



"Investing in Africa's Future"
COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES
DEPARTMENT OF HEALTH SCIENCES
MASTERS IN PUBLIC HEALTH (MPH)
SPH 537 OCCUPATIONAL HEALTH EXAMINATION
END OF SEMESTER EXAMINATIONS

APRIL/MAY 2022

LECTURER: J MANDOWA

DURATION: 3 HOURS

INSTRUCTIONS

Answer **ANY FOUR (4)** questions in this paper.

Each full question carries 25 marks.

Credit will be awarded for logical, systematic and neat presentations

Each question to be answered in a new clean sheet

QUESTION 1

Chidembo Company has an employee compliment of 1000. Within a particular year, the company recorded 2000 near misses, 15 injuries that resulted in employees seeking first aid treatment but returning back to work and 5 injuries that resulted in employees failing to return for duty for at least 1 shift. The total lost days for the year were 500 days. Top management of the company is worried about the injuries that are occurring in the organization and want to make concrete decision to avert the recurrence of the incident. Based on the following narration, calculate the following

- i) Lost time injury frequency rate [5]
- ii) Injury severity rate [5]
- iii) Based on the calculated rates in (i) and (ii), provide a technical interpretation to the company's top management to enable them to make a decision [5]
- iv) Differentiate leading and lagging indicators in Occupational Health performance measurement [10]

QUESTION 2

- a) Explain in detail the 4 E's of accident prevention in a workplace environment and how they are useful in the management of occupational health risks at the workplace [8]
- b) Making reference to any two Vision Zero golden rules of your choice, explain how they can be applied to ensure the prevention of occupational injuries and diseases in industry [10]
- c) An organization X has reported an occupational accident involving Taurai Simango who was trapped by a machine trying to repair machinery whilst it was in motion. As an occupational health practitioner for the workplace, you have been approached by senior management to initiate the accident investigation. Explain in detail the approach you will take to effectively investigate the accident so as to ensure the avoidance of a recurrence [7]

QUESTION 3

Terry and Jones Holdings, an organization involved in Timber processing has been experiencing an unprecedented increase in the number of musculoskeletal disorders amongst its employees. Management of the organization has decided to implement a risk management programme to avert the occupational health risk. With specific reference to risk factors of Musculoskeletal disorders, discuss in detail how you would apply the principle of risk management to effectively deal with the challenge of musculoskeletal disorders experienced by workers at Terry and Jones Holdings [25]

QUESTION 4

- a) Explain the applicability of ILO Convention 155 and C 161 in occupational health management [5]
- b) Discuss how the following Occupational Health Laws can be applied at the workplace to manage occupational health risks
 - (i) Pneumoconiosis Act Chapter 15:08 [5]
 - (ii) S. I 68 of 1990[5]
 - (iii) Labour Act Chapter 28:01[5]
- c) Company X has purchased agrochemicals to use in controlling pests on its tobacco field. As an Occupational Health Practitioner, explain what control measures you are going to put in place to ensure safe handling of the agrochemicals [5]

QUESTION 5

Jasper Enterprises is a recently established business enterprise involved in growing and processing of tea for export. As a condition for the company to export, it is required to comply with the internationally acclaimed ISO 45001 Occupational Safety and Health Management System Standard. As an Occupational Health Practitioner, you have been tasked by the organization to design an occupational health management system for the business enterprise. Discuss any five elements of an occupational health management system you will include in the company's occupational health management system to ensure its efficacy in prevention of occupational health risks in the organization [25].

END OF EXAMINATION