

1st SEM. 2019/2020



Page 1 of 3

UNIVERSITY OF ESWATINI

FINAL EXAMINATION PAPER

PROGRAMME: BSc. in Agricultural Economics and Agribusiness
Management Year 4

COURSE CODE: AEM403

TITLE OF PAPER: ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

TIME ALLOWED: TWO (2): HOURS

INSTRUCTION: 1. ANSWER ALL FOUR QUESTIONS
2. EACH QUESTION CARRIES 25 POINTS

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CHIEF INVIGILATOR

Question 1 (25 MARKS)

The forest is viewed as a storable renewable resource that provides different services. Can you discuss services that are provided by forests under the following categories of services provided by forests?

- i. Ecological services **15 MARKS**
- ii. Scenic and landscape services and values **10 MARKS**

Question 2 (25 MARKS)

- a) Is the optimal level of pollution 0? Why or why not? Explain in detail. **10 MARKS**
- b) In the Times of Swaziland dated 12 October 2018, there was a report on heavy air pollution in the Matsapha industrial site. Can you advise the government of Eswatini on policy options for air pollution control. **15 MARKS**

Question 3 (25 MARKS)

The government of the Kingdom of Eswatini has been conducting exploration activities and has discovered 100 billion tons of coal which is suited for electricity generation. The government therefore wants to augment its electricity supply through building an open cast coal mine¹ and a coal-fired power station at Mpaka. As an Environmental and Natural Resource Economists what problems/drawbacks do you foresee of augmenting electricity supply through coal-based power as planned by the government? Discuss in detail.

25 MARKS**Question 4 (25 MARKS)**

Ocean fisheries are typically open-access resources so they impose external costs to present and future generations through over exploitation of the fish stock. Discuss public policies that can help minimize/eliminate the ocean fisheries problem(s).

25 MARKS