



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

(Main Campus)

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

EXAMINATION

SECOND YEAR, SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE OF

BACHELOR OF SCIENCE IN CIVIL AND STRUCTURAL ENGINEERING

COURSE CODE: CSE 226

COURSE TITLE: ENGINEERING GEOLOGY

DATE: MONDAY 25TH APRIL 2022 TIME: 3.00 – 5.00 PM

Instructions to Candidates

1. This paper contains FOUR (4) questions
2. Answer ALL questions in Section A and ANY TWO in Section B
3. Exam Duration is **2 hours**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over →

CSE 226 ENGINEERING GEOLOGY

SECTION A: Answer ALL questions [30 Marks]**Question ONE**

- a) Describe earth's structure characteristics [5 Marks]
- b) Briefly discuss the importance of the earth's mantle as it relates to engineering Geology [5 Marks]
- c) Differentiate between the following processes in relation to engineering geology:
- i) Faulting and folding [4 Marks]
 - ii) Deposition and aggradation [4 Marks]
 - iii) Weathering and denudation [4 Marks]
- d) List FIVE characteristics of igneous rocks [5 Marks]
- e) Describe the products of Geomorphic processes [3 Marks]

SECTION B: Answer ANY THREE questions [40 Marks]**Question TWO**

- a) With an aid of a diagram describe geomorphic processes [12 Marks]
- b) Discuss the importance of engineering Geology in civil engineering [8 Marks]

Question THREE

- a) Discuss characteristics of earthquake [10 marks]
- b) Briefly discuss Seismic refraction method as one of Geophysical investigation methods [10 Marks]

Question FOUR

Discuss how you can take care of landslide hazards on a site where you are charged with responsibility of designing of storey buildings [20 Marks]

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