



GWANDA STATE UNIVERSITY

FACULTY OF ENGINEERING AND ENVIRONMENT

DEPARTMENT OF GEOMATICS AND SURVEYING

ENVIRONMENTAL DESIGN/PLANNING

EGS 2213

Final Examination Paper

MAY/JUNE 2023

This examination paper consists of 2 printed pages

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Miss B. Mwabvu

INSTRUCTIONS

1. Answer all 4 questions
2. Each question carries 25 marks
3. Use of calculators is permissible, but programmable calculators are not allowed in the exam

Additional Requirements

If doubt exists as to the interpretation of any question, the candidate is urged to submit with the answer, a clear statement of any assumptions made.

MARK ALLOCATION

Question 1 to 4	25Marks
Part Questions	As shown in each part question
Total Attainable	100

Question 1**25**

Examine the components of the following spatial planning frameworks:

- a) Regional plan
- b) Master Plan
- c) Local Development Plan

Question 2**25**

- a) Explain the contribution of Climate knowledge in environmental design and planning. [15]
- b) The advent of new technology has aided the geomatics profession. Describe how the use of UAVs aids the efficient design of the environment. [10]

Question 3**25**

Discuss how the knowledge of the following can assist environmental designers in their projects of interest:

- a) Remote Sensing [12]
- b) Geographical Information System (GIS) [13]

Question 4**25**

- a) By using Epoch Mine University Campus Site as your case study, map out strategic land uses [10]
- (b) What do you understand by Environmental Management? How does it contribute to effective environmental design and planning? [15]