CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION ARTS

GEOG 313: CLIMATOLOGY

STREAMS: BED (ARTS) Y3S2 TIME: 2 HOURS DAY/DATE: FRIDAY 09/7/2021 11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

- Answer question ONE (Compulsory) and any other TWO questions
- Use illustrations wherever appropriate
- 1. (a) Describe the various spatial and temporal scales of studying climatology [10 marks] (b) Compare and contrast the notion of weather and climate [6 marks] (c) Discuss four layers of the atmosphere based on temperature and illustrate them [12 marks] Explain why the science of climatology is considered holistic (d) [2 marks] 2. Examine various factors influencing the nature and the prevailing climate in a given region [20 marks] Describe THREE major approaches of classifying climate systems [6 marks] (a)
- 3.
 - (b) Examine FOUR contemporary applications of climatology [14 marks]
- Examine the processes by which energy is transferred between the atmosphere 4. (a) and Earth's surface [6 marks]
 - (b) Discuss the hydrological cycle and show its relation to climate [14 marks]
- 5. Describe four elements of weather and show how they are measured [10 marks] (a)
 - (b) Examine four sub components of climatology [10 marks]