



ZIMBABWE EZEKIEL GUTI UNIVERSITY

COLLEGE OF LIFELONG LEARNING

EXAMINATION PAPER

MODULE CODE : GISRS113  
MODULE TITLE : Data Collection, Sources, and Geographic Data  
DURATION : 2 Hours  
LEVEL : 1.1  
DATE :

27 NOV 2025

**INSTRUCTIONS TO CANDIDATES:**

1. No cell phones are allowed in the examination venue.
2. Use of silent, non-programmable calculators is allowed
3. Answer **Question 1** and any other **THREE** in Section B.
4. Begin each question on a new page.
5. The number of marks for each question or part question is shown in brackets [ ]
6. Show all workings, where applicable.

**Section A: Compulsory Question (40 Marks)**

**Question 1:**

Discuss the major methods and challenges of spatial data collection. Your answer must include:

- a. Primary vs. secondary data sources. (10 marks)
- b. Field data collection methods used in Zimbabwe. (10 marks)
- c. Data quality issues common in developing countries. (10 marks)
- d. Ethical considerations when collecting geographic data. (10 marks)

**Section B: Optional Questions (Answer Any 3; 20 Marks Each)**

**Question 2:**

- a. Explain mobile data collection workflows (GPS, mobile apps). (8 marks)
- b. Describe advantages of digital field surveys over paper-based systems. (6 marks)
- c. Identify any two limitations of GPS accuracy. (6 marks)

**Question 3:**

- a. Define spatial databases and explain their importance. (8 marks)
- b. Discuss three common spatial data formats (e.g., Shapefile, GeoJSON). (6 marks)
- c. Explain two challenges of data integration. (6 marks)

**Question 4:**

- a. Describe remote sensing as a source of spatial data. (8 marks)
- b. Discuss three types of sensors and their applications. (6 marks)
- c. Identify two limitations of remote sensing. (6 marks)

**Question 5:**

- a. Explain the role of national mapping agencies (e.g., Surveyor General Zimbabwe). (8 marks)
- b. Discuss open data sources (e.g., Google Earth Engine, OpenStreetMap). (6 marks)
- c. State two risks of using freely available datasets. (6 marks)

**Question 6:**

- a. Explain the process of data validation. (8 marks)
- b. Describe positional accuracy and thematic accuracy. (6 marks)
- c. State two common errors found during validation. (6 marks)

**\*\*\*\*END OF EXAMINATION\*\*\*\***

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