

**UNIVERSITY OF SWAZILAND**

**DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND  
PLANNING**

**FINAL EXAMINATION, MAY 2014**

**MSc**

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

**COURSE NUMBER : ERM 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**

ANSWER TWO (2) QUESTIONS

QUESTION 1

- (a) Compare and contrast the following concepts:
- i. Economic and ecological dimensions of sustainable development. (10 marks)
  - ii. Environmental and economic sustainability. (10 marks)
  - iii. Green and sustainable development. (10 marks)
- (b) 'The domain of "economics" is fundamental to considerations of sustainable development. However, there has been considerable criticism of the tendency to use the three-domain model of the triple bottom line: economics, environmental and social.' Discuss the challenges likely to be encountered when using this approach. (20 marks)

[50 Marks]

QUESTION 2

- (a) Compare and contrast Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) indicating their roles in decision making. (15 marks)
- (b) Outline some of the tools that could be used in Strategic Environmental Assessment (SEA). (10 marks)
- (c) Using examples, discuss the purpose, implications and lessons learned from public participation in Environmental Impact Assessment (EIA). (25 marks)

[50 Marks]

QUESTION 3

- (a) Using examples discuss the difficulties involved in estimating demand for resources. (20 marks)
- (b) Discuss the differences between economic and financial analysis in determining overall project feasibility. (10 marks)
- (c) 'Many project planners are reluctant to place monetary values upon ecosystem benefits.' Discuss the justification for this and the possible ways out of this problem. (20 marks)

[50 Marks]

QUESTION 4

- (a) Compare and contrast Environmental Auditing (EA) with Environmental Impact Assessment (EIA). (10 marks)
- (b) Discuss the objectives and benefits of Environmental Auditing (EA). (15 marks)
- (c) Explain how you would carry out an Environmental Audit (EA). (25 marks)

[50 Marks]