



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MGT
UNIVERSITY EXAMINATION FOR DIPLOMA IN LAND SURVEY

2nd Year 1st SEMESTER 2024/2025 ACADEMIC YEAR
MAIN REGULAR

COURSE CODE: PDS 2215

COURSE TITLE: ENVIRONMENTAL ECONOMICS 1

EXAM VENUE: LAB 10

STREAM: (DIPLOMA IN ENV. SCIENCE)

DATE:

TIME: 2 HOURS

Instructions:

- i. Attempt Question **ONE (COMPULSORY)** and any other **THREE** questions.
- ii. Candidates are advised not to write on the question paper.
- iii. Candidates must hand in their answer booklets to the invigilator while in the examination room.

QUESTION ONE (40 MARKS)

a) Define the following terms

- i) Economics (2 Marks)
- ii) Environment (2 Marks)
- iii) Resource (2 Marks)
- iv) Resource management (2 Marks)

b) Distinguish between scarcity and choice as applied in environmental economics (2 Marks)

c) Identify THREE Values attached to environmental resources (3 Marks)

d) Identify SIX methods used in waste resource recovery (6 Marks)

e) Outline FOUR benefits of applying Economic valuation methods in environmental resource management (4 Marks)

f) Identify FOUR ecosystem services that are critical for a healthier Economy -Environment Nexus (4 Marks)

g) State SIX categories of utility resources based on economic principles (6 Marks)

h) Outline four reasons for goods and services market failure (4 Marks)

i) Using well illustrated graph, explain the demand and supply laws (3 Marks)

QUESTION 2 (20 MARKS)

a) Explain how natural resources are classified based on resource economics (10 Marks)

b) Discuss the benefits of applying Community -Based Natural Resource Management (CBNRM) in resource planning and management (10 Marks)

QUESTION 3 (20MARKS)

Environmental resources access and use conflicts often emerge because people have different preferential uses for resources such as forest, water, land , minerals or want to manage them in different ways.

a) Explain five causes of environmental resource conflicts (10 Marks)

b) Discuss how demand and supply laws can be applied in ensuring optimal environmental resource extraction (10 Marks)

QUESTION 4 (20 MARKS)

- a) Explain five economic valuation methods used in environmental resource management (5 Marks)
- b) Discuss how you can apply the methods in (2a) above in resource management (15 Marks)

QUESTION 5(20 MARKS)

- a) Describe economics if scarcity and choice as critical elements in environmental resources management (10 Marks)
- b) Discuss how you can apply principles of property right regime to manage environmental resources (10 Marks)

QUESTION 6 (20MARKS)

- a) State and explain the benefits of international trade in a country. (10 Marks)
- b) Discuss the impacts of international trade on the environment (10 Marks)