



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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

FIRST YEAR SECOND TRIMESTER EXAMINATIONS

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

COURSE CODE: NCO 121

COURSE TITLE: FOUNDATIONS OF OCCUPATIONAL HEALTH
AND SAFETY

DATE: Monday 23rd July, 2018

TIME: 9.00a.m. – 12.00noon.

INSTRUCTIONS TO CANDIDATES

There are three sections
Section A- Multiple Choice Questions
Section B – Short answer Questions
Section C – Long Answer Questions
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. ►

SHORT ANSWER QUESTIONS (20 MARKS)

1. Which of the following should you do first when your co-worker has suffered an electrical shock?
 - A. Move the victim away from the electrical source with a help of a non-conducting object
 - B. Shut off the source of electricity if possible
 - C. Check the victim's breathing and pulse. Begin CPR if necessary
 - D. Lay the victim down with his/her head lower than the rest of the body
2. Which of the following is the most serious burn that destroys skin and underlying tissue?
 - A. First-degree burns
 - B. Second-degree burns
 - C. Third-degree burns
 - D. All of the above
3. First aid treatment for a chemical burn involves...
 - A. Applying ointment over the affected area
 - B. Removing dead skin
 - C. Neutralizing the chemical
 - D. Flushing the chemicals off the affected area with cool, gently running water for 10 to 20 minutes
4. In developing a safety training program, the most essential consideration is:
 - A. Training staff
 - B. Training methods
 - C. Content of training program
 - D. Training objectives
5. Continuous exposure to noise levels at ____ decibels (dB) or above can cause hearing loss.
 - A. 85
 - B. 80
 - C. 75
 - D. 70
6. 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
7. What is done to monitor a worker's hearing over time?
 - A. Audiometric Testing
 - B. Genetic Testing
 - C. Both a and b
 - D. None of the above
8. Which of the following is a warning sign that your workplace may be too noisy?
 - A. You hear a humming or ringing in your ears when you leave your workplace
 - B. You constantly pull your ears
 - C. You have to shout to a person who's an arm's length away in order to be heard.
 - D. When you see the industrial hygienist going round to ask about noise
9. Noise Induced Hearing Loss can be mitigated and even fully repaired with medical aid.
 - A. True
 - B. False

10. Workplace safety means that both you and your employer must make sure:
 - A. Your workplace is safe and without risks to your health or the health of your co-workers
 - B. That your co-workers are free from communicable diseases that may affect other workers
 - C. The workplace is well maintained for any leakages or free from falling objects
 - D. The working environment is safe and free from any live electrical wires that can cause electrocution to employees
11. After how long should an employee report workplace fatalities?
 - A. 12 hours
 - B. 24 hours
 - C. 8 hours
 - D. 6 hours
12. Safety signs are used at the workplace when:
 - A. The hazard has not been completely eliminated
 - B. When employees do not adhere the workplace safety
 - C. When the hazard can be completely eliminated
 - D. When there are plenty of hazards in the workplace
13. Which colour signifies cautionary signs?
 - A. Red
 - B. Blue
 - C. White
 - D. Yellow
14. Employer's liability insurance is taken for compensation for:
 - A. Employee accidents and injuries
 - B. Employer compensation by the government
 - C. Employee retirement benefits
 - D. Employer medical coverage
15. 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
16. Radioactive material found in soil, water and vegetation is:
 - A. Cosmic radiation
 - B. Terrestrial radiation
 - C. Internal radiation
 - D. Ultra violet radiation
17. Which of the following radiation is high enough to pull electron from the atmosphere?
 - A. Ionizing radiation
 - B. Non-ionizing radiation
18. The following is a source of ionizing radiation:
 - A. Cosmic rays
 - B. Microwaves
 - C. Radio/TV waves
 - D. Ultraviolet light

19. Which of the following is the most correct for Safety training at the place of work?
- Should be organized by staff since they know the hazards
 - Should be a policy to train all new employees
 - Should also train customers coming for services
 - Should organize drills at each training session
20. Environmental monitoring or safety audit at the workplace is best done through:
- A walk-through survey
 - Electronic hazard survey
 - Dust sampling
 - Employee health survey

SHORT ANSWER QUESTIONS (40 MARKS)

- Explain any four responsibilities of the employer in ensuring a safe work environment. (8Marks)
- What is the definition an electric hazard? (2 Marks)
 - Explain any three actions you would do to ensure safety from electrical hazards. (6 Marks)
- Explain the engineering controls that can be put in place to mitigate Noise as a hazard at the workplace. (8 Marks)
- Describe the dangers of ionizing radiation to human life (8 Marks)
- Discuss the use of any four personal protective equipment at the place of work (8 Marks)

LONG ANSWER QUESTIONS (40 MARKS)

- Discuss the planning, organizing, leading and controlling functions of workplace management. (20 Marks)
- Describe hazards are identified by the following methods. (20 Marks)
 - Walk-through survey
 - Electron hazard survey