



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF LAND AND SPATIAL SCIENCES

QUALIFICATIONS: BACHELOR OF GEOMATICS, DIPLOMA IN GEOMATICS	
QUALIFICATIONS CODES: 07BGEO,06DGEO	QUALIFICATIONS LEVEL: 7 - 07BGEO, 6 - 06DGEO
COURSE CODE: CAS520S	COURSE NAME: CADASTRAL SURVEYING 1
SESSION: JUNE 2025	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER:	Mr Taruwona Makaza
MODERATOR:	Mr Frikkie Louw

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.

PERMISSIBLE MATERIALS

Calculator, ruler, pen, pencil and eraser

THIS QUESTION PAPER CONSISTS OF 3 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 the 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) "Because the cadastral system in Egypt developed around the definition of arable land, the system became also quite important in re-establishing the delineated boundaries after the annual floods of the Nile River washed away the evidence of land boundaries." Describe how these boundaries were re-established after the annual floods. (2)
- (c) Describe the purpose of the Land Survey Act. (2)
- (d) Describe the four (4) duties of a Land Surveyor as per the Land Survey Act. (8)
- (e) Describe any five (5) duties of the Surveyor-General. (10)
- (f) Define 'Land Surveyor' as per the Land Survey Act. (3)

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Question 2

Describe the following six (6) types of demarcation:

- (a) Beacon relocation; (2)
- (b) Subdivision; (2)
- (c) Consolidation; (2)
- (d) Sectional title surveys; (2)
- (e) Township survey; (2)
- (f) Servitude survey; (2)

[12]

Question 3

Describe fully what the survey that you did in Cimbebasia involved. State some major processes that you did as part of the exercise. (8)

[8]

Question 4

- (a) State any six (6) kinds of information contained in an erf register. (6)
- (b) The survey diagram is the fundamental registrable document prepared by a land surveyor. Name and describe at least 4 types of survey diagrams. (8)
- (c) Indicate at least five (5) types of information that is included on a working plan. (5)
- (d) What information does a working plan show to the examiner and other land surveyors? (2)
- (e) Describe any three (3) characteristics of a noting plan. (6)

[27]

Question 5

- (a) State any eight (8) components of survey records. (8)
- (b) Name any four (4) categories of coordinates that are found on a coordinate list. (4)
- (c) Mention three (3) approaches to beaconing a servitude of uniform width. (6)
- (d) When preparing a subdivision sketch it is critical to include information that may have a bearing on the subdivision. Name four (4) examples of such information. (4)

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Question 6

Indicate what the following symbols denote on a working plan.

- (a) single black circle (1)
- (b) double black circle (1)
- (c) double red circle (1)
- (d) circle with a cross (1)

[4]

