



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

THIRD YEAR SECOND TRIMESTER

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN NURSING**

COURSE CODE: NCN 321

COURSE TITLE: OCCUPATIONAL HEALTH AND SAFETY

DATE: Monday 8th April, 2024

TIME: 8.00a.m. – 11.00a.m.

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in this paper.

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 10 Printed Pages. Please Turn Over. ►

MULTIPLE CHOICE QUESTIONS**(60 MARKS)**

1. Which of the following is an essential component of workplace safety?
 - a) Counselling
 - b) Proper ventilation
 - c) Team-building exercises
 - d) Lunch breaks
2. Why is it important to keep work areas clean and organized?
 - a) It looks better for visitors
 - b) It improves productivity
 - c) It prevents accidents and injuries
 - d) It makes the boss happy
3. 5. What should you do if you encounter a fire in the workplace?
 - a) call the fire brigade in your area before you evacuate
 - b) Attempt to extinguish the fire immediately
 - c) Activate the fire alarm and evacuate
 - d) Call the manager on duty to alert all the workers about the fire
4. 6. What is the purpose of safety signs in the workplace?
 - a) To show that the employer is OSHA compliant
 - b) To provide directions to the emergency alarms
 - c) To indicate potential hazards and provide safety instructions
 - d) To be used during employee emergency training
5. 7. Which of the hazards below is the most prevalent in many workplaces?
 - a) Loud noises
 - b) Stressful deadlines
 - c) Uncomfortable chairs
 - d) Chemical spills
6. 8. What is the purpose of an emergency evacuation plan?
 - a) To create a sense of urgency among employees
 - b) To test the fire alarm system and all emergency procedures at the workplace
 - c) To provide a blueprint for safe and orderly evacuation during emergencies
 - d) To simulate emergency situations for training purposes
7. 9. What does the acronym "OSHA" stand for?
 - a) Occupational Safety and Health Administration
 - b) Occupational Standard for Hazard Assessment
 - c) Organization for Safety and Hazard Awareness
 - d) Office of Security and Health Administration
8. 10. Which of the following is an example of an ergonomic hazard in the workplace?
 - a) Slippery floors
 - b) Sitting while working
 - c) Poorly designed workstations
 - d) Inadequate lighting causing one to strain

- A. Provide a bright, cheerful place to work
 - B. Safeguard the safety and health of all employees
 - C. Give everyone their very own copy of company safety policy
 - D. Provide personalised hard hats in a variety of colour
57. What will blue, circular signs with white pictograms typically indicate?
- A. That a certain action in the area is prohibited
 - B. That wearing a certain type of PPE in the area is mandatory
 - C. That certain types of machinery are subject to faults
 - D. That you should be aware of nearby hazards
58. How many main types of fire extinguisher are there?
- A. 2
 - B. 4
 - C. 6
 - D. 8
59. under the OSHA act, a ----- is one that is known to be hazardous taking into account the standard of knowledge of the industry.
- a) Recognizes hazard
 - b) Internal hazard
 - c) Constitutional hazard
 - d) Implicit hazard
60. Under Section 11 of the OSH Act, the _____ can be exercised when employees are exposed to a dangerous condition posing the risk of serious injury or death and when there is insufficient time.
- a) Power of exception
 - b) Right to strike
 - c) Right to refuse
 - d) Agency-shop clause

SHORT ANSWER QUESTIONS (20 MARKS)

1. You have an emergency in your organization. What actions will you undertake in
 - a. Response to the emergency (10 Marks).
 - b. Recovery from the emergency (10 Marks)

LONG ANSWER QUESTIONS (20 MARKS)

1. As the occupational health nurse explain 4 roles that you will play at the workplace and in each role, describe what each situations will be like. (20 Marks)

9. What is the purpose of a safety data sheet (SDS)?
- To show that workers' data is captured on a sheet
 - To provide information on hazardous chemicals
 - To schedule safety training sessions with workers names
 - To document workplace accidents and near hits
10. Which of the following is NOT a type of fall protection equipment?
- Safety harness
 - Fork lift
 - Guardrails
 - Safety nets
11. 13. What does the term "LOTO" stand for in the context of workplace safety?
- Lock Out, Tag Out
 - Limited Office Time Only
 - Log of Training Opportunity
 - Lost Object Tracking Order
12. 14. What should you do if you suspect a gas leak in the workplace?
- Light a match to identify the source
 - Open all windows and doors to ventilate the area
 - Report it immediately and evacuate the premises
 - Remove the gas cylinder to eliminate the hazard
13. The following are examples of a biological hazard in the workplace except.
- Patient vomitus
 - Urine on the floor
 - Blood-borne pathogens
 - Slippery floor
14. What is the purpose of regular safety training sessions?
- To cultivate a positive workplace culture
 - To improve employee workplace relationships and elevate their morale
 - To keep employees up-to-date on safety procedures
 - To ensure that there is no fire accident that will occur at the workplace
15. 17. Which of the following is an example of a fire prevention measure?
- Having an emergency assembly point
 - Storing flammable materials near heat sources
 - Regularly inspecting and maintaining fire extinguishers
 - Smoking in designated areas only
16. 18. What should you do before using any machinery or equipment in the workplace?
- Study the safety signs for increased efficiency
 - It would be better to use an old equipment which you are familiar with
 - Inspect it for any damage or defects
 - Ask a coworker to demonstrate its use
17. What should you do if you witness a coworker experiencing an electric shock?

