



**UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER**

PROGRAMME: BSC ABE 4
BSC AGRON 4
BSC AG ED 4

COURSE CODE: ABE 404

TITLE OF PAPER: NATURAL RESOURCES MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

SPECIAL MATERIAL REQUIRED: NONE

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO
OTHER QUESTIONS.

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GRANTED BY THE CHIEF INVIGILATOR**

SECTION A. COMPULSORY QUESTION**Question One**

a. Explain the relevance of the following principles in conservation of natural resources;

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|------|-------------------------------------|-----|-----------------|
| i. | Precautionary principle | /5 | |
| ii. | Carrying capacity | /5 | |
| iii. | The law of conservation of matter | /5 | |
| iv. | The laws of energy | /10 | |
| v. | The competitive exclusion principle | /5 | 30 marks |

b. Explain why understanding of economics is relevant in natural resources conservation?

10 marks

SECTION B. ANSWER ANY TWO QUESTIONS**Question Two**

a. Developed countries often move their manufacturing companies to least developed countries. This is often seen as abuse of least developed countries in various forms. Discuss two reasons why these companies prefer to work in least developed countries.

10 marks

b. Describe the following methods of water resources management;

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|-----|----------------------|----|--|
| i. | Watershed protection | /5 | |
| ii. | Zoning flood plains | /5 | |

10 marks

c. Describe the causes of eutrophication and the impacts it has in water resources.

10 marks

Question Three

a Define the following concepts as used in natural resources management;

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|-----|-------------------|----|-----------------|
| i. | Environmental law | /5 | |
| ii. | Land rights | /5 | 10 marks |

b. Describe the environmental impacts of inorganic nutrient pollutants (nitrates and phosphates) in water resources. **10 marks**

c. Explain the meaning of the following concepts using examples where possible;

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|-----|-------------------|----|--|
| i. | The environment | /5 | |
| ii. | Natural resources | /5 | |
- 10 marks**

Question Four

a. Explain why an environmental impact assessment (EIA) is considered a very important tool in natural resources management.

5 marks

b. Describe the following components of an Environment Impact assessment;

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|-----|-----------|----|--|
| i. | Scoping | /6 | |
| ii. | Screening | /9 | |

15 Marks

c. Write short notes explaining the following concepts:

- | | | | |
|-----|--------------------|----|--|
| i. | Birth rate | /5 | |
| ii. | Exponential growth | /5 | |

10 marks