UNIVERSITY OF SWAZILAND

DEPARTMENT OF GEORAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

MAIN EXAMINATION: MAY, 2017

MSc

TITLE OF PAPER : LAND AND WATER RESOURCES PLANNING AND MANAGEMENT

COURSE NUMBER : GEP 604/ERM 622

TIME ALLOWED : THREE (3) HOURS

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

MARKS ALLOCATED : ALL QUESTIONS CARRY 50 MARKS

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

MAY, 2017

GEP 604: LAND AND WATER RESOURCES PLANNING AND MANAGEMENT

SECTION A: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 1:

- (a) Discuss the management of mineral resources in Swaziland by citing specific examples, including specific reference to the Chrysotile Asbestos Mine at Bulembu. (25 Marks)
- (b) Review the problems and challenges of soil erosion and land degradation in Swaziland, and explain the potential complications posed by global climate change scenarios.

(25 Marks) (50 Marks)

QUESTION 2

- (a) 'The management of natural resources in Swaziland is fundamental to sustainable development.' Critically discuss this statement by making reference to specific examples of either renewable or non-renewable land resources.
 (25 Marks)
- (b) 'Economic growth requires development of both buildings and infrastructure, yet these needs have the potential to seriously affect both our land and water resources'. Discuss this statement with a view to proposing potential solutions to prevent resource degradation. (25 Marks)

(50 Marks)

SECTION B: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 3

- a) Distinguish between multi-sectorial and sectorial planning in the sector of water resources. (25 Marks)
- b) Discuss the importance of economic analysis in the sector of water resources planning and management. (25 marks)

(50 Marks)

QUESTION 4

(a) Distinguish between water law and water policy.
(b) Discuss the importance of The Dublin principles in relation to integrated water resources management.
(25 Marks)

(50 Marks)