- a) Attempt to switch off the mains power switch
 - b) Hit the person with a wooden plank to release him from the electric current.
 - c) Call for emergency medical assistance and do not touch the person
 - d) Stay with him to ensure consciousness until help arrives
18. Which of the following is an example of a safety hazard related to electrical equipment?
- a) Using equipment with frayed power cords
 - b) Keeping the office temperature too high
 - c) Straining to look at the computer screen when there is a power outage
 - d) Using many electrical gadgets in the same office for long
19. What should you do if you are unsure about the proper use of a chemical or substance in the workplace?
- a) Experiment and see what happens
 - b) Ask a coworker for advice
 - c) Read the safety data sheet or consult the manufacturer's instructions
 - d) Substitute it for the one you normally use since this is a new one at the workplace
20. What is the main purpose of a safety committee in the workplace?
- a) To organize company OSHA audits and reports
 - b) To call for assistance in case of accidents
 - c) To promote a safety culture and address safety concerns
 - d) To carry out interdepartmental safety training needs
21. Which of the following is an example of a hazard associated with working at heights?
- a) Slippery floors in offices on higher floors
 - b) Mental illness at the workplace
 - c) Slips and trips on uneven surfaces
 - d) Falling from ladders or scaffolds
22. What is the purpose of personal hygiene practices in the workplace?
- a) To ensure that the worker is well groomed
 - b) To work in an environment safe from stress
 - c) To prevent the spread of germs and diseases
 - d) To ensure that all gender have adequate rest-rooms
23. What is the purpose of safety inspections in the workplace?
- a) To reward employers and employees who are safe at work
 - b) To create a positive safe work culture for management
 - c) To identify and correct potential hazards or safety violations
 - d) To slow work routines and inspect the risks in the building
24. Which of the following is an example of safety precaution when working with hazardous chemicals?
- a) Eliminating the chemical as it enters the premises
 - b) Covering your mouth and nose to avoid contamination
 - c) Having only one person trained to deal with the chemicals
 - d) Properly storing and labeling chemicals

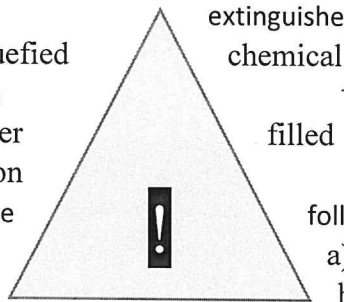
25. What should you do if you are unsure about the safety procedures for a specific task?
- a) You have the right to refuse to undertake the task
 - b) Ask a coworker who seems knowledgeable
 - c) Skip the task and move on to something else
 - d) Consult your supervisor or a safety professional
- Answer: d) Consult your supervisor or a safety professional
26. Ear muffs reduces the noise level by:
- a) 8 – 10 dB
 - b) 10 – 15 dB
 - c) 50 – 40 dB
 - d) 15 – 50 dB
27. A sample of handwriting of the worker obtained during pre-placement examination is valuable later on, in workers exposed to:
- a) Manganese
 - b) Lead
 - c) Mercury
 - d) Carbon disulphide
28. A system for hazard prevention and control includes:
- a) Workplace safety and health inspections
 - b) Hazard reporting system
 - c) Accident and near-miss incident investigation
 - d) All the above
29. A system for safety and health training includes all but one of the following:
- a) Documentation for training conducted
 - b) Hazard controls including guarding and ventilation
 - c) New employee orientation
 - d) Training in the use of Personal Protective Equipment
30. A safety and health management system is likely to be ineffective if:
- a) Top management does not establish a clear priority for safety and health.
 - b) There is no effective process to involve employees in safety and health issues.
 - c) Employees and supervisors are not held accountable for safety and health.
 - d) All of the above.
31. To have an effective safety and health management system all policies and procedures must be written.
- a) True
 - b) False
32. A nurse is working in an occupational health setting. Which of the following roles will the nurse most likely have?
- a) Clinician/Practitioner
 - b) Administrator
 - c) Educator
 - d) Consultant
33. A nurse in the occupational health arena is implementing a secondary prevention strategy. Which of the following best describes the action that will be taken by the nurse?

