) Continentality (3 Marks)
- b) Describe any FOUR forms of precipitation. (8 Marks)