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QUALIFICATION : BACHELOR of SCIENCE HONOURS	
QUALIFICATION CODE: 08BOSH	LEVEL:
COURSE: ENVIRONMENTAL POLLUTION, MONITORING AND REMEDATION	COURSE CODE: EPM821S
DATE: JANUARY 2025	SESSION: 1
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY: QUESTION PAPER

EXAMINER: *Ms Mary Mutwa*

MODERATOR: *Prof James Abah*

INSTRUCTIONS

1. Answer all questions on the separate answer sheet.
2. Please write neatly and legibly.
3. Do not use the left side margin of the exam paper. This must be allowed for the examiner.
4. No books, notes and other additional aids are allowed.
5. Mark all answers clearly with their respective question numbers.

This paper consists of 2 pages including this front page

QUESTION 1: [20]

1.1 Define the following: (10)

- a) EIA report
- b) Water balance
- c) Watershed
- d) Anoxic Limestone Drains (ALDs)
- e) Life Cycle Assessment (LCA)

1.2 What are the main factors to be considered when introducing or amending an EIA System? (8)

1.3 Explain earthquake in terms of tailing dam failure. (2)

QUESTION 2: [20]

2.1 What are the seven specific principles of EIA application? (7)

2.2 List any five principles of Green Chemistry. (5)

2.3 What are the five factors in inherent safety of chemical processes? (5)

2.4 What are the main categories of saline soil reclamation methods? (3)

QUESTION 3: [20]

3.1 Outline a typical sequence for managing hazardous wastes and explain each step (10)

3.2 What are the consequences of high salinity in soil and water for plant growth? (6)

3.3. Differentiate between: (4)

- a) radiative forcing and climate forcing
- b) Surveys and Surveillance (in water quality monitoring)

QUESTION 4: [20]

4.1 Name and explain four phytoremediation strategies that are used to remediate metal-contaminated sites. (8)

4.2 Name and explain the four categories of chemical reactions are available to treat hazardous wastes (8)

4.3 The Terms of Reference determines the relevance and utility of the EIA work for project design and management, and for final decision-making. What components should be included in the Terms of Reference document? (4)

QUESTION 5: [20]

5.1 Outline and explain the sequence of steps for a typical treatment plant for surface water (14)

5.2 What are the components of Hazard Incident Response (5)

5.3 UN actions related to the environment can be described in terms of 3 broad periods. Which of the 3 periods does the current year belong to? (1)

END OF QUESTION PAPER