

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF LAND AND SPATIAL SCIENCES

QUALIFICATIONS: BACHELOR OF GEOMATIC	CS, DIPLOMA IN GEOMATICS
QUALIFICATIONS CODES:07BGEO,06DGEO	QUALIFICATIONS LEVEL: 7 - 07BGEO, 6 - 06DGEO
COURSE CODE: CASS20S	COURSE NAME: CADASTRAL SURVEYING 1
SESSION: JUNE 2024	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER			
EXAMINER:	Mr T.Makaza		
MODERATOR:	Mr S. Sinvula		

INSTRUCTIONS				
1.	Answer ALL the questions.			
2.	Write clearly and neatly.			
3.	Number the answers clearly.			

PERMISSIBLE MATERIALS

Calculators may be used as well as other drawing equipment.

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page).

Question 1

(a)	In South Africa the first land surveyor came to the Cape in 1657. The first cadastral survey was t					
	survey of a piece of land on the banks of the Liesbeeck River. Describe the features that were adopted					
	as boundaries for the said property.	(2)				
(b)	Outline ANY 5 powers and duties of the Surveyor-General.	(10)				
(c)	are the 6 members of the Namibian Council for Professional Land Surveyors, Technical Surveyors					
	and Survey Technicians (SURCON)?	(6)				
(d)	Define 'Land Surveyor' as per the Land Survey Act 33 of 1993.	(3)				
(e)	Fill in the blanks space: Subject to the Public Service Act, the Minister appoints a person who is a					
	to be the Surveyor-General.	(1)				
(f)	Describe the 4 duties of a Land Surveyor as per the Land Survey Act.	(8)				
		[30]				
Ques	tion 2					
(a)	Explain 4 reasons that may necessitate a beacon relocation.	(4)				
(b)	Outline the requirements for a piece of land to be registered in the Deeds Registry.	(2)				
(c)	Before carrying out a survey, one of the important things that a land surveyor does is to g					
	Surveyor-General's office to look for survey information. Indicate ANY 3 examples of such in	formation.				
		(3)				
		[9]				
Ques	tion 3 (This question is in the context of the practical assignment that you undertook in Cin	nbebasia)				
(a)	Describe fully what the survey that you did in Cimbebasia involved and all the major steps that you					
	did to complete the task.	(8)				
(b)	State the type of diagrams required for lodgement in Surveyor-General's office.	(3)				
(c)	Explain what a closure certificate indicates.	(2)				
		[13]				

Question 4

- (a) Explain the difference between a diagram and a general plan. (2)
- (b) State ANY 6 kinds of information contained on a farm index card. (6)
- (c) The survey diagram is the fundamental registrable document prepared by a land surveyor. Mention ANY 7 essential information that is shown on a diagram. (7)
- (d) What situation necessitates the preparation of a general plan rather than a diagram? (2)
- (e) With regards to a subdivision survey, explain what a mother diagram is. (2)
- (f) Describe ANY 3 characteristics of a noting plan. (6)

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Question 5

- (a) Name ANY 4 categories of coordinates that are found on a coordinate list. (4)
- (b) When preparing a subdivision sketch it is critical to include information that may have a bearing on the subdivision. Name 5 examples of such information. (6)
- (c) Mention a least 7 components of survey records. (7)
- (d) Outline 2 typical demarcation methods/scenarios encountered in ensuring that beacons are placed in the correct positions as desired by a client. (Answer should indicate how coordinates are obtained for each case).

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Question 6

Indicate what the following symbols denote on a working plan.

- (a) single black circle. (1)
- (b) circle with a cross. (1)

[2]

