



GRETSA UNIVERSITY - THIKA

UNIVERSITY EXAMINATIONS SEPTEMBER - DECEMBER 2021 SEMESTER

BACHELOR OF EDUCATION (ARTS)

COURSE CODE: GEOG 303

COURSE TITLE: CLIMATOLOGY

DATE: 17 NOVEMBER 2021

TIME: 11.30 AM - 2.30 PM

INSTRUCTIONS TO CANDIDATES

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

CAUTION: *All exam rooms are under CCTV surveillance during the examination period.*

SECTION A: COMPULSORY

Question One

- a) Examine the advancement and application of climatology in geography [10 Marks]
- b) Explain the location and characteristics of cold climates of the world [10 Marks]
- c) Discuss the devastating effects of aridity and desertification on physical and human environment [10 Marks]
- d) State five characteristics of modified Equatorial climate of the lake region of Kenya and explain how Lake Victoria has modified the climate of the surrounding areas. [10 Marks]

SECTION B: ANSWER ANY THREE QUESTIONS

Question Two

- a) State and explain the formation and characteristics of three forms of precipitation localized in Kenya [10 Marks]
- b) Discuss the effects of pollution on urban environment in the world [10 Marks]

Question Three

- a) Describe the external and internal factors that contribute to global climate change [10 Marks]
- b) Explain how altitude, aspect and configuration of the coast influence climate of Kenya [10 Marks]

Question Four

- a) Using a well labelled diagram explain the main layers of the atmosphere citing the major characteristics. [10 Marks]
- b) Citing the causes of global warming, discuss the measures taken by the Kenyan government to reduce and control global warming [10 Marks]

Question Five

- a) Examine the reasons why most of the Tropical deserts are located on the western side of the continents. [10 Marks]
- b) State four human activities that cause climate change and explain its effects on environment [10 Marks]