

# 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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## SECTION A. COMPULSORY QUESTION

#### **Question One**

a. Explain the relevance of carrying capacity natural resources conservation.

10 marks

- Each consumer level contains only about 10% of the biomass and food energy of the lower level. Discuss four reasons why?
   20 marks
- c. Explain the meaning of the following principles as used in natural resources management;
  - i. Ecosystems
  - ii. Dematerialization

10 marks

[40 marks]

## SECTION B. ANSWER ANY TWO QUESTIONS

### **Question Two**

a. Explanation what is the difference between a food chain and a food web?

10 marks

- b. Describe the differences between renewable and non-renewable resources citing their characteristics.
  10 marks
- c. State the law of conservation of matter and how it relates to natural resources management.

[30 marks]

#### **Question Three**

a. Discuss three reasons why a country's governance system important for natural resources management?

15 marks

b. Describe at least three common sources of water pollution

15 marks

[30 marks]

# **Question Four**

a. Environmental law is one of the most important tools for natural resources management. Discuss three of the common problems curtailing the enforcement of environmental law in Least Developed Countries.

15 marks

b. Discuss the impacts of inorganic pollutants in surface water resources.

15 marks [30 marks]