



**UNIVERSITY OF SWAZILAND
EXAMINATION PAPER**

PROGRAMME: BSC LWM 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. Describe the market relationship between buyers and sellers as stated by the law of supply and demand.
10 marks
- b. Describe the market and command economies and discuss how they relate to natural resources management.
20 marks
- c. Discuss at least two of the functions of forests in maintaining of natural ecosystems and resources.
10 marks

SECTION B. ANSWER ANY TWO QUESTIONS

Question two

- a. Discuss the relationship between sustainable forest and climate change mitigation and adaptation. In your discussion make reference to the following:
 - i. A forest, forestry and forest management
 - ii. Sustainable forest management
 - iii. Criteria and indicators for sustainable forest management,
 - iv. Ecosystems goods and services,
 - v. Climate change mitigation and climate change adaptation**30 marks**

Question three

- a. Describe four procedures that are recommended by conservationists for prevention of flooding.
20 marks
- b. Describe the differences between renewable and non-renewable resources citing their characteristics.
10 marks

Question four

a. Describe how the following substances cause water pollution;

i. Sewage and fertilizer

ii. Sedimentation

20 marks

b. Explain what are the obligations of an 'operator' as stipulated in the water pollution control regulations 2010?

10 marks