

EGERTON

UNIVERSITY



UNIVERSITY EXAMINATION

REGULAR-NJORO CAMPUS

EXAM SESSION, 2024/2025 ACADEMIC YEAR

THIRD-YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

IN ENVIRONMENTAL SCIENCE

ENSC 334: OCCUPATIONAL HEALTH AND SAFETY

STREAM: B.Sc (ENSC & TOHM)

TIME: 2HRS

EXAMINATION SESSION:

YEAR: 2025

INSTRUCTION

- (i). Attempt all the questions in section A and any TWO in section B
- (ii). Do not write on the question paper
- (iii). Illustrate your answer with suitable diagrams and formulas where appropriate

SECTION A (40 MARKS)

Question One

Distinguish between the following terms as user in Occupational Health and safety

- a) Workers' health surveillance and working environment surveillance (2 Marks)
- b) Risk likelihood and Risk severity (2 Marks)
- c) Occupational diseases and Occupational disorders (2 Marks)
- d) Accident prevention and Accident control (2 Marks)

Question Two

- (a) Briefly explain the importance of occupational safety and health in a workplace.

(6 Marks)

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- (b) Elaborate on the importance of communication in preventing occupational risks in a workplace (4 Marks)

Question Three

- (a) Explain the cause and effects of occupational musculoskeletal disorder. (6 Marks)
(b) Elaborate on how fire safety can be promoted in a workplace. (4 Marks)

Question Four

- (a) Discuss the elements of the work environment in an occupational setting of a manufacturing industry (6 Marks)
(b) Explain using examples how engineering controls are used to control workplace hazards in a welding workshop (4 Marks)

SECTION B (30 MARKS)

Question Five

Imagine that you are an employer. Describe the steps you would take to carry out an occupational risk assessment in your workplace (15 Marks)

Question Six

Imagine that you have been assigned the role of an inspection team leader to inspect a food processing industry. Discuss what is involved in the inspection and post-inspection phase of the said industry. (15 Marks)

Question Seven

“The responsibility of government, employers, and employees should be complementary and mutually reinforcing in the common good of promoting occupational health and safety”. Discuss (15 Marks)
