

7/20



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN EXAMINATION

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

FOURTH YEAR FIRST SEMESTER EXAMINATIONS

**BACHELOR OF SCIENCE IN ECONOMICS & BSC MATHEMATICS
AND ECONOMICS**

COURSE CODE: ECO 407

COURSE TITLE: ENVIRONMENTAL ECONOMICS

DATE: WEDNESDAY-14-12-2022 TIME: 12:00 -14:00

INSTRUCTIONS TO CANDIDATES

ATTEMPT QUESTION **ONE** AND ANY OTHER **TWO**

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

QUESTION ONE

- a. Explain using a clear diagram, how the use of subsidies can promote the environmental value of resources as a public good. (10 marks)
- b. Describe, using practical examples, the application of the following concepts in environmental management within a developing economy:
 - i. Carbon financing
 - ii. Green economy
 - iii. Intergenerational equity
 - iv. Trans-boundary conservation (20 marks)

QUESTION TWO

Describe the impact of climate change on a developing economy and suggest appropriate policy measures to combat the persistent problem of drought in Sub-Saharan Africa (20 marks)

QUESTION THREE

As an Environmental Policy Officer, describe the various legal and market options available to combat air pollution from a local cement plant, highlighting their relative strengths and limitations. (20marks)

QUESTION FOUR

- a. Discuss the various state and private interventions that can be used to promote mangrove forest conservation in Kenya. (10 marks)
- b. As an Environmental Policy Officer, identify the various emerging technologies in environmental management and explain how they used to enhance forest and wildlife conservation efforts within your County (10 marks)

QUESTION FIVE

- a. The local Department of Environment is appraising a proposed irrigation project. Describe the various environmental impact evaluation tools that can be used, by highlighting their relative strengths and limitations. (10 marks)
- b. Explain how trans-boundary resource conflicts can be resolved using domestic and international interventions. (10 marks)