

## ELIZADE UNIVERSITY FACULTY OF BASIC AND APPLIED SCIENCES

DEPARTMENT: PHYSICAL AND CHEMICAL SCIENCES

PROGRAMME: APPLIED GEOPHYSICS EXAM TITLE: DEGREE EXAMINATION

COURSE CODE & TITLE: AGY 201 - PHYSICAL GEOLOGY

TIME ALLOWED: 2 hrs

SEMESTER/SESSION: FIRST / 2020/2021

INSTRUCTIONS: Write your matriculation number on the cover page

HOD's SIGNATURE

of the exam booklet.

ANSWER QUESTION ONE (1) AND THREE (3) OTHER QUESTIONS IN ALL.

- 1. Discuss magma production at subduction zone and list the three factors that contribute to melting of the asthenosphere.
- Describe the mineralogy, texture, and common geologic occurrence of the following types of igneous rocks:
  - (a) Granite (b) Rhyolite (c) Basalt (d) Gabbro (e) Andesite
- 3. (a) Draw a cross-sectional view of the earth.
  - (b) Describe the physical properties of each of the earth's layers.
- 4. (a) Explain the differences between mechanical weathering and chemical weathering.
  - (b) Explain how thermal expansion can establish forces that could fracture a rock.
- 5. (a) Enumerate the earth resources that are of economic value.
  - (b) Describe the differences between non-renewable and renewable resources.
- 6. (a) What is a geologic structure? What are the three main types of structures?
  - (b) Draw a cross-sectional sketch of an anticline—syncline pair and label the parts of the folds.