



**PAMIBIA UNIVERSITY**  
**OF SCIENCE AND TECHNOLOGY**

**FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT**

**DEPARTMENT OF LAND AND SPATIAL SCIENCES**

<b>QUALIFICATIONS:</b> BACHELOR OF GEOMATICS, DIPLOMA IN GEOMATICS	
<b>QUALIFICATIONS CODES:</b> 07BGEO,06DGEO	<b>QUALIFICATIONS LEVEL:</b> 7 - 07BGEO, 6 - 06DGEO
<b>COURSE CODE:</b> CAS520S	<b>COURSE NAME:</b> CADASTRAL SURVEYING 1
<b>SESSION:</b> JUNE 2023	<b>PAPER:</b> THEORY
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>FIRST OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER:</b>	<b>Mr T.Makaza</b>
<b>MODERATOR:</b>	<b>Mr S. Sinvula</b>

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

**PERMISSIBLE MATERIALS**

Calculator, ruler, pencil and eraser

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

**Question 1**

- (a) Cadastral surveying can be carried out as two (2) operations. State them. (2)
- (b) 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)
- (c) What was the reason for the promulgation of Act No. 32 of 1993? (2)
- (d) Outline any five (5) powers and duties of the Surveyor General. (10)
- (e) Give a short summary of the history of Cadastral Surveying in Namibia. (6)
- (f) The cadastral system in Namibia is considered among the best internationally. Explain any two reasons for this. (2)
- (g) Who are the members of Namibian Council for Professional Land Surveyors, Technical Surveyors and Survey Technicians (SURCON) (5)
- (h) Define 'Land Surveyor' as per the Land Survey Act 33 of 1993. (3)

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**Question 2**

- (a) Explain four (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 go to the Surveyor General's office to look for survey information. Indicate any three (3) examples of such information. (3)

**[9]**

**Question 3**

- (a) Briefly explain the key processes to be followed by an owner who wishes to subdivide an erf in a township. Also include the professionals that are involved. (4)
- (b) When doing a subdivision, which two (2) methods can be used to determine the coordinates of the new beacons to be placed. (2)
- [6]**
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**Question 4**

- (a) Mention and describe any five (5) kinds of survey diagrams. (10)
- (b) Mention any eight (8) types of essential information found on a diagram. (8)
- (c) Name and briefly explain the two(2) types of property registers found in the Surveyor General's office. (6)
- (d) Explain the difference between a diagram and a general plan. (2)
- [26]**
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**Question 5**

- (a) State any five (5) headings that may prove useful as a basis for a cadastral survey report. (5)
- (b) When preparing a subdivision sketch it is critical to include information that may have a bearing on the subdivision. Name five (5) examples of such information. (6)
- (c) Mention a least seven (7) components of survey records. (7)
- (d) The Surveyor General usually approves a minimum of three copies of a diagram. Explain who keeps these three (3) copies after approval. (3)
- (e) What is the purpose of a data consistency check? (2)
- [22]**
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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) single red circle (1)
- (d) circle with a cross (1)
- (e) triangle (1)

**[5]**

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