

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER: MAY 2006

B.Sc. IV

COURSE CODE : GEP 422

TITLE OF PAPER : LAND EVALUATION

TIME ALLOWED : THREE (3) HOURS

SPECIAL MATERIAL REQUIRED: NONE

**INSTRUCTIONS : ANSWER ANY FOUR QUESTIONS
ALL QUESTIONS CARRY EQUAL
MARKS**

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GRANTED BY THE CHIEF INVIGILATOR**

Question 1.

- (a) Discuss the role of Environmental Impact Assessment (EIA) in land evaluation highlighting some possible positive and negative impacts of constructing a dual carriage road from Manzini to Mhlume through the Hlane National Park.
(13 marks)
- (b) Describe the three levels of intensity that may be distinguished in land evaluation.
(12 marks)

(25 marks)**Question 2.**

- (a) Using examples describe six questions that are answered by the process of land evaluation.
(18 marks)
- (b) Describe the concept of land mapping units illustrating how it is applicable in land evaluation.
(7 marks)

(25 marks)**Question 3.**

- (a) Discuss the sequence of land use planning; using examples to illustrate how each stage can be applicable in the selection of an area to be developed for ecotourism.
(12 marks)
- (b) Discuss the key players (people) in planning, describing the role played by each.
(13 marks)

(25 marks)**Question 4.**

- (a) Discuss the difference between qualitative and quantitative land suitability classification.
(15 marks).
- (b) Using examples, describe land characteristics, and explain how they can be used in land evaluation.
(10 marks)

(25 marks)**Question 5.**

Compare and contrast the two-stage and parallel approach to land evaluation, specifying the approach that would be appropriate for the assessment of the potential of an area to be used for nature reserve, with reasons.
(25 marks)

Question 6.

Describe the process and procedure of creating a functional GIS using a GPS for collecting information for input a database, illustrating how the GIS can be used in land evaluation.
(25 marks)