

UNIVERSITY OF SWAZILAND

DEPARTMENT OF GEORAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

MAIN EXAMINATION: MAY, 2012

MSc.

TITLE OF PAPER : LAND AND WATER RESOURCES PLANNING

COURSE NUMBER : ERM 622

TIME ALLOWED : THREE (3) HOURS

**INSTRUCTIONS : ANSWER ONE QUESTIONS FROM EACH
SECTION. ILLUSTRATE YOUR ANSWERS WITH
APPROPRIATE DIAGRAMS**

MARKS ALLOCATED : EACH QUESTION CARRIES 50 MARKS

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

ERM 622: LAND AND WATER RESOURCES PLANNING

SECTION A: ANSWER ONE QUESTION

QUESTION 1:

- (a) Discuss the usefulness of the different types of renewable energy resources, and evaluate their potential application in Swaziland. (16 marks)
 - (b) Evaluate the occurrence Diamonds, gold and coal in southern Africa and discuss and distinguish their potential economic value in Swaziland. (17 marks)
 - (c) 'Deforestation is a major environmental threat in Africa'. Discuss how indigenous forests could be saved in Swaziland. (17 marks)
- (50 Marks)**

QUESTION 2:

- (a) Mining of Asbestos has contributed for many years to the economic wealth of Swaziland. Discuss why it has been abandoned. (17 marks)
 - (b) Ngwenya Iron Ore Mine in northeast Swaziland has large capacities of unused tailings. Discuss their potential for exploitation and evaluate some risks related to their exploitation. (17 marks)
 - (c) Discuss the usefulness of building additional big dams for the production of electricity in Swaziland. (16 marks)
- (50 Marks)**

SECTION B: ANSWER ONE QUESTION

Question 3

Discuss the importance of water resources planning and management in the sector of water resources. (50 Marks)

Question 4

Discuss the importance of water law in the sector of water resources. (50 Marks)