



**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAMME: BSC ABE
BSC AGRON
BSC AG ED 4

COURSE CODE: ABE 404

TITLE OF PAPER: NATURAL RESOURCES MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

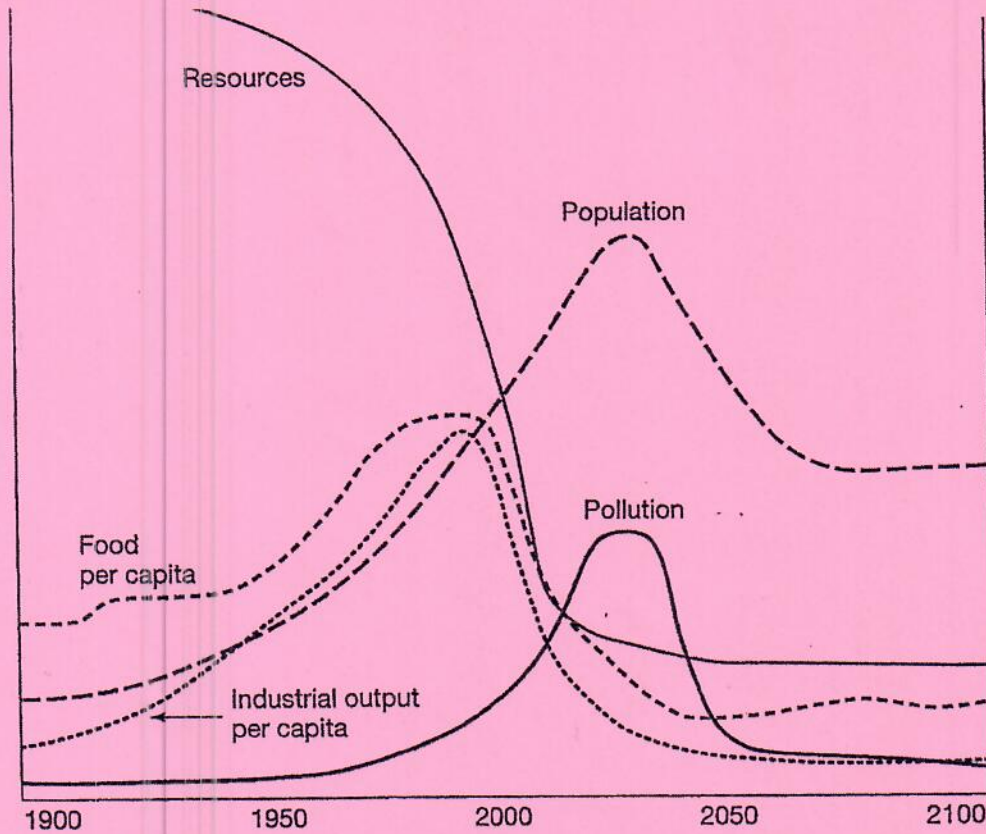
SPECIAL MATERIAL REQUIRED: NONE

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO OTHER QUESTIONS.

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SECTION A. COMPULSORY QUESTION

Question One



Researchers used computer analysis to predict the fate of human society if the current trends in resource consumption continue. Study the diagram above and answer the following questions.

- Using exponential human population growth as an underlying cause for the scenario presented in the above diagram, describe it and explain how it may lead to unsustainable societies.

(20 marks)

- Using examples, discuss the effectiveness of resources conservation, recycling and use of renewable resources in developing sustainable societies.

(20 marks)

SECTION B. ANSWER ANY TWO QUESTIONS

Question Two

- a. Explain what a food web is, linking the numerous feeding relationships, energy and nutrients flow in ecosystems. **(20 marks)**
- b. Give a concise discussion why economics is an integral part of natural resources management? **(10 Marks)**

Question Three

- a. Discuss the hydrologic and environmental importance of wetlands. **(20 marks)**
- b. Describe the following methods of water resources management;
 - i. Watershed protection /5
 - ii. Zoning flood plains /5 **(10 marks)**

Question Four

- a. Explain what environmental law is and discuss its significance in natural resources management **(20 marks)**
- b. Discuss the challenges of enforcing environmental law in developing countries. **(10marks)**