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UNIVERSITY OF SWAZILAND
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING
MAIN EXAMINATION: MAY 2016
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.

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

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GEP 415: Land Use Planning (May 2016)**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). The size of each of the farms is 50 hectares.
- i) Classify portions A1 and A2 of Farm A and portions B1 and B2 of Farm B according to land capability classes (LCCs); land suitability classes (LSCs); and land suitability sub – classes (LSSCs). (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 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 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

Land Capability Classes	Price (E/Ha)
1	100 000

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SECTION B
ANSWER ANY TWO QUESTIONS

QUESTION 2

With the help of examples, discuss the land use planning aims and goals.

(30 Marks)

QUESTION 3

Discuss the factors influencing land use decisions among land users.

(30 Marks)

QUESTION 4

(a) Using examples, explain the following concepts and circumstances under which they are applied:

- | | |
|-----------------------|-----------|
| (i) Permitted uses | (4 marks) |
| (ii) Proscribed uses | (4 marks) |
| (iii) Prescribed uses | (4 marks) |
| (iv) Preferred uses | (4 marks) |

(b) 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)

(30 Marks)

QUESTION 5

(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 on SNL areas. (15 marks)

(30 Marks)