



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT
BACHELOR OF SCIENCE IN HEALTH SYSTEMS MANAGEMENT AND
DEVELOPMENT
END OF SECOND SEMESTER EXAMINATION MAY-AUGUST 2025
HMD 228 OCCUPATIONAL HEALTH AND SAFETY

TIME: Two Hours

Date : 7 August 2025

TIME : Two (2) Hours Start----11.15 Stop 1.15PM

INSTRUCTIONS TO CANDIDATES

- 1) This exam is out of 70 marks
- 2) Section-A is compulsory with a Total of 30 Marks
- 3) Answer any TWO (2) questions in Section B with 40 Marks
- 4) Read carefully the additional instructions preceding each section.

SECTION A (30 Marks)

1. Read the case below and answer all questions. (a to f)

XYZ Textiles

XYZ Textiles Ltd. is a large garment factory with 200 workers engaged in fabric dyeing, sewing, and quality control. Workers report frequent exposure to chemical fumes, loud machinery noise, and prolonged standing leading to musculoskeletal disorders. Recently, two workers fainted due to heat stress, and another suffered an electric shock from faulty wiring.

Questions:

- a. Identify five occupational hazards at XYZ Textiles Ltd. (1.5 Marks)
 - b. Recommend five ergonomic solutions to reduce musculoskeletal disorders. (2.5 Marks)
 - c. List five electrical safety measures to prevent shocks and fires. (5 Marks)
 - d. Outline three health risks of chemical exposure (1.5 Marks)
 - e. Propose five management strategies to reduce workplace fatigue. (2.5 Marks)
 - f. State three roles of trade unions in promoting worker safety. (3 Marks)
2. State the purpose of a Risk Assessment in workplace safety (2 Marks)
 3. List three common physical hazards in a construction site. (3 Marks)
 4. Name two legislations (laws) that govern occupational health in your country. (2 Marks)
 5. Using examples outline five types of Personal Protective Equipment (PPE) important? Mention two types. (2.5 Marks)
 6. State five key steps in fire emergency preparedness at the workplace? (2.5 Marks)
 7. Highlight the term near-miss incident and why it should be reported. (2 Marks)

SECTION B (40 Marks)

Answer any TWO questions.

8. Chemical Hazards

- a. Classify three types of hazardous chemicals found in industries. (6 Marks)
- b. Discuss five control measures for safe chemical handling. (10 Marks)
- c. Describe two acute and two chronic health effects of chemical exposure. (4 Marks)

9. Occupational Health Audits

- a. Explain "health audit" in one sentence. (1 Mark)
- b. Analyze three benefits of regular health audits for a manufacturing plant. (9 Marks)
- c. Explain five common non-compliance issues an audit might reveal. (10 Marks)

10. OSHA Kenya

- a. State the year OSHA Kenya was established and its governing law. (2 Marks)
- b. Explain five duties of OSHA Kenya inspectors. (10 Marks)
- c. Discuss three penalties for non-compliance with OSHA regulations. (6 Marks)
- d. Summarize OSHA Kenya's impact on industrial safety in two points. (2 Marks)