

UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING

FINAL EXAMINATION, DECEMBER 2017

MSc. E.R.M.

**TITLE OF PAPER: ENVIRONMENTAL MANAGEMENT & RESOURCE
ECONOMICS**

COURSE NUMBER: GEP601

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:

- 1. ANSWER TWO QUESTIONS**
- 2. ANSWER ONE QUESTION FROM EACH SECTION**
- 3. ILLUSTRATE YOUR ANSWERS WITH EXAMPLES AND USE APPROPRIATE TERMINOLOGY**

ALLOCATION OF MARKS: EACH QUESTION CARRIES 50 MARKS

THIS QUESTION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR

GEP601: ENVIRONMENTAL MANAGEMENT & RESOURCE- December 2017

SECTION A

ANSWER ONE QUESTION

QUESTION 1

The Swaziland Environment Authority has received a project concept from a mineral processing industry that is expected to bring jobs and significantly contribute to the country's GDP. Preliminary analysis by the project proponent indicates that the most suitable area is within an area currently designated as wetland of international importance (Ramsar site) and key tourism hotspot.

- a) Outline the process that needs to be followed before a decision on the project is made. (25 marks)
- b) How would you determine whether to forgo the Ramsar site or halt the proposed project from a 'value' point of view? (25 marks)
- (50 Marks)**

QUESTION 2

- a) Describe the advantages and disadvantages of using the following instruments to control pollution:
- i) Standards (12 marks)
 - ii) Taxes and subsidies (14 marks)
- b) Discuss the following methods of natural resource valuation.
- i) Contingent valuation method (12 marks)
 - ii) Travel cost method (12 marks)
- (50 Marks)**

SECTION B
ANSWER ONE QUESTION

QUESTION 3

Using appropriate environmental issues, discuss the theory and applicability of the Environmental Kuznets Curve (EKC). **(50 Marks)**

QUESTION 4

Discuss the following environmental management tools:

- a) Environmental auditing (10 marks)
 - b) Strategic environmental assessment (10 marks)
 - c) Life cycle assessment (10 marks)
 - d) Environmental risk assessment (10 marks)
 - e) Environmental accounting (10 marks)
- (50 Marks)**