



(University of choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER

SUPPLEMENTARY/SPECIAL EXAMINATIONS

FOR THE DEGREE

OF

**BACHELOR OF SCIENCE IN DASTER MITIGATION AND
SUSTAINABLE DEVELOPEMENT**

COURSE CODE: DSM 303

COURSE TITLE: APPROPRIATE DEVELOPMENT AND SUSTAINABILITY

DATE: Friday, 29th July 2022

TIME: 11 am – 1 pm

INSTRUCTIONS TO CANDIDATES

- 1) This paper contains **FOUR** Questions
- 2) Answer question **ONE** and any **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) Define the following terms:
 - i. Sustainability (2 marks)
 - ii. Environmental sustainability (2 marks)
 - iii. Social Sustainability (2 marks)
 - iv. Economic sustainability (2 marks)
 - v. Explain the term 'carrying capacity'. (3 marks)
- b) Using a suitable diagram, explain the main elements of sustainability. (7 marks)
- c) Outline factors that would limit growth of a population. (7 marks)
- d) What is the importance of the environment to human development. (5 marks)

Question TWO

- a) Discuss briefly the significance of the environment to the objectives of Kenya's Vision 2030. (6 marks)
- b) What are the causes of un-sustainability of the environment. (4 marks)
- c) Discuss the main environmental problems associated with modern agriculture. (10 marks)

Question THREE

- a) Define the term pollution. (4 marks)
- b) Explain the major sources of water pollution. (6 marks)
- c) Account for the harmful effects of water pollution. (6 Marks)
- d) Suggest measures used to control water pollution in Nairobi City. (4 marks).

Question FOUR

- a) Define the term land degradation. (3 marks)
- b) Discuss the major causes of land degradation in Kenya. (10 marks)
- c) Suggest measures to improve degraded land of Mt Elgon forest. (7 marks)