

UNIVERSITY OF SWAZILAND  
DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND  
PLANNING  
MAIN EXAMINATION: MAY 2018  
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 IN SECTION A IS COMPULSORY
3. ANSWER TWO QUESTIONS IN SECTION
4. 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.

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

## GEP 415: LAND USE PLANNING - MAY 2018

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.
- 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)
  - State the appropriate land use for each and every portion. (4 marks)
  - 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**

<b><u>FARM A</u></b>		<b><u>FARM B</u></b>	
<b><u>Portion A1</u></b>		<b><u>Portion B1</u></b>	
Size (ha):	28 ha	Size (ha):	39
Slope angle:	1°	Slope angle:	8°
Soil depth (cm):	150	Soil depth (cm):	38
Soil permeability:	good permeability:	(3) mod. Impermeable	
Wetness:	W <sub>0</sub>	Wetness:	W <sub>1</sub>
Erosion:	(1) none Erosion:	2 moderate	
Hindrance to Cultivation	none	Hindrance to cultivation	boulders
<b><u>Portion A2</u></b>		<b><u>Portion B2</u></b>	
Size (ha):	21	Size (ha):	10
Slope angle:	3°	Slope angle:	12°
Soil depth (cm):	115	Soil depths (cm):	41
Soil permeability:	2 severe	Soil permeability:	rapid permeability
Wetness:	W <sub>3</sub>	Wetness:	W <sub>2</sub>
Erosion:	(1) none Erosion:	3 severe	
Hindrance to Cultivation:	none	Hindrance to cultivation:	Rocky

**Table 2 Hypothetical prices of land parcels under different LCCs**

<b><i>Land Capability Classes</i></b>	<b><i>Price (E/Ha)</i></b>
I	200 000
II	150 000
III	100 000
IV	50 000
V	25 000
VI	20 000
VII	15 000
VIII	10 000

**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)**