

BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

In collaboration with

ZIMBABWE OPEN UNIVERSITY

Diploma in Human Resources Management

OCCUPATIONAL HEALTH AND SAFETY

OH121

Special 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. Something with the potential to cause harm is called _____.
 - A. Methodology
 - B. Hazard
 - C. Frequency
 - D. Severity

2. _____ are both major infections capable of transfer by small amounts of blood and serum.
 - A. AIDS and Hepatitis B.
 - B. AIDS and Asbestosis
 - C. Hepatitis B and Asbestosis
 - D. Hepatitis B and Dermatitis

3. _____ is the number of times the event occurs over a given period of time.
 - A. Safety
 - B. Frequency
 - C. Severity
 - D. Occupation

4. The scientific discipline that studies human capabilities, limitations and other characteristics for the purpose of developing human interface technology is called _____.
 - A. Psychology
 - B. Homeopathy
 - C. Ergonomics
 - D. Bio-medical science



5. _____ is concerned with the control of occupational health hazards that arise as a result of, or during work.
- A. Occupational hygiene
 - B. Occupational safety
 - C. Occupational health
 - D. Hazards
6. The key elements of _____ programme involves identification, evaluation and control of environmental factors or hazards arising from the workplace causing illness, impaired health or significant discomfort among workers or citizens.
- A. Occupational medicine
 - B. Occupational safety
 - C. Occupational health
 - D. Occupational hygiene
7. _____ is the science and art of preventing disease, prolonging life and promoting health through organized efforts of society.
- A. Occupational medicine
 - B. Occupational safety
 - C. Occupational health
 - D. Environmental Health
8. Which of the following is by far the most common and important method of absorption?
- A. Ingestion into the gastro-intestinal tract
 - B. Absorption via the skin
 - C. Gamma Rays
 - D. Inhalation into the respiratory tract
9. _____ is one of the responses of the body to toxic substances.
- A. Dust



- B. Fumes
 - C. Acute effects
 - D. Gases
10. _____ can affect various parts of the respiratory tract.
- A. irritants
 - B. Ear muffs
 - C. Ear plugs.
 - D. Asphyxiants.

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. Teratogens cause abnormalities in the unborn foetus.
2. Mechanical hazards do not exist in every industry.
3. Vapours represent the gaseous form of substances that are normally in the solid or liquid state at room temperature or pressure.
4. Portable fire extinguishers should be maintained in a fully charged and operable condition.
5. Ergonomics is the matching of the job to the worker and product to the user.
6. Airborne particulates are dust particles which are so big that they cannot settle on the ground.
7. Elimination of hazardous substances from a workplace is not part of a hierarchy of control measure.
8. Poor work posture, exertion of force in the limbs and certain environmental factors at the workplace are some of the ergonomic risk factors.
9. In the physics of sound, frequency is the number of pressure changes moving past a definite point per second.
10. Temporary Threshold Shift occurs after several years of exposure to loud noise in the work environment.



11. Asthma can be aggravated by exposure to air pollution.
12. Poor illumination causes fatigue and de-motivates employees in their work performance.
13. Chronic obstructive pulmonary diseases (COPD) cause shortness of breath, coughs and sputum production.
14. Reflected glare is light that bounces off any nearby surfaces, such as computer monitors, into the worker's eyes.
15. Flammable and combustible liquids do not require careful handling at all times.
16. Elimination of ignition sources is not a fire prevention measure.
17. Mechanical sparks can be generated as a result of electron transfer between two contacting surfaces.
18. In a fire safety programme, an emergency plan should ensure that a fire alarm will sound for the building.
19. Environmental causes of accidents can also be grouped as bad house-keeping on the factory floor.
20. Performing medical examinations constitute the bulk of work for an occupational medical practitioner and occupational nursing practitioner.

SECTION C – SHORT ANSWER QUESTIONS

[30 MARKS]

Answer all questions

Question 1

- a) Proper and sufficient lighting is vital for people. Describe any three benefits of good lighting at the workplace.

(6 marks)
- b) Identify four adverse effects that could arise at the workplace due to poor lighting.

(4 marks)

Question 2

- a) List any three ergonomics risk factors and give examples of a causal factor of each.

(6 marks)



- b) In physical terms, sound is defined as the mechanical vibration of an elastic medium, causing energy to be transmitted away from the source by means of a series of successive changes in pressure. Explain frequency as one properties of noise which are important in the workplace.

(4 marks)

Question 3

- a) An occupational hygiene investigation is never complete without a report on the findings of the investigation. State any four parts of this report.

(6 marks)

- b) What should be contained in the Results part of the report.

(4 marks)

SECTION D ESSAY QUESTIONS

[40 MARKS]

Answer any TWO questions.

QUESTION 1

20 marks

Identify and explain the most common types of fires

(20 marks)

QUESTION 2

20 marks

In Botswana, Factories Act Chapter 44:01 was promulgated for the regulation of conditions of employment in factories and other places as regards the safety, health and welfare of persons employed therein. Discuss interpretation of expression "factory" in terms of the provisions of Section 5 of the Act.

(20 marks)

QUESTION 3

20 marks

An accident is defined as an event that causes any person to be harmed, or in different circumstances, might have caused any person to be harmed. Give a detailed description of the term 'serious harm'.

(20 marks)



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QUESTION 4

20 marks

Explain why accidents at work should be investigated.

(20 marks)

=====END OF PAPER=====