



ZIMBABWE EZEKIEL GUTI UNIVERSITY

COLLEGE OF LIFELONG LEARNING

EXAMINATION PAPER

MODULE CODE : GISRS114
MODULE TITLE : Geographic Data Visualization and Map Creation
DURATION : 2 Hours
LEVEL : 1.1
DATE : 28 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 principles of cartographic design and map visualization. Your answer should include:

- a. Key elements of a good map layout. **(10 marks)**
- b. The role of colour theory and symbology in map design. **(10 marks)**
- c. Challenges in visualizing complex datasets. **(10 marks)**
- d. Provide Zimbabwe-based examples of thematic maps used for government or development planning. **(10 marks)**

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

Question 2:

- a. Explain the difference between qualitative and quantitative maps. **(8 marks)**
- b. Discuss the use of legends and classification methods. **(6 marks)**
- c. State two potential problems with choropleth maps. **(6 marks)**

Question 3:

- a. Describe the concept of visual hierarchy. **(8 marks)**
- b. Explain why map scale influences representation. **(6 marks)**
- c. Give two examples of poor cartographic practices. **(6 marks)**

Question 4:

- a. Explain the role of typography in map creation. **(8 marks)**
- b. Identify differences between reference maps and thematic maps. **(6 marks)**
- c. State two software tools used in Zimbabwe for map production. **(6 marks)**

Question 5:

- a. Discuss map projection distortions and how they affect visualization. **(8 marks)**
- b. Explain proportional symbol mapping. **(6 marks)**
- c. Identify two challenges when symbolizing dense data. **(6 marks)**

Question 6:

- a. Describe the process of producing a printed map. (8 marks)
- b. Discuss exporting maps for digital platforms. (6 marks)
- c. List two QA/QC checks before publishing a map. (6 marks)

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

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