



(University of Choice)

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

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

SECOND YEAR SECOND TRIMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN OCCUPATIONAL HEALTH AND SAFETY**

COURSE CODE: NCO 226

COURSE TITLE: OCCUPATIONAL AND WORK RELATED ILLNESSES

DATE: Monday 8th April, 2024

TIME: 8.00 am. – 11.00 am.

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in this paper.

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over ►

SECTION ONE: MULTIPLE CHOICE QUESTIONS**(20 MARKS)**

1. Ventricular flutter is caused by which hazard?
 - A. Psychological
 - B. Electricity
 - C. Radiation
 - D. Mechanical
2. A worker could contract tetanus from:
 - A. Inhalants
 - B. Ingestants
 - C. Irritants
 - D. Soil
3. Work-site analysis is doing one of the following:
 - A. Biological monitoring of workers at the site
 - B. Determining the jobs and workstations that are a potential problem
 - C. Undertaking an environmental monitoring
 - D. Analyzing work place related diseases
4. Occupational infections are human diseases as a result of exposure to:
 - A. Microbial agents
 - B. Chemical agents
 - C. Physical agents
 - D. Any workplace hazard
5. Workers specifically exposed to brucellosis work in the following industry:
 - A. Construction industry
 - B. Agricultural industry
 - C. Hospital industry
 - D. Production industry
6. Noise Induced Hearing Loss can be mitigated and even fully repaired with medical aid.
 - A. True
 - B. False
7. Ergonomics is the focus of the workers' activities as regards the:
 - A. Posture, rhythms and moods of work
 - B. Monotonous way of performing repeated activities
 - C. Conveyor belt syndrome
 - D. Heavy workload and lack of adequate rest during the working time
8. What is the purpose of personal hygiene practices in the workplace?
 - a) To waste time
 - b) To impress colleagues and supervisors
 - c) To prevent the spread of germs and diseases
 - d) To avoid wearing uniforms or protective equipment
9. A possible sign of hearing loss is:
 - A. Ear wax buildup.
 - B. Difficulty hearing people who whisper
 - C. The TV or radio is too loud for others.
 - D. Ear wax buildup and the TV or radio is too loud for others
10. Noise in the workplace can cause employee fatigue
 - A. True
 - B. False

11. Hearing protection is required when other controls, such as engineering or administrative controls, cannot keep noise exposure below the OSHA PEL.
 - A. True
 - B. False
12. Ultraviolet light, visible light, microwaves and radio waves are all examples of
 - A. Gamma rays
 - B. Ionizing radiation
 - C. Non-ionizing radiation
 - D. Electro-magnetic waves
13. Exposure to radiation doses within the occupational limits produces no apparent indications of exposure.
 - A. True
 - B. False
14. Gloves used for electrical protection must be electrically tested every...
 - A. 3 months
 - B. 6 months
 - C. 12 months
 - D. Never
15. The Prohibited Approach Boundary is considered the same as making_____.
 - a. Insulation
 - b. Confluence
 - c. Contact
 - d. Pastry
16. Battery operated tools such as drills, screwdrivers etc can replace mains powered equipment
 - A. True
 - B. False
17. The most effective way to avoid hearing loss at work is to
 - A. Stay away from loud noises and refuse to work
 - B. Listen to music that is louder than the noise level at work
 - C. Use hearing protection, such as earplugs, regardless of whether or not communication is essential at the office
 - D. Monitor noise levels through engineering and administrative controls
18. When determining the level of contaminants in an air shed, you want to compare the standard and _____ in place.
 - A. Regulations
 - B. Toxic
 - C. Guidelines
 - D. Resources
19. Environmental monitoring is designed to help us understand the natural environment and
 - A. Protect it from any negative outcomes of human activity
 - B. Understand ecological and parameter observation
 - C. carbon and nitrogen cycle
 - D. None of above
20. Environmental_____ Evaluation is a process to facilitate management decisions regarding an organization.
 - A. Contribution
 - B. Performance
 - C. OSHA
 - D. Workplace

SHORT ANSWER QUESTIONS (40 MARKS)

1. Describe any five action that can prevent electrical accidents in your workplace. (5 marks)
2. Dust is a hazard to workers in the mining industry, explain any two diseases a worker can contract from dust and the control measures (8 Marks)
3. Explain the effects of the following Chemicals (8 Marks)
 - a) Flammable
 - b) Corrosive
 - c) Toxic
 - d) Oxidizers
4. Discuss any two health effects of continuous noise to workers at the workplace (8 Marks)
5. Explain the consequences of risk assessment and their meaning about the hazard (8 Marks)

LONG ANSWER QUESTIONS**(40 MARKS)**

1. Agricultural workers are exposed to a tremendous variety of environmental hazards that are potentially harmful to their health and well-being. Discuss four hazards the farmers are exposed to and the protection and prevention of the harmful effects of the hazards (20 Marks)
2. Discuss any five components that constitutes a safe work environment and give examples for each (20 Marks)