

UNIVERSITY OF SWAZILAND
MAIN EXAMINATION: MAY 2013
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 below shows two farms, Farm A and Farm B, with two portions each (portions A1, A2 and B1, B2 respectively). Each of the farms is 50 hectares in size.
- (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 (LSSC). (12 marks)
- (ii) State the appropriate land use for each and every portion. (4 marks)
- (iii) Use Table 2 below to estimate the values of Farm A and Farm B using the indicated hypothetical prices for land parcels under the different land capability classes. (6 marks)
(40 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:	sandy

<u>Table 2</u>	<u>Hypothetical Prices of Land Parcels under Different LCCs</u>	
	<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

SECTION B

ANSWER ANY TWO QUESTIONS

QUESTION 2

Discuss the factors that could influence land use decisions among land users. **(30 marks)**

QUESTION 3

Discuss the various planning levels in an integrated land use planning process and highlight the different planning activities taking place at each level. **(30 marks)**

QUESTION 4

- (a) With the help of examples, describe the Land Suitability Classification (LSC) Structure. (15 marks)
- (b) Identify and explain the crucial factors always considered in Land Suitability Classification (15 marks)
- (30 marks)**

QUESTION 5

‘...our view is that policy plays a central role in land use planning’ (Cocks and Austine, 1979).

- (a) Based on this statement, discuss the role of policy in the land use planning process. (20 marks)
- (b) State the various sources of land use planning policies. (10 marks)
- (30 marks)**