

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD OF
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE**

ENSC 224: ENVIRONMENTAL GEOLOGY

STREAMS: BSC (ENSC) Y2S2

TIME: 2 HOURS

DAY/DATE: TUESDAY 6 /07/ 2021

8.30 AM – 10.30 AM

INSTRUCTIONS:

- Answer ALL Questions in SECTION A and ANY TWO in SECTION B
- Do not write anything on the question paper

SECTION A: (30 MARKS)

- Q1. Define the following terms as used in geology
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|--------------------|-----------|
| a) polymorphs | [2 Marks] |
| b) Amphibole group | [2 Marks] |
| c) Diagenesis | [2 Marks] |
- Q2. Describe the formation of Pumice a rock and indicate one of its applications.[4 Marks]
- Q3. Explain the use of sedimentary rocks as indicators of climate change. [5 Marks]
- Q4. Describe radon gas as an indoor air pollutant. [5 Marks]
- Q5. Discuss environmental factors to consider when designing a waste disposal site. [5 Marks]
- Q6. Briefly discuss prograde and retrograde reaction processes. [5 Marks]

SECTION B (40 MARKS)

- Q7. (a) Briefly discuss any five natural geological hazard can be prevented. [10 Marks]
- (b) Using examples, discuss how losses due to geological hazard can be prevented. [10 Marks]
- Q8. (a) Discuss various properties of minerals. [10 Marks]
- (b) Using an appropriate diagram, explain the difference between extrusive and intrusive igneous rock formation and give an example for an each. [10 Marks]
- Q9. Describe the physical form, mineralogy and genesis of kimberlite rocks. [20 Marks]
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