

UNIVERSITY OF SWAZILAND
FINAL EXAMINATION: APRIL / MAY 2005
BASS IV.

TITLE OF PAPER : LAND USE PLANNING
COURSE NUMBER : GEP 415
TIME ALLOWED : THREE (3) HOURS
INSTRUCTIONS :
1. ANSWER THREE (3) QUESTIONS
2. QUESTION ONE IS COMPULSORY
3. ILLUSTRATE YOUR ANSWERS WITH
EXAMPLES AND LARGE CLEARLY DRAWN
DIAGRAMS WHERE APPROPRIATE.

SPECIAL REQUIREMENTS: NONE

ALLOCATION OF MARKS: QUESTION ONE (COMPULSORY) IS WORTH
40 MARKS WHILE THE REST ARE WORTH 30
MARKS EACH.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY
THE INVIGILATOR.

SECTION A
COMPULSORY

QUESTION 1

- (a) Explain the importance of land evaluation in the land use planning process. (6 marks)
- (b) Identify and describe THREE common land evaluation systems used in the land use planning process. (12 marks)
- (c) Table 1 shows two farms, Farm A and Farm B, with two portions each (portions A1, A2 and B1, B2 respectively). The sizes of each of the farms are 50 hectares.
- (i) Classify portions A1 and A2 of Farm A and portions B1 and B2 of Farm B according to land capability classes (LCC); land suitability classes (LSC); and land suitability sub - classes. (12 marks)
- (ii) State the appropriate land use for each and every portion. (4 marks)
- (iii) Use Table 2 to estimate the values of Farm A and Farm B using the following hypothetical prices for land parcels under the different land capability classes. (6 marks)

SECTION B
ANSWER ANY TWO QUESTIONS

QUESTION 2

Identify and explain the key elements of land tenure systems which provide incentives for production and conservation in the use of land.

(30 marks)

QUESTION 3

- (a) Identify and explain the differences in the physical appearance of areas under Swazi Nation Land (SNL) tenure system and those under the Freehold Title Deed (FTD) system. (15 marks)
- (b) Account for the environmental degradation problems on the SNL areas of Swaziland. (15 marks)

QUESTION 4

- (a) Explain how planners ensure adherence to recommended land uses in the event that they do not own or control the land and other means of production. (14 marks)
- (b) Define the following concepts and explain circumstances under which they are applied.
- (i) Permitted uses
- (ii) Proscribed uses
- (iii) Prescribed uses
- (iv) Preferred uses (16 marks)

QUESTION 5

"...our current view (is) that policy plays a central role in land use planning" (Cocks and Austine, 1979:1). Based on this statement, discuss the role of policy in the land use planning process and state the various sources of land use planning policies. (30 marks)

Table 1 Land characteristics of portions of Farm A and Farm B

FARM A		FARM B	
<u>Portion A1</u>		<u>Portion B1</u>	
Size (ha):	29 ha	Size (ha):	40
Slope angle:	1	Slope angle:	8
Soil depth (cm):	120	Soil depth (cm):	44
Soil permeability:	(5) good	Soil permeability:	(3) mod. Impermeable
Wetness:	Wo	Wetness:	W1
Erosion:	(1) none	Erosion:	2 moderate
Hindrance to Cultivation:	none	Hindrance to cultivation:	boulders
<u>Portion A2</u>		<u>Portion B2</u>	
Size (ha):	21	Size (ha):	10
Slope angle:	3	Slope angle:	12
Soil depth (cm):	95	Soil depths (cm):	41
Soil permeability:	2 severe	Soil permeability:	rapid permeability
Wetness:	W3	Wetness:	W2
Erosion:	(1) none	Erosion:	3 severe
Hindrance to Cultivation:	none	Hindrance to cultivation:	gravelly

Table 2 Hypothetical Prices of Land Parcels under Different LCCs

<i>Land Capability Classes</i>	<i>Price (E/Ha)</i>
I	100 000
II	60 000
III	51 000
IV	40 000
V	30 000
VI	20 000
VII	10 000
VIII	5 000