

THE NATIONAL UNIVERSITY OF LESOTHO

BSc. ENVIRONMENTAL HEALTH

END OF SEMESTER EXAMINATIONS-JANUARY 2024

OCCUPATIONAL HEALTH, SAFETY AND HYGIENE (EHS3212)

DURATION: 3 HRS

MARKS:100

INSTRUCTIONS:

- Answer **ALL** questions
- Each question must be started on a new page

QUESTION1**[4*5]**

Explain the following terms and phrases as uses in Occupational Health, Safety and Hygiene:

- a) Permissible Exposure Limit (PEL);
- b) Asphyxiation;
- c) Oxidizing materials;
- d) Whirling hygrometer;
- e) Whole-body vibration.

QUESTION 2

A factory worker is assigned to enter a confined space to conduct routine equipment maintenance. While inside, the worker encounters unexpected hazardous fumes. They need to promptly don respiratory protection, exit the confined space, and report the hazardous fumes to the appropriate personnel.

- a) Mention the steps the factory worker should take to protect when encountering unexpected hazardous fumes in the confined space. [10]
- b) Discuss the process of reporting the above incident. [10]

QUESTION 3

A restaurant kitchen staff member notices that the fire extinguisher is missing from its designated location. They need to report this immediately to the manager to ensure that the kitchen is equipped with necessary fire safety equipment. For example, the staff member might take a photo of the missing fire extinguisher and inform the manager verbally or through a written report.

- a) Explain how the restaurant staff member effectively communicate the missing fire extinguisher to the manager to ensure a prompt response. [10]

- b) Explain the protocols the restaurant should have in place for regular checks and maintenance of fire safety equipment. [10]
- c) Discuss the role of leadership and management in fostering a culture of safety and compliance within the restaurant. [15]

QUESTION 4

A manufacturing plant employee notices a strong smell of gas in the production area. Upon further investigation, they discover a gas leak from a faulty valve. The employee needs to immediately evacuate the area, alert the supervisor or safety officer, and ensure that the necessary emergency response procedures are followed to prevent any potential fire or explosion hazards.

As an Environmental Health Practitioner, critically analyse the given scenario. [25]