**CHUKA** 



## UNIVERSITY

#### UNIVERSITY EXAMINATIONS

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

**ENSC 224: ENVIRONMENTAL GEOLOGY** 

STREAMS: ENSCI Y2S1 TIME: 2 HOURS

DAY/DATE: FRIDAY 06/12/2019 11.30 A.M. – 1.30 P.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)**

- Q1. (a) Name three types of sedimentary rocks. (3 marks)
  (b) Define three types of weathering. (6 marks)
- Q2. Describe the formation of Pumice rock and mention one of its applications. (3 marks)
- Q3. Explain the use of sedimentary rocks as indicators of climate change. (5 marks)
- Q4. Discuss the radon gas as indoor air pollutants. (3 marks)
- Q5. Discuss environmental factors to consider when designing a waste disposal site.

  (5 marks)
- Q6. Discuss plate tectonic theory in relation to biodiversity conservation in Madagascar. (6 marks)

### **SECTION B (40 MARKS)**

- Q7. (a) Briefly discuss any five natural geological hazards. (10 marks)
  - (b) Giving examples, discuss how losses due to geological hazard can be prevented.

Q8. (a) Discuss various properties of minerals. (10 marks) (10 marks)

- (b) Using an appropriate diagram, explain the difference between extrusive and intrusive igneous rock formation and give an example for each. (10 marks)
- Q9. Explain the formation of the coal and indicate its environmental impacts. (10 marks)
- Q10. Kenya has discovered oil deposits in Turkana County. As an Environmental, Health and Safety Officer, discuss how you will advise the county government on the petrochemical exploration safety using an environmental management plan. (10 marks)