



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

SEPTEMBER –DECEMBER 2021

FACULTY OF ARTS AND SOCIAL SCIENCES

DEPARTMENT OF HUMANITIES (GEOGRAPHY)

REGULAR PROGRAMME

GEO 310: ATMOSPHERE AND SOIL SYSTEMS

Date: DECEMBER 2021

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any TWO Questions

Q1.

- a. Define the following terms
 - i. climate (2marks)
 - ii. global cooling (2marks)
 - iii. climate indices (2marks)
 - iv. soil texture (2marks)
 - v. vegetation climax (2marks)
- b. Explain any 5 importance of carbon dioxide in the atmosphere (5marks)
- c. Illustrate the thermal layers and describe their characteristics (10marks)
- d. Explain how the prevailing winds affect the climate of a region (5marks)

Q2. Expound on the three indices of climate classification (20marks)

Q3.

- a. Explain the types of ecological succession (10marks)
- b. Explain the concept of the Biosphere (10marks)

Q4.

- a. Elaborate on the factors that influence soil formation? **(10marks)**
- b. Expound on vegetation classification in the world **(10marks)**

Q5.

- a. Expound on the factors affecting soil development **(10marks)**
- b. Describe the passage of shortwave radiation from the sun to the earth's surface **(10marks)**

DTE DEC 2021

END