GWANDA STATE UNIVERSITY

FACULTY OF ENGINEERING AND ENVIRONMENT

DEPARTMENT OF GEOMATICS AND SURVEYING

Cadastral Surveying

ESG3206

June 2026

This examination paper consists of 4 pages

Time Allowed : 3 hours

Total Marks : 100

Examiner's Name : Mr. J B MANYATI

INSTRUCTIONS

1. Answer ALL 4 questions
2. Each question carries 25 marks
3. Use of calculators is permissible, but programmable calculators are not allowed in the exam

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LAND TENURE: [25 marks]				
1.	a)		Some of the land tenure forms that are formally recognized in Zimbabwe are-	
		i.	Customary tenure.	3
		ii.	Leasehold tenure.	3
		iii.	Freehold tenure.	3
		iv.	Statutory tenure.	3
			Define each of the tenure forms stated above and identify land holdings in Zimbabwe where each is recognized.	
	b)		Define the following by giving examples	
		i.	Rectilinear boundary.	2
		ii.	Curvilinear boundary	2
		iii.	General boundaries	2
		iv.	Fixed boundaries.	2
	c)		As part of the ongoing Land Policy Consultations, contributions by Stakeholders are recommending giving title to communal land holders. State giving your reasons, which boundary type you would recommend for the communal areas of Zimbabwe.	5

LAND SURVEY REGULATIONS: [25 marks]				
2	a)		Using sketches where necessary, explain what is meant by the following terms in the context of the Land Survey (General) Regulations 1979.	
		i.	Witness Mark,	5
		ii.	Indicatory beacon.	5
	b)	i.	Briefly outline the conditions used in concluding an alignment test.	5
		ii.	What action would you take when a post forming part of a properly erected fence occupies a corner point of the piece of land, if the land is more than 2 Ha in extent.	5
		iii.	What type of beacon would you place in the survey of a piece of land more than 200 hectares in extent?	5

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LAND SURVEY REGULATIONS: [25 marks]

3.

Mr. Ncube owns a property called Stand 100 Bulawayo Township of Bulawayo Township Lands. He wants to dispose portion of the property to his uncle who is currently in the United Kingdom. Mr. Ncube has obtained a permit for the subdivision from City of Bulawayo and has engaged you to undertake his survey.

You have done your searches at the Surveyor General's Office and subsequently you have relocated and fixed the property beacons. The information from the Surveyor General indicates that the property was surveyed in October 1990 by Land Surveyor, J.B. Manyati and is filed in the Surveyor General's Office as SR330/90. Coordinates of the beacons as per SR330/90 are as follows:

Coordinates- Lo 29 (metres); **SR330/90**

	Constants	
Beacon Name	**+/- 44 000.000**	**+/- 2 230 000.000**
66A	+4 333,20	+5 578,90
67C	+4 301,17	+5 587,92
P1	+4 295,78	+5 638,82
P2	+4 347,58	+5 622,77

The coordinates obtained from your survey are listed below:

Coordinates- Lo 29 (metres); **This Survey**

	Constants	
Beacon Name	**+/- 44 000.000**	**+/- 2 230 000.000**
66A	+4 333,26	+5 578,97
67C	+4 301,20	+5 587,84
P1	+4 295,80	+5 638,84
P2	+4 347,61	+5 622,80

a) Carry out a detailed comparison for the found beacons 10

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	b)		Comment on the results of your comparison	5
	c)		Reconstruct the position(s) of any rejected beacon(s)	10

LAND SURVEY ACT [25 marks]				
4	a)		Briefly outline the processes leading to one's recognition as a Land surveyor in Zimbabwe. In your outline, clearly highlight the conditions and stages involved in their sequential order.	12
	b)		The Land Survey Act requires the land surveyor to deposit with the surveyor general such records as prescribed relating to every survey carried out by him. Describe what constitutes such a set of records relating to a subdivision of a land parcel into 151 stands.	13

- THE END -

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