



**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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BY THE CHIEF INVIGILATOR**

SECTION A. COMPULSORY QUESTION**Question one**

- a. Discuss the shortcomings of the following economic practices used to account for natural resources and promoting their conservation;
- i. Short-term planning
 - ii. Failure to incorporate economic externalities
 - iii. False measure of progress
- 15 marks**
- b. Give concise definitions for the following;
- i. Water quality
 - ii. Pollution
 - iii. Point source pollution
- 15 marks**
- c. Identify and describe a procedure that is used to treat water when contaminated with inorganic pollutants (phosphates and nitrates) or a tertiary water treatment.
- 10 marks**

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

- 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;
- i. Scoping /6
 - ii. Screening /9
- 15 marks**
- c. Explain what are the obligations of an authority as stipulated in the water pollution control regulations 2010?
- 10 marks**

Question three

Briefly describe the meaning of the following terms as used in environmental management;

- i. green house effect /5
- ii. green house gases /5
- iii. doubling time for population /5
- ii. Alien and invasive species /5

20 marks

- a. Describe the differences between renewable and non-renewable resources citing their characteristics.

10 marks

Question four

- a. Describe what is sediment pollution? **5 marks**
- b. Discuss the economical and environmental impacts of sediment pollution

15 marks

- c. Developed countries often move their manufacturing companies to least developed countries. This is often seen as abuse of least developed countries of various forms. Discuss the reasons why these companies prefer to work in least developed countries. **10 marks**