חAmIBIA UMIVERSITY
OF SCIEПCE AПD TECHחOLOGY

## FACULTY OF ENGINEERING AND SPATIAL SCIENCES

DEPARTMENT OF ARCHITECTURE AND SPATIAL SCIENCES

| QUALIFICATIONS: |  |
| :--- | :--- |
| BACHELOR OF GEOMATICS, DIPLOMA IN GEOMATICS |  |
| QUALIFICATIONS CODES: <br> O6DGEO, 07BGEO | QUALIFICATIONS LEVEL: 6-06DGEO, 7-07BGEO |
| COURSE CODE: CAS610S | COURSE NAME: CADASTRAL SURVEYING 2 |
| SESSION: JULY 2022 | PAPER: THEORY |
| DURATION: 3 HOURS | MARKS: 100 |


| SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER |  |
| :--- | :--- |
| EXAMINER: | Mr T. Makaza |
| MODERATOR: | Mr S. Sinvula |

INSTRUCTIONS

1. You MUST answer ALL QUESTIONS.
2. Write clearly and neatly.
3. Number the answers clearly.

## PERMISSIBLE MATERIALS

Calculators may be used as well as other drawing equipment

## Question 1

Explain the following in the context of Act 33 of 1993 and its regulations:
(a) Riparian rights
(b) GNSS (should state how it differs from GPS)
(c) Curvilinear boundary (include an example of such)

## Question 2

(a) In terms of Act 33 of 1993, "owner" concerning land not only means the person registered in the deeds registry as the owner of such land but also includes other aspects. State all these aspects that also constitute ownership.
(b) Unless otherwise clearly stated, when a river constitutes a boundary of any piece of land, the state where the boundary of such piece of land lies and how such boundary can be surveyed.
(c) Act 33 of 1993 gives the Surveyor General and land surveyors certain powers regarding entering private land to perform their duties. State these five powers.

## Question 3

Describe the specifications of beacons under the following special circumstances;
(a) If the corner point falls on soft or sandy ground;
(b) If it is not possible to drive the peg into the ground due to the presence of rock;
(c) If the corner point falls on hard ground where a peg cannot be driven to the prescribed depth.

## Question 4

Outline any two guidelines for placing reference marks (regulation 20) in the survey of new townships and extensions to new townships.

## Question 5

(a) Which numerical data shall a diagram contain? (Any four types)
(b) State six cases when it shall not be necessary to define any corner point by a beacon
(c) How is the area/size of a consolidated diagram compiled without a resurvey calculated?
(d) State all cases in which the Surveyor General can issue a certified copy of a general plan or diagram without the written consent of the land surveyor.
(e) What are the requirements for survey records when the survey involves the replacement of beacons into coordinate positions previously established on the trigonometrical system?
(f) If the linear misclosure of a traverse is 0.025 m and the total distance of the traverse is 1005.80 m , is this traverse acceptable? Explain your answer. You should use the formula below where
$A=0.012+\{(0.082 S) /(3 S+1000)\}+\{(0.15 S) / 100000\}$ metres and $A$ is the allowable limit.

## Question 6 (All questions relate to Act 32 of 1993)

(a) The register of practitioners shall consist of different categories of practitioners under Act 32 of 1993. State all of them.
(b) Name any six acts or offences that for disciplinary proceedings against a practitioner constitute "professional misconduct".
(c) Name all acts which a person may do to be called a practitioner under this Act.

## Question 7

Outline the following aspects related to the Fencing Act 17 of 1912:
(a) Dividing fence
(b) Give and take line

## Question 8

Explain FULLY the three types of prescription as per the Prescription Act of 1968.

