

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

NARE 213: PRINCIPLES OF MINERAL RESOURCES MANAGEMENT

STREAMS: NARE

TIME: 2 HOURS

DAY/DATE: MONDAY 20/04/2020

8.30 A.M - 10.30 A.M.

INSTRUCTIONS:

- Answer ALL Questions in Section A and any Two questions in Section B
- Do not write anything on the question paper.

SECTION A 30 MARKS

- Q.1. Define the following term as used in mineralogy
- (a) Mineral [2 Marks]
 - (b) Bonds [2 Marks]
 - (c) Crystal morphology [2 Marks]
- Q.2. Explain various criteria used to define a mineral. [5 Marks]
- Q.3. Define the property of streak in minerals contrast its use in mineral identification with colour. [6 Marks]
- Q.4. Explain three components of ore genesis. [6 Marks]
- Q.5. Explain using examples how minerals are named. [4 Marks]
- Q.6. List various symmetry operations in mineral. [3 Marks]

SECTION B 40 MARKS

Q.7. (a) Discuss the general environments where rocks and minerals ores are formed or are modified. [10 Marks]

(b) Describe various properties of minerals. [10 Marks]

Q.8. (a) List the Moh's scale of hardness. [10 Marks]

(b) Discuss three principle bonds types as used in mineralogy [10 Marks]

Q.9. Discuss using examples, the contribution of mineral resources in the Kenyan economy. [20 Marks]

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