



GWANDA STATE UNIVERSITY

FACULTY OF ENGINEERING AND ENVIRONMENT

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL SCIENCE

HYDROLOGY

NES1204

Main Examination Paper

JUNE 2024

This examination paper consists of 2 pages.

Time Allowed: 3 hours

Examiner's Name: Mr. Magenge

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. Define the scope of hydrology and explain its interdisciplinary nature. [25]
2. Discuss the primary factors influencing the distribution of water resources globally. [25]
- 3a. Discuss the socio-economic implications of dam failures. [12]
- b. Evaluate measures which can be taken to mitigate hydrological hazards. [13]
4. Discuss the concept of Eco hydrological feedbacks and provide examples of positive and negative feedback mechanisms. [25]
5. Evaluate the effectiveness of Integrated Water Resources Management (IWRM) in addressing water scarcity and promoting water security at the local, national, and regional levels. [25]
6. Discuss the problems militating against water resources management and development. [25]

THE END