



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SPECIAL/SUPPLEMENTARY EXAMINATIONS
FOURTH YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES
FIRST SEMESTER, 2024/2025
(AUGUST, 2025)

MELS 183: OCCUPATIONAL HEALTH AND SAFETY

STREAM: Y4 S1

TIME: 2 HOURS

DAY: MONDAY, 3:00-5:00 PM

DATE: 18/08/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer ALL questions in Section A and in Section B. Answer question ONE (Compulsory) and any other question in section C.***

SECTION A (ANSWER ALL QUESTIONS)-20 MARKS

- Which of the following best defines occupational health?
 - The study of human diseases
 - The promotion and maintenance of physical, mental, and social well-being of workers
 - The treatment of industrial injuries
 - Prevention of environmental pollution
- The principle of anticipation in occupational health refers to:
 - Reacting after incidents occur
 - Forecasting potential workplace hazards before they arise
 - Evaluating accident reports
 - Waiting for employee complaints
- Which of the following is a biological hazard in the workplace?
 - Ionizing radiation
 - Excessive heat
 - Infectious microorganisms
 - Sharp metal fragments
- The Occupational Safety and Health Act (OSHA) is primarily designed to:
 - Promote industrialization
 - Enforce taxation
 - Ensure safe and healthy working conditions
 - Increase productivity

5. Which organization is responsible for global occupational health standards?
 - A. WHO
 - B. ILO
 - C. FAO
 - D. UNESCO
6. Which of the following is not a principle of occupational health and safety?
 - A. Prevention
 - B. Promotion
 - C. Profit maximization
 - D. Protection
7. The main purpose of pre-employment medical examinations is to:
 - A. Diagnose chronic illnesses
 - B. Disqualify unfit candidates
 - C. Ensure fitness for the specific job role
 - D. Prevent malingering
8. Which of the following is a key function of a workplace first aider?
 - A. Filling patient files
 - B. Giving vaccines
 - C. Providing initial care during an emergency
 - D. All of the above
9. The most appropriate control measure for chemical hazards is?
 - A. Counseling
 - B. Ventilation and substitution
 - C. Social distancing
 - D. Reducing work hours
10. A health surveillance program in occupational health aims to:
 - A. Track financial losses
 - B. Monitor worker health related to exposure risks
 - C. Record office attendance
 - D. Ensure lunch breaks are taken
11. Which of the following best describes ergonomic hazards?
 - A. Slippery floors
 - B. Poor lighting
 - C. Repetitive movements and poor workstation design
 - D. High voltage equipment
12. The term “industrial hygiene” primarily refers to?
 - A. Factory cleanliness
 - B. Use of disinfectants in healthcare
 - C. Identification and control of workplace hazards
 - D. Ensuring workers wash hands
13. Epidemiology in occupational health is important because it?
 - A. Helps treat illnesses faster
 - B. Tracks disease trends and identifies work-related health risks
 - C. Ensures equipment safety
 - D. Improves lighting systems

14. One of the roles of occupational health providers in emergencies is to:
 - A. Assess salaries
 - B. Oversee production
 - C. Manage medical response and emergency planning
 - D. Control work shifts
15. Psychological hazards in the workplace include?
 - A. Overcrowding
 - B. Chemical spills
 - C. Job stress and bullying
 - D. Excessive lighting
16. The legal responsibility for maintaining a safe work environment lies with?
 - A. Only government inspectors
 - B. The employees
 - C. The employer and employees jointly
 - D. The employer
17. One of the key components of an effective health and safety program is?
 - A. Daily evaluation
 - B. Employee health education and training
 - C. Product marketing
 - D. Profit analysis
18. Which of the following is not part of the hierarchy of hazard control?
 - A. Elimination
 - B. Substitution
 - C. Consultation
 - D. Engineering controls
19. Return-to-work rehabilitation programs are designed to?
 - A. Train new staff
 - B. Replace unproductive workers
 - C. Help injured or ill workers reintegrate safely
 - D. Extend sick leave
20. Occupational diseases are best prevented by?
 - A. Waiting for symptoms to appear
 - B. Early diagnosis
 - C. Eliminating exposure to workplace hazards
 - D. Restricting employment

SECTION B-STRUCTURED QUESTIONS (ANSWER ALL QUESTIONS)-20 MARKS

1. List any five workplace hazards and give one example for each (5 marks)
2. Briefly describe the key roles of a health care provider in occupational health services (5 Marks)
3. Explain the concept of the hierarchy of hazard control and list its five levels (5 Marks)
4. Highlight the objectives of occupational health (5 Marks)

SECTION C (QUESTION ONE IS COMPULSORY THEN CHOOSE ANY

OTHER

QUESTION ONE (15MKS)

Discuss the anticipation, recognition, evaluation, and control (AREC) approach to occupational hazards.

QUESTION TWO (15MKS)

Explain the legal and regulatory aspects of occupational health and safety in Kenya.

QUESTION THREE (15MKS)

Explain the key roles of a healthcare provider in occupational health services and how they help improve workplace safety and health.