



UNIVERSITY OF SWAZILAND
MAIN EXAM 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. Natural resources conservation is said to be failing in most world countries owing to a number of reasons including unprecedented human economic growth. Give an explanation of how economic development compromises natural resources conservation. /10 marks
- b. Using the law of supply and demand as applied in market economies, describe how it affects natural resources management? /10 marks
- c. Discuss two of the environmental issues related to overpopulation. /10 marks
- d. Explain the meaning of the following principles as used in natural resources management;
- a. Ecosystems
 - b. Dematerialization
- [40 marks]

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

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

Question Three

- a. Environmental law is said to be “used to achieve policies which are mainly determined by other disciplines”. Using realistic examples, explain the meaning of this statement. /10 marks
- b. Explain the meaning of population density as used in natural resources conservation and two of the factors contributing to population density of animals. /10 marks
- c. List five factors justifying the importance of land to humans and all terrestrial ecosystems. /10 marks
- [30 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;
- 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**