



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

UNIVERSITY EXAMINATIONS 2023/2024 ACADEMIC YEAR FOURTH YEAR FIRST SEMESTER EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF EDUCATION **MAIN EXAM**

COURSE CODE: ESM 410

COURSE TITLE: ENVIRONMENTAL EDUCATION

DATE: 14/12/2023

TIME: 8:00-10:00 AM

INSTRUCTIONS TO CANDIDATES

Question 1 is Compulsory and carries 25 marks. Answer ANY OTHER three Questions each carrying 15 marks

MMUST observes ZERO tolerance to examination cheating

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

OUESTION ONE (25 MARKS)

a) What is "Environmental Education"

(2 marks)

b) With suitable examples, justify why the earth is habitable.

(6 marks)

- c) Design a food chain and describe the relationships among the organisms involved. (7 marks)
- d) With suitable diagrams, illustrate how the following approaches may be applied in Environmental Education curriculum development:

i) Multi-disciplinary approach

(5 marks)

ii) Interdisciplinary approach

(5 marks)

QUESTION TWO (15 MARKS)

The type of development embraced by a country can cause problems that destroy the environment and lower the quality of life. In view of this statement, discuss any **FIVE** effects of human activities on the natural balance giving appropriate examples in each case (15 marks)

QUESTION THREE (15 MARKS)

Community Learning Service (CLS) has been mainstreamed in the Basic Education Framework Curriculum in Kenya to allow for integration of curriculum activities in the community. Demonstrate how you may plan and execute such learning activities in your area of specialization. (15 marks)

OUESTION FOUR (15 MARKS)

Conservation does not mean lack of economic growth. It suggests growth within limits set by the ability of the environmental capital to regenerate itself. Discuss this statement in the light of National Environmental Management Authority's (NEMA) mandate to regulate sustainable development in Kenya. (15 marks)

QUESTION FIVE (15 MARKS)

El Nino rains are about to begin in October, 2023, its damage is eminent and inevitable. You are a senior officer in the Kenya Metrological department. You are tasked to give a public notice on the effects of such rainfall. Generate the information that may be relayed to guide the public on the following:

- i) Possible effect of the rains (5 marks)
- ii) El Nino effect prone areas in Kenya (5 marks)
- iii) Possible mitigation measures to address the effects (5 marks)