



GWANDA STATE UNIVERSITY

FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL SCIENCE

ENVIRONMENTAL HEALTH AND SAFETY: NGE 2202

Final Examination Paper

JUNE 2025

This examination paper consists of 3 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. a. Outline the importance of implementing an Occupational Health and Safety Management System (OHSM) at an organisation. [12]
- b. Discuss the roles of major actors in the Environmental health and safety at work place. [13]
2. a. Explain the following terms
 - i. Health [3]
 - ii. Health hazard [3]
- b. Distinguish between a Hazard and a Risk. [4]
- c. Examine the Occupational Safety and Health Hierarchy of hazard control giving relevant examples [15]
3. a. Distinguish between an accident and a near miss [6]
- b. Outline any two key dimensions of the Health Belief Model (HBM) [4]
- c. Explain the origins of the domino theory of accident causation and its applicability. [15]
4. a. Outline the significant roles of a supervisor in the management of safety and health system. [8]
- b. Highlight key principles of international and national occupational health and safety policies [8]
- c. State 4 types of OSH audits and briefly explain any two audit types of your choice [9]
5. a. Briefly explain the concepts ergonomics and highlight areas it covers at a workplace. [6]
- b. Explain the following concepts in ergonomics studies
 - i. Physiological basis of ergonomics [3]
 - ii. Environmental factors [3]
 - iii. Physiology of the worker [3]
- c. Outline the multidisciplinary nature of toxicology [10]
6. a. Define the term Pneumoconiosis [3]
- b. Distinguish between Criminal law and civil law [4]
- c. Briefly explain the provisions of the following occupational health and safety management systems international standards giving relevant examples.
 - i. ISO 45001 [6]
 - ii. ISO 9001 [6]
 - iii. ISO 14001 [6]

THE END