



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
(MMUST)
MAIN CAMPUS
UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN DISASTER MITIGATION AND
SUSTAINABLE DEVELOPMENT (DMSD)**

COURSE CODE: DSM102

COURSE TITLE: EARTH HISTORY AND EVOLUTION

DATE: 27/4/2023

TIME: 12-2 PM

INSTRUCTIONS TO CANDIDATES

This paper contains **FOUR** Questions

Answer Question **ONE** and any other **TWO** Questions

TIME: 2 Hours

MMUST observes **ZERO** tolerance to examination cheating

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

Question ONE

- (a) Distinguish between the following geophysical processes:
- (i) Weathering and mass wasting **(5 Marks)**
 - (ii) Aggradation and gradation **(5 Marks)**
 - (iii) Mountain or valley glacier and continental ice sheets **(5 Marks)**
- (b) Using relevant examples, explain the genetic and fossil evidences for evolution of life on earth. **(15 Marks)**

Question TWO

- (a) Describe the continental drift theory as propounded by Alfred Wegener in 1912. **(5 Marks)**
- (b) Discuss the three forms of tectonic movements along plate boundaries and outline the resulting landforms associated with each of them. **(15 Marks)**

Question THREE

- (a) Evolution of life on earth is a gradual process that occurs over a long period of time captured on the geologic time scale, examine the various eras of the geologic time scale and explain the role of disasters in these processes. **(15 Marks)**
- (b) Explain the characteristics of the Holocene environments in the geological time scale. **(5 Marks)**

Question FOUR

- (a) Briefly describe the morphology of the earth. **(8 Marks)**
- (b) Discuss the causes of glacial and interglacial periods over the earth. **(12 Marks)**