



MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

(Main Campus)

UNIVERSITY EXAMINATIONS

2022/2023 ACADEMIC YEAR

Examination

FIRST YEAR SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE OF

**BACHELOR OF SCIENCE IN DISASTER PREPAREDNESS & ENVIRONMENTAL
TECHNOLOGY**

COURSE CODE: DPE 102

COURSE TITLE: MAN AND ENVIRONMENT

DATE: 11/4/2023

TIME: 12-2 PM

Instructions to Candidates

- This paper contains FOUR (4) questions
- Question **one is compulsory** {total =30 Marks}
- Attempt **any other two (2)** {total = 40 Marks} from the remaining questions
- Be brief and to the point

MMUST observes ZERO tolerance to examination cheating

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

SECTION 1: COMPULSORY {30 MARKS}

Question ONE

- a) Using the Venn diagram model, illustrate the interactions of the spheres of the Earth **(10 Marks)**
- b) Discuss the Benefits of Optimizing Environmental Health **(10 Marks)**
- c) Explain how depletion of the ozone layer is necessitated **(10 Marks)**

SECTION II: ATTEMPT ANY OTHER TWO (2) QUESTIONS {40 MARKS}

Question TWO

Explore the key environmental factors that affect health within the spheres **(20 Marks)**

Question THREE

Discuss in detail the Biotic and Abiotic components of an ecosystem, relating to the environment.

(20 Marks)

Question FOUR

Nitrogen is an important component of many biomolecules, like proteins and nucleic acids (DNA and RNA). It must be converted into nitrates to be utilized by plants. Elaborate several stages through which this can be achieved within the environment **(20 Marks)**