



FACULTY OF ENGINEERING
END OF SEMESTER EXAMINATIONS - APRIL 2025

PROGRAMME: BACHELOR OF ELECTRICAL AND CONTROL ENGINEERING

YEAR/SEM: YEAR 3/SEMESTER 2

COURSE CODE: HUM3161

NAME: ENVIRONMENTAL ENGINEERING

DATE: 2025-04-24

TIME: 2:00-5:00PM

INSTRUCTIONS TO CANDIDATES:

1. Read the instructions very carefully
2. The time allowed for this examination is STRICTLY three hours
3. Read each question carefully before you attempt and allocate your time equally between all the Sections
4. Write clearly and legibly. Illegible handwriting cannot be marked
5. Number the questions you have attempted
6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks
7. Any examination malpractice detected will lead to automatic disqualification.

DO NOT WRITE ANYTHING ON THE QUESTION PAPER

Section A Attempt any TWO questions

Question 1:

1. a. What are the objectives of developing and implementing an Environmental Management Plan? (14 marks)
- b. What are the costs involved in developing and implementing an Environmental Management System? (06 marks)

Question 2:

1. a. Mention some of the benefits of developing and implementing an Environmental Management System. (10 marks)
- b. Define the following terminologies used in International Law. (10 marks)
 - i. Treaty
 - ii. Soft Law
 - iii. Protocol
 - iv. Convention
 - v. Declaration

Question 3:

8. Define the following terms: 2 marks each. (20 marks)
 - i. EMS
 - ii. Environmental monitoring
 - iii. Natural resources
 - iv. Climate change
 - v. Biodiversity
 - vi. Renewable Resources
 - vii. Green Technology
 - viii. Corporate Social Responsibility
 - ix. Externalities
 - x. Pareto Efficiency

Question 4:

- a. Explain the objectives of Sustainable Development. (14 marks)
- b. Elaborate on the pillars of Environmental Policy that guide the development and implementation of an Environmental Management System. (06 marks)

Section B Attempt any THREE questions

Question 1:

D

6. Discuss the environmental challenges that the world is facing today. (20 marks)

Question 2:

Discuss the key steps for creating an Environmental Management System in an organization/company. (20 marks)

Question 3:

2. Briefly the major environmental problems faced in Uganda today. (20 marks)

Question 4:

4. a) Briefly discuss any five (5) basic principles of Environmental law. (10 marks)
b) Explain any five (5) methods of impact quantification in EIA. (10 marks)