



(University of Choice)

# MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

# UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR

MAIN EXAMINATIONS

# FOR MSC DEVELOPMENT STUDIES

COURSE CODE: MDS 809

COURSE TITLE: ENVIRONMENTAL SUSTAINABILITY AND

NATURAL RESOURCE MANAGEMENT

**DATE:** TUESDAY 13/12/2022 **TIME:** 9:00-12:00

#### INSTRUCTIONS TO CANDIDATES

ATTEMPT QUESTION ONE AND ANY OTHER THREE

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

#### **QUESTION ONE**

- a) Describe the historical evolution and emerging transitions of sustainable development (10 marks)
- b) Justify the essence of resource and environmental management in a transitioning economy. (10 marks)
- c) Mention using relevant examples the need for inclusiveness among the various excluded groups in developing an equitable food security policy. (10 marks)
- d) Critically assess the Malthusian population growth theory as a foundation of sustainable development in the context of a transitioning economy. (10 marks)

### **QUESTION TWO**

Developing nations are exposed to the brunt of global climate change hazards, constraining national development. Describe the socio-economic impacts of climate change and discuss the various international and domestic mechanisms that can be adopted to mitigate them. (20 marks)

#### **QUESTION THREE**

Development partnerships are crucial for environmental and resource conservation in Kenya. Identify the crucial international and domestic development partners and stakeholders, explaining their role in achieving national conservation targets. (20 marks)

#### **QUESTION FOUR**

The County is planning for an extensive wind farm to enhance renewable power supply. As a County Environmental Officer, prepare a socio-environmental impact matrix to identify the potential adverse impacts and suggest the various actions that can be used to mitigate them. (20 marks)

## **QUESTION FIVE**

As a Planning Officer, describe the emerging constraints that developing countries face in achieving targeted Sustainable Development Goals by 2030. Suggest appropriate mechanisms and financial interventions that can be used to overcome the constraints. (20 marks)

#### **QUESTION SIX**

Discuss the following emerging dimensions in natural resource management and conservation:

- a. Transboundary resource conflicts and mediation
- b. Command and control conservation policies
- c. Emerging technologies in resource monitoring and evaluation (20 marks)