1st SEM. 2018/2019



Page 1 of 2

#### UNIVERSITY OF ESWATINI

# RE-SIT/SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME:

BSc. in Agricultural Economics and Agribusiness

Management Year 4

COURSE CODE:

AEM403/AEM 403

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

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

## Question 1 (25 MARKS)

- a) What is energy efficiency and why should energy efficiency be promoted? 15 MARKS
- b) Define property rights and discuss the different types of property rights. 10 MARKS

### Question 2 (25 MARKS)

The relationship between the environment and the economy can be portrayed by means of the Material Balance Model. Can you **show and discuss** the relationship between the environment and the economy using the Material Balance Model?

25 MARKS

## Question 3 (25 MARKS)

- a) Distinguish between Current Annual Increment (CAI) and Mean Annual Increment (MAI)

  5 MARKS
- b) In biological point of view what is the optimum harvesting stage of timber? What are the factors that are missed when analyzing the problem in biological point of view?

10 MARKS

c) In economists point of view when should trees be cut down? Explain logically.

5 MARKS

d) How is the Hartman Model different from the Faustmann model? Explain briefly.

5 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