



# **GWANDA STATE UNIVERSITY**

**FACULTY OF ENGINEERING AND ENVIRONMENT**

**DEPARTMENT OF GEOMATICS AND SURVEYING**

**SPATIAL PLANNING**

**ESG 5107**

**Final Examination Paper**

**November 2024**

This examination paper consists of 2 pages

**Time Allowed: 3 hours**

**Total Marks: 100**

**Examiner's Name: Dr. N. Muleya**

## **INSTRUCTIONS**

**Answer ALL questions in chronological order**

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|                             |    |   |    |
|-----------------------------|----|---|----|
| <b>QUESTION 1: 25 marks</b> |    |   |    |
|                             | a  | Explain the role of the Surveyor-General's Office in spatial planning   | 10 |
|                             | b  | With aid of examples and theories, discuss the value of settlement hierarchy in spatial planning  | 15 |
| <b>QUESTION 2: 25 marks</b> |    |   |    |
|                             |    | In response to the Call to Action by His Excellency, the President of the Republic of Zimbabwe, you are required to prepare a 'Fast Track Legally Compliant Master Plan' according to the 'Regional Town and Country Planning Act [Chapter 29:12] and subsidiary legislation: |    |
|                             | a  | Justify the need for 'Fast Track Legally Compliant Master Plans' in Zimbabwe  | 5  |
|                             | b  | With reference to a settlement of your choice, prepare a miniature master plan. The master plan must constitute of three parts: The Report of Study, Written statement and diagrams/maps.   | 20 |
| <b>QUESTION 3: 25 marks</b> |    |   |    |
|                             |    | You are required to prepare a residential layout plan for the Gwanda State university, Epoch mine campus in order to regularise the existing residential units. In light of your knowledge and experience of the University environment:                                      |    |
|                             | i  | Locate a layout plan in the hierarchy of plans in Zimbabwe  | 5  |
|                             | ii | Design a sketch residential layout plan to regularise the Epoch mine residential units while spelling out important design standards followed in the process.   | 20 |
| <b>QUESTION 4: 25 marks</b> |    |   |    |
|                             | a  | Examine the relationship between 'land use suitability' and 'land use needs' in spatial planning.   | 10 |
|                             | b  | Develop a strategy to assess 'land use suitability' using Geographic Information System (GIS) and remote sensing based methods.   | 15 |

**END OF EXAMINATION**