- a) Providing education on safety in the workplace to prevent injury
 - b) Working with workers who have diabetes to ensure they have appropriate medications
 - c) Screening for hearing loss resulting from noise levels in the plants
 - d) Ensuring that a person with cardiovascular disease attends a rehab program
34. An employer offers a limited duty program after an employee has experienced a cumulative trauma injury. Which of the following levels of prevention is being implemented?
- a) Primary prevention
 - b) Secondary prevention
 - c) Tertiary prevention
 - d) Assessment
35. An occupational health nurse is assessing workplace hazards. Which of the following would be the best method for the nurse to use?
- a. Review incident reports.
 - b. Walk through the worksite.
 - c. Interview key employees.
 - d. Read the Standard Industrial Classification (SIC) Code.
36. Which types of industries are noted for high degrees of hazards associated with the work?
- a. Data entry, animal rescue, and hospice
 - b. Engineering, science, and laboratories
 - c. Manufacturing, mining, and agriculture
 - d. Aeronautics, plastics, and nursing
37. A nurse is assessing host factors as part of the epidemiologic triad. Which of the following factors would the nurse most likely assess?
- a. Crowding
 - b. Shift work
 - c. Worker's family
 - d. Chemical exposure
38. Which population is at the greatest risk for experiencing work-related accidents with subsequent injuries?
- a. Workers of child-bearing age
 - b. Workers with less than 1 year of experience
 - c. Workers with diminished sensory abilities
 - d. Workers with chronic illnesses
39. A nurse is assessing a worker who has had a health reaction to a "safe" low-level exposure. Which of the following most likely describes what has happened?
- a. An allergic reaction
 - b. A compromised immune system
 - c. Hypersusceptibility
 - d. Malnutrition
40. A nurse is conducting an occupational health assessment. Which of the following best describes the rationale for this assessment?
- a. It is required by the Occupational Safety and Health Act (OSHA).
 - b. It is required by National Institute for Occupational Safety and Health (NIOSH).
 - c. It helps to identify agent and host factors that place employees at risk.
 - d. It helps to educate workers about potential hazards.
41. An occupational health nurse is assessing the need for safety data sheets (SDSs) at the worksite. Which of the following items would require an SDS?
- a. Hand soap

- b. Eye goggles
- c. Aprons
- d. Earplugs

42. Which fire

- a) Liquefied
- b) CO₂
- c) Water
- d) Halon



extinguisher is suitable for live electrical fire?

chemical

filled

43. Which of the

following is not the case of electric fire?

- a) Overloading on wires
- b) Loose connection
- c) Overuse of WiFi
- d) Electric short circuit

44. Which of the following statements about natural hazards is NOT true?

- a) Hazards are natural processes that CAN be dangerous, but have not yet caused damage.
- b) Hazards become disasters when they harm many people.
- c) Some hazards can be predicted, but usually can't be stopped.
- d) Hazards are natural processes that harm people on a regular basis.

45. A risk assessment is...

- a) a quick check to see if there is anything on the floor
- b) an assessment of the hazards and risks associated with an activity
- c) a way to check you have been paid correctly
- d) a way of recording accidents that happen on site

46. What is the second step in a risk assessment?

- a) Decide who may be harmed
- b) Record your findings
- c) Identify the hazard
- d) Evaluate the risk

47. Health and Safety at work Act requires Employers to

- a) Carry out regular risk assessments
- b) Ask you to carry out a risk assessment
- c) Request the local Council to carry out Risk assessment
- d) Only carry out Risk Assessments if the employees are more than 5

48. What is the best hazard analysis method to understand the deviations that could occur in a chemical process?

- a) Human Performance Analysis
- b) Hazard and Operability Analysis
- c) Job Safety Analysis
- d) Audit and Causal Analysis

48.

What does the above symbol mean? The color inside the triangle is yellow.

- a) It is a mandatory sign
- b) It is a warning sign
- c) It is a prohibitory sign
- d) It is a cautionary sign

49. What does the below sign indicate?



- a) An action is mandatory
 - b) A hazard is present Danger ahead
 - c) An action is prohibited
 - d) A danger sign
50. Epidemiologists are interested in learning about
- a) the causes of diseases and how to cure or control them
 - b) the frequency and geographic distribution of diseases
 - c) the causal relationships between diseases
 - d) all of the above
51. An organization needs to avoid _____ culture and encourage
52. _____ culture for the mental health of the workers.
- a) survival
 - b) growth
 - c) a goal oriented
 - d) thriving
53. Organization focuses on _____ experience whereas counselling
54. focuses on _____ experience.
- a) Emergency
 - b) Objective
 - c) Subjective
 - d) Historical
55. What is the most important reason why all accidents should be investigated and recorded?
- A. Comply with health and safety law
 - B. Satisfy the enforcement officer
 - C. Something to read on the loo
 - D. Prevent similar accidents in the future
56. Under the Health and Safety at Work Act 1974, an employer must: