



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## University Examinations 2023/2024

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF  
SCIENCE IN ECONOMICS

### BEC 3455: ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

DATE: APRIL 2024

TIME: 2 HOURS

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INSTRUCTIONS: Answer question *one* and any other *two* questions

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#### QUESTION ONE (30 MARKS)

- a. How do property rights affect externalities? (5marks)
- b. Explain the classification of resources. (8marks)
- c. Explain the intellectual property rights instruments- (5marks)
- d. Why do government need to enact policies for resource management? (4marks)
- e. What is a public good? explain features of public good. (5marks)
- f. Explain ways of solving resource conflict (3marks)

#### QUESTION TWO (20 MARKS)

- a) Explain why environmental economists are in favor of appropriate and clean technologies which provide the most rational use of natural resources and energy and to protect the environment. (10marks)
- b) Environmental values are economic values. It is important for the society to conserve its limited resources in the interest of economic efficiency and welfare. Discuss this statement (10marks)

**QUESTION THREE (20 MARKS)**

- a) Environmental pollution or degradation occurs as a by-product of our activities related to production or consumption. Discuss five main effects on climate change. (10marks)
- b) Discuss the methods of environmental valuation (10marks)

**QUESTION FOUR (20 MARKS)**

- a) Impact analysis seek to measure the impact of a public action such as regulation on a designated sector of an economy. Explain the methods used in the natural resource analysis. (10marks)
- b) What is an externality? Explain ways to curb externalities. (10marks)

**QUESTION FIVE (20 MARKS)**

- a) Using an illustration discuss any two conditions for maximum social welfare. (10marks)
- b) Discuss Coase theorem and illustrate how the problem of pollution can be solved by assigning property rights. (10marks)