

CHUKA

UNIVERSITY



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN NATURAL RESOURCES MANAGEMENT AND BACHELOR OF  
SCIENCE IN ENVIRONMENTAL SCIENCE**

**ENSC 224: ENVIRONMENTAL GEOLOGY**

**STREAMS: BSC. NARE (Y2S1), ENSC (Y2S1)**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 09/04/2024**

**11.30 A.M. – 1.30 P.M.**

**INSTRUCTIONS**

- **Attempt all questions in section A and any two in section B**
- **Do not write anything on the question paper**

**SECTION A (30 Marks)**

1. Explain the meaning of the following terms;
  - i) Environmental geology (2 marks)
  - ii) Land use planning (2 marks)
  - iii) Environmental utility (2 marks)
  - iv) The principle of faunal succession (2 marks)
2. Illustrate with well labelled diagram the structure and composition of the internal structure of the earth. (6 marks)
3. Briefly explain the importance of geology in site evaluation for constructing a landfill. (4 marks)
4. Briefly describe two principles of rock formation and state their relevance in geology. (6 marks)
5. Giving examples, briefly discuss the economic importance of minerals in Kenya. (3 marks)

6. State three factors that exacerbate natural hazards causing disaster. (3 marks)

**SECTION B (40 MARKS)**

7. Using examples, discuss the formation of the three different types of rocks. (20 marks)

8. Discuss in detail the five fundamentals concepts of environmental geology. (20 marks)

9. a) Discuss the theory of the plate tectonics, the forces of plate tectonics and its significance in environmental geology. (12 marks)

- b) Discuss in detail the benefits and impacts of hazards attributed to volcanism and prevention measures. (8 marks)

.....