

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE  
OF BACHELOR OF EDUCATION ARTS

GEOG 440: ARID AND SEMI-ARID LANDS MANAGEMENT

STREAMS: BED (ARTS)

TIME: 2 HOURS

DAY/DATE: MONDAY 09/12/2019

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

- Answer question ONE and any other TWO questions
- Sketch maps and diagrams should be used whenever they serve to illustrate an answer

1. (a) Write short essays on the following [8 marks]
- (i) Potential evapotranspiration [2 marks]
  - (ii) Aridity [2 marks]
  - (iii) Sahel [2 marks]
  - (iv) Precipitation [2 marks]
- (b) What is Aridity Index and how is it determined [4 marks]
- (c) Briefly discuss the causes of aridity [6 marks]
- (d) Discuss the classification of arid and semi-arid areas on the basis of the Aridity Index [12 marks]

marks]

2. (a) Temperature and Precipitation are the key factors influencing arid climates. With the aid of diagrams, describe the three rainfall patterns that distinguish the various arid climate zones. [12 marks]

marks]

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- (b) Besides temperature and precipitation, what other factors influence aridity?

[8

marks]

3. (a) Explain the various classifications of arid vegetation [12 marks]  
(b) Describe the characteristics of arid vegetation that make them specifically adapted to the arid climate [8 marks]
4. Assess the potential of Arid and Semi-Arid Lands (ASALs) in Kenya for development and contribution to the national economy. [20 marks]
5. Discuss the challenges facing arid and semiarid areas globally and suggest possible measures for sustainable ASAL management in Kenya. [20 marks]

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