



**ELIZADE UNIVERSITY,
ILARA-MOKIN, NIGERIA**

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION

2018/2019 ACADEMIC SESSION

COURSE CODE: EMT 309

COURSE TITLE: ENVIRONMENTAL GEOSCIENCE I

DURATION: 2 HOURS

HOD's SIGNATURE

NAME:.....

MAT. No:.....

INSTRUCTION: ANSWER FOUR QUESTIONS IN ALL

1a. Explain the planetary system and the different spheres

b. Give reasons why the earth planet is more important than the other planets

2. Describe the type of rock formed from

(i) Quartz, feldspar and mica

(ii) Limestone

(iii) Mud and clay

3a. Describe the kind of weathering that granite undergo to form clay mineral (kaolin) in the presence of water.

b. List the classification of mineral resources in our environment

4. (i) Describe four (4) major groups of hazards that a miner may be exposed to during the sub-surface mining of natural resources in a developing economy

(ii) In the United States, the Fifty (50) State surveys are coordinated by the Association of American State Geologists. Fortunately you are chosen to be one of the cohorts of geologist for the State surveys. Clearly list five (5) field behaviors while carrying out Geological mappings during the State surveys. (iii) Highlight five (5) field equipment for geological mapping techniques and their uses.

5. (i) Children vary in their abilities to recognize sweetness. Some children are twenty times better at detecting sugar than others, and that this may be partly genetically determined. For these children, some of them may use more toothpastes than the recommended amount on their toothbrushes. Discuss the **effects** of consuming excess toothpastes on such children's teeth.

(ii) Explain two major sources of arsenic exposures.

(iii) How can iodine deficiency be eradicated in Nigeria as a developing nation?

6. (i) Clinical signs associated with Selenium (Se) deficiency remain unrecognized. However, explain symptoms to look for in affected animals. How do you ameliorate the effects since Se usually competes with sulfur in biochemical pathways?

(ii) Describe two (2) major degrees of trace elements toxicity in the man.