

BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

In collaboration with

ZIMBABWE OPEN UNIVERSITY

Diploma in Human Resources Management

OCCUPATIONAL HEALTH AND SAFETY

OH121

Sessional Examination

Marks – 100

Time allowed: 3 hours

Instructions

1. The examination consists of Four sections: A, B, C and D.
2. Begin each answer to a new question on a new page.
3. Answer questions according to instructions given in each section
4. Write answers in the answer booklet provided
5. Write in grammatical English

SECTION - MULTIPLE CHOICE QUESTIONS

[10 MARKS]

Answer ALL questions. Each question carries ONE (1) mark.

1. The likelihood that a substance, or an activity, or a process will cause illness in the conditions of its use is called _____.
 - A. Methodology
 - B. Risk
 - C. Frequency
 - D. Severity

2. _____ is any unplanned event that results in injury or ill-health of people, or damage to, or loss, of property.
 - A. Risk
 - B. Accident
 - C. Safety
 - D. Hazard

3. _____ represents the cost of the damage, consequential loss or injury.
 - A. Safety
 - B. Frequency
 - C. Severity
 - D. Occupation

4. To ensure the safety and health of workers in a work environment, managers should establish _____.
 - A. Psychology
 - B. Homeopathy
 - C. a Safety, Health, and Environment (SHE) Programme
 - D. Bio-medical science



5. _____ is the promotion and maintenance of the highest degree of physical, mental and social wellbeing of workers in all occupations.
- A. Occupational hygiene
 - B. Occupational safety
 - C. Occupational health
 - D. Hazards
6. _____ is the science concerned with protecting workers from health hazards that may arise in their occupation and attending to emergencies that may occur during working hours.
- A. Occupational medicine
 - B. Occupational safety
 - C. Occupational health
 - D. Hazards
7. In occupational health and safety, MSDS is an abbreviation for _____.
- A. Managing Safety and Dangerous Situations
 - B. Mental Stress and Deadly Syndromes
 - C. Moving Safety to Desired Sites.
 - D. Materials Safety Data Sheets
8. Which of the following is not a function of the occupational hygienist?
- A. Identification of workplace hazards
 - B. Evaluation of health hazards
 - C. Control of environmental factors or hazards which may have a detrimental effect on workers or members of the public.
 - D. Formulating an organization-wide health and safety policy



9. _____ are a state of matter in which the material has a very low density and viscosity.
- A. Dusts
 - B. Fumes
 - C. Vapours
 - D. Gases
10. Because noise is produced in a range of frequencies the choice of _____ must be based upon the measured spectrum of the noise to be attenuated.
- A. Hearing protection.
 - B. Ear protection
 - C. Compatibility protection.
 - D. Foot and leg protection.

SECTION B – TRUE/FALSE QUESTIONS

[20 MARKS]

Answer ALL questions. Each question carries ONE (1) mark.

State whether each of the following statements is TRUE or FALSE.

1. Air purifying respirators are respirators that are fitted with filtering medium and a cartridge.
2. Supplied air purifying respirators are half-mask or fullface piece and often made of rubber or plastic maintained at a positive pressure as the air is drawn through the filter by means of a battery-powered fan.
3. Ear-muffs are incompatible with helmets unless they are specially mounted on the helmet.
4. Human error of one kind or another almost always causes accidents.
5. The worker can also be a contributing factor to causes of accidents due to their risk-taking, negligent or faulty behaviour.
6. The objective of accident investigation is to maintain a control system to avoid compliance with legal requirements.



7. Noise does not affect human beings as far as disturbing work, sleep, and communication are concerned.
8. The Workers Compensation Act 47:03 places liability on employers for compensation for death or incapability whilst at work.
9. In claiming for compensation, a notice of injury must be given within 12 months of such injury or death of the employee.
10. An employer shall be liable to pay compensation for an injury or occupational disease that has been deliberately self-inflicted.
11. The Public Health Act 63:01 does not cover adequately issues of safety of employees at work.
12. The Factories Act 44:01 is the main legislation that is used in Botswana to regulate occupational health and safety at work.
13. Where work is to be carried out under confined spaces, and where fumes are likely to be present, all practical steps must be taken to remove such fumes and prevent any ingress of fumes.
14. Ventilation in the working environment is important because it helps increase carbon dioxide (CO₂) inside a building and also retains body heat generated by the occupants.
15. The physical factors affecting ventilation excludes air changes, humidity, quality of air, temperature and use of building.
16. Harmful effects to the lungs caused by toxic substances include acute inflammation as well as respiratory sensitization.
17. Pulmonary diseases cannot be caused by the inhalation of various aerosols, gases, pathogens and dust.
18. Asbestosis is a disease characterised by masses of fibrous tissue that start to develop at the base of the lung and slowly progress upwards.
19. Noise-induced deafness is a partial or complete hearing impairment of one or both ears which originates during and as a result of a person's work.

20. The benefits of good lighting at the workplace include preserving human energy, decreasing the risk of accidents, increased production, better working conditions, decreased waste and improved organisational relationships.

SECTION C – SHORT ANSWER QUESTIONS

[30 MARKS]

Question 1

- a) Noise affects human beings in a number of ways. Describe any three health effects of noise. (6 marks)
- b) Suggest two hints for preventing ergonomic hazards with regard to a sitting position. (4 marks)

Question 2

- a) List any three requirements of a good ventilation system. (6 marks)
- b) There are three key techniques often applied in the industry to control pollutants generated from the source from reaching the worker. State and outline two one of them. (8 marks)

QUESTION 3

- a) State any three factors that have been identified as potential sources of causes of stress. (3 marks)
- b) Stress can be regarded as the strain imposed on the workers by psychological influences associated with work that may affect health, well-being and productivity. Explain how occupational stress can occur. (3 marks)
- c) Briefly describe any two of the main routes of entry for toxic substances into the body. (4 marks)

SECTION D ESSAY QUESTIONS

[40 MARKS]

Answer any TWO questions.

QUESTION 1

20 marks



Discuss five factors that affect the visibility of an object.

(20 marks)

QUESTION 2

20 marks

A variety of occupational health and safety related legislations in various countries in Southern Africa provide for the legal obligations of the employer and employees in ensuring and safety and health at work. Discuss the provisions of Botswana legislation in this regard.

(20 marks)

QUESTION 3

20 marks

An occupational hygiene investigation is never complete without a report on the findings of the investigation. Categorise the components of the report.

(20 marks)

QUESTION 4

20 marks

Occupational health and safety is a discipline with a broad scope involving many specialized fields. Explain any five aims of a health and Safety at work programme.

(20 marks)

=====END OF EXAMINATION=====