NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF ENVIRONMENTAL SCIENCES

DEPARTMENT OF ENVIRONMENTAL SCIENCE

BACHELOR OF SCIENCE HONOURS DEGREE IN ENVIRONMENTAL SCIENCE AND HEALTH

ENVIRONMENTAL ECONOMICS

ESH 2108

Final Examination Paper

December 2024

This examination paper consists of 3 printed pages.

Time Allowed: **3 hours.**

Total Marks: **100**

Special Requirements: **None**

Examiner's Name: **Dr M. Ndabambi**

INSTRUCTIONS

1. Answer any **FOUR** questions.
2. Each question carries 25 marks.

MARK ALLOCATION

QUESTION	MARKS
1.	**25**
2.	**25**
3.	**25**
4.	**25**
5.	**25**
6.	**25**
TOTAL	**100**

1. (a) List the conditions that are required for clearly defined ownership of resources. [4]

(b) Define the following terms

(i) Option value [2]

(ii) Bequest value [2]

(iii) Existence value [2]

(iv) Externality [2]

(v) Transaction costs [2]

(c) Describe the relationship between economic activity and waste generation. [6]

(d) Explain why the assimilative capacity of the environment decreases as pollution increases. [5]

2. (a) List the four steps in a full-scale cost-benefit analysis. [4]

(b) Describe four environmental project valuation criteria that may be used with or as alternatives to the contingent valuation method. [12]

(c) Describe the policies that can be used to add flexibility to emission trading programs. [9]

3. Write short notes on the following terms:

a) Pollution-control cost, [13]

b) Pollution-damage cost. [12]

4. (a) Describe the advantages and disadvantages of using emission standards as a measure of pollution control. [10]

(b) Discuss the macroeconomic effects of environmental regulations. [15]

5. Discuss the use of effluent charges as an instrument of environmental protection.

6. Discuss the use of revealed preference valuation methods in the economic valuation of environmental goods and services.