



# **MACHAKOS UNIVERSITY**

**University Examinations for 2023/2024 Academic Year**

**SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES**

**DEPARTMENT OF ENVIRONMENTAL SCIENCES**

**FIRST YEAR, FIRST SEMESTER EXAMINATION FOR BACHELOR OF  
ENVIRONMENTAL SCIENCE**

**ERC 110: INTRODUCTION TO NATURAL RESOURCE MANAGEMENT**

**DATE:**

**TIME:**

---

**Instructions: Answer question ONE and any other TWO questions**

**QUESTION ONE**

- a) Giving examples, differentiate between the following concepts:
  - i. Renewable and Non-renewable natural resources (4 Marks)
  - ii. Biotic and Abiotic natural resources (4 Marks)
  - iii. Conservation and Preservation (4 Marks)
- b) “Resources are not, they become”. Critically justify this statement (6 Marks)
- c) Discuss the impacts of human activities on natural resources (12 Marks)

**QUESTION TWO**

- a) Explain the significance of natural resources in sustainable development (10 Marks)
- b) Describe any five key ecological principles of sustainability of natural resources (10 Marks)

**QUESTION THREE**

Discuss the application of any five principles of natural resources management in Kenya (20 Marks)

**QUESTION FOUR**

Examine two approaches to natural resource management and discuss their application in forest resource management in Kenya (20 Marks)

**QUESTION FIVE**

- a) Discuss the significance of natural resource management laws (10 Marks)
- b) Discuss the challenges in implementation of natural resource laws in Kenya (10 Marks)

