



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2018/2019 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER

**SCHOOL OF TOURISM & NATURAL RESOURCES
MANAGEMENT**

BACHEOR OF SCIENCE IN ENVIRONMENT STUDIES

COURSE CODE: ENS 2101

**COURSE TITLE: EARTH MATERIALS, PHYSICAL
PROCESSES AND THE ENVIRONMENT**

DATE: 11TH DEC 2018

TIME: 0230-0430

INSTRUCTIONS TO CANDIDATES

Answer question **ONE** and any other **TWO** questions. Use of simple scientific calculators is allowed. . Use illustrations where appropriate.

This paper consists of 2 printed pages. Please turn over

SECTION A (ANSWER ALL QUESTIONS)

Q1

- a. What the main characteristics of physical processes? **(2 marks)**
- b. Describe how contact metamorphism occurs. **(1 mark)**
- c. Give one examples of silicates and explain its usefulness. **(2 marks)**
- d. Give two reasons why it was easier for scientists to accept the plate tectonics theory as compared to the continental drift hypothesis **(4 marks)**
- e. Explain the meaning of the terms 'Parent' 'Stable daughter' and 'half-life' as used in the table below. **(6 marks)**

PARENT	STABLE DAUGHTER	HALF-LIFE
Rubidium- 87	Strantonium-87	47 Billion
Thorium-232	Lead-208	14.1 Billion
Uranium-235	Lead-207	713 Billion
Potassium-40	Argon-40	1.3 Billion

- f. Explain five the issues that one should consider when selecting any one of the common geophysical investigation methods. **(10 marks)**

[Total 25 marks]

SECTION B (ANSWER ANY THREE)

Q2) Describe environmental impacts of any six of the following geological hazards;

- a. Ground subsidence
- b. Tsunamis
- c. Mudflows
- d. Volcanic eruptions
- e. Landslides
- f. Sand-dune migration
- g. Mass wasting
- h. Earth quakes
- i. Rock falls
- j. Acid rain
- k. Floods
- l. Snow avalanches

(15 marks)

Q3 With the aid of five local examples explain effects of chemical weathering at the earth's surface. **(15 marks)**

Q4 "Fossils have documented the evolution of life in Earth's history. They are good time indicators". Discuss this statement. **(15 marks)**

Q5 Discuss the factors that could lead to isostatic adjustments at the Earth's surface. **(15 marks)**

Q6) Explain five strategies that could be used to contribute towards better household water conservation in the farming areas. **(15 marks)**

.....END.....