

UNIVERSITY OF ESWATINI
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

FINAL EXAMINATION, AUGUST (JUNE), 2020

MSc

TITLE OF PAPER : **LAND AND WATER RESOURCES PLANNING AND
MANAGEMENT**

COURSE NUMBER : **GEP604**

TIME ALLOWED : **THREE (3) HOURS**

INSTRUCTIONS : **ANSWER TWO QUESTIONS: ONE FROM EACH
SECTION**

MARK ALLOCATION : **EACH QUESTION CARRIES FIFTY (50) MARKS**

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

AUGUST (JUNE), 2020

GEP 604: LAND AND WATER RESOURCES PLANNING AND MANAGEMENT

SECTION A: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 1

Discuss the utilization and management of mineral resources in Eswatini by citing several specific examples, including specific reference to the Chrysotile Asbestos Mine at Bulembu, and the mine at Ngwenya. Your answer needs to also consider the development needs of Eswatini in the future.
(50 Marks)

QUESTION 2

'The management of natural resources in Eswatini is fundamental to sustainable development.' Critically discuss this statement by making reference to specific examples of **either** renewable or non-renewable land resources.
(50 Marks)

QUESTION 3

'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.
(50 Marks)

SECTION B: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 4

Discuss the importance of both economic and physiographic analysis in the sector of water resources.
(50 Marks)

QUESTION 5

Discuss the concept of the minimum in-stream flow requirements for river systems, and show how this, together with key catchment information (demographic, hydrologic, ecological, economic etc. data) is very important in water resources management; the design of reservoirs and water release.
(50 Marks)

QUESTION 8:

Discuss the state of knowledge and resource management of wetlands in Swaziland and show the threat posed by the projections of a changing climate.
(50 Marks)

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