

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS IN
GEOGRAPHY AND BACHELOR OF EDUCATION ARTS**

GEOG 313: CLIMATOLOGY

STREAMS: BA GEOGRAPHY & BED ARTS

TIME: 2 HOURS

DAY/DATE: TUESDAY 04/12/2018

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

- **Answer question ONE and ANY OTHER TWO questions. Maps, sketches and diagrams should be used whenever they serve to illustrate an answer.**

1. (i) Differentiate between
 - (a) Climatology and Meteorology (4 marks)
 - (b) Regional climatology and applied climatology (4 marks)
 - (c) Climate variability and climate change (4 marks)
 - (ii) Identify three ways in which Planet Earth is different from the others. (6 marks)
 - (iii) With the aid of a diagram, describe the various layers of the atmosphere. (12 marks)
2. (a) What is “climate index” (2 marks)
 - (b) Identify the four parameters for defining climate and their various indices. (16 marks)
 - (c) What is “Climate Base Period” and what is its significance in climate studies? (2 marks)
3. (a) What is climate change? (2 marks)
 - (b) Describe any five climate hazards associated with climate change. (18 marks)

4. Discuss the various applications of weather forecasting. (20 marks)
5. (a) With reference to the Koppen's Climate Classification system, describe the characteristics of dry climates. (10 marks)
- (b) Identify the anthropogenic causes of climate change. (10 marks)
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