

UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND
PLANNING

FINAL EXAMINATION, DECEMBER, 2016

MSc

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

COURSE NUMBER : GEP 601

TIME ALLOWED : THREE (3) HOURS

**INSTRUCTIONS : ANSWER TWO (2) QUESTIONS
ILLUSTRATE YOUR ANSWERS WITH
APPROPRIATE DIAGRAMS**

MARK ALLOCATION : EACH QUESTION CARRIES FIFTY (50) MARKS

**THIS PAPER IS NOT TO OPENED UNTIL PERMISSION HAS BEEN GRANTED
BY THE INVIGILATOR**

**GEP 601: ENVIRONMENTAL MANAGEMENT AND RESOURCE
ECONOMICS - DECEMBER 2016**

ANSWER ANY TWO (2) QUESTIONS

QUESTION 1

- a) Explain why the ecological integrity, social equity, and economic efficiency are regarded as pillars of sustainability through which competing needs could be met when implementing integrated resource planning. (20 marks)
- b) 'In economic comparison of projects using the Benefit-Cost Analysis method, the decision criteria are based on: Net Benefits; the Benefit Ratio, or the Internal Rate of Return'. Discuss these bases indicating their strengths and limitations. (30 marks)
- (50 Marks)**

QUESTION 2

- a) Compare and contrast Environmental Auditing (EA) with Environmental Impact Assessment (EIA). (10 marks)
- b) Discuss the objectives and benefits of Environmental Auditing (EA). (10 marks)
- c) Explain how you would carry out an Environmental Audit (EA). (15 marks)
- d) Using examples, discuss the purpose, implications and lessons learned from public participation in Environmental Impact Assessment (EIA). (15 marks)
- (50 Marks)**

QUESTION 3

- a) 'Markets and market failures should be blamed for the prevailing environmental problems.' Discuss this statement. (15 marks)
- b) Discuss the typical issues facing countries with regard to environmental policy. (15 marks)
- c) Using examples, discuss why it is difficult to determine the best way for government to regulate the economy and fix the problem of pollution. (20 marks)
- (50 Marks)**

QUESTION 4

- a) Discuss the difficulties facing economists and planners in placing monetary values upon ecosystems benefits. (15 marks)
- b) 'It is difficult to determine supply and demand in resource appraisal.' Discuss this statement. (15 marks)
- c) Using examples, discuss why we need to have environmental policies. (20 marks)
- (50 Marks)**