



GWANDA STATE UNIVERSITY
FACULTY OF ENGINEERING AND ENVIRONMENT
DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL SCIENCE

RANGELAND MANAGEMENT

NGE2204

Final Examination Paper

April 2025

This examination paper consists of 2 pages

Time Allowed: 3 hours

INSTRUCTIONS

1. Answer any **four** questions.
2. Each question carries 25 marks.
3. Credit will be given to answers that are clear, illustrated, concise, and grammatically well-constructed.

1. Describe the main characteristics of rangeland ecosystems and how these influence biodiversity and productivity. [25]

2. a) Classify the different types and categories of plants found in rangelands. [12]
b) Explain the role of these plants in the ecosystem. [13]

3. Explore various foraging strategies used in rangeland management. [25]

4. Briefly explain the following terms as used in rangeland management:
 - I. range succession
 - II. endangered species
 - III. plant morphology
 - IV. invasive plants
 - V. climate change mitigation. [25]

5. Discuss the concept of carrying capacity in rangeland management. [25]

6. Evaluate the role of technology in monitoring grazing impacts on rangelands. [25]

END OF PAPER