

136



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UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

PROGRAMME:

BSC. AGRICULTURAL ECONOMICS & AGRIBUSINESS
MANAGEMENT 4

COURSE CODE: AEM 403

TITLE OF PAPER: NATURAL RESOURCE AND ENVIRONMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: 1. ANSWER ALL QUESTIONS
2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS

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THE CHIEF INVIGILATOR**

137

Question 1

- A. Define property rights and discuss in detail the six [6] basic rights relating to property ownership in a society. [15]
- B. The climate change dynamics need constant monitoring and evaluation for policy decisions. Discuss how, as an economist, you can carry out a cost –benefit analysis assessment of climate change for a country. [10]

Question 2

- A. In the Swazi Nation Land, the inherent problems associated with poor definition of property rights are evident. Economists call this notion of the ‘tragedy of the commons.’ Define this notion and elaborate on how the government can correct the problem. [10]
- B. Rural industrialization in Swaziland seems to be exacerbating environmental pollution since the rural are governed by traditional authorities instead of municipalities. Management of externalities is a major issue. The government wants to intervene to help provide a guide on both the negative and positive externalities. As an advisor in the economic planning, help advice on what the government can do to fix/control both externalities in these rural areas. [15]

Question 3

- A. Pollution is a hazard to all environmental elements; policy makers are asking ‘what is this monster? Is it possible for government to correct Pollution? Explain. [15]
- B. Discuss the stated preference resource valuation methods as used for non-market environmental and natural resources. [10]

Question 4

- A. The Hotelling’s rule of extractable resource scarcity and price has been criticised by economics for enveloping all factors relating to management of scarcity. State the shortcomings relating to Hotelling’s rule as observed by the natural resource economists. [10]



B. For mining companies, the cost of extraction is the guiding element in their profit and future decisions.

i. How would you as an economist quantify the cost of mineral extraction, elaborate on methods available to you? [12]

ii. Define the profit maximising rule for miners which guide their operation decisions. [3]