



BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

DIPLOMA IN HUMAN RESOURCES MANAGEMENT

DIPLOMA IN BUSINESS MANAGEMENT

Course Name: OCCUPATIONAL HEALTH AND SAFETY

Course Code: OS 101

SESSIONAL EXAMINATION

Duration: 3 hours

Instructions to candidates:

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



SECTION A:

[15 MARKS]

Answer the questions by indicating True or False on the statements.

1. Poor working conditions can affect the health and safety of the workers in a negative way.
2. Technology brings new problems and this list grows day by day.
3. A hazard is something with the potential to cause no harm.
4. The most frequent occupational problems encountered are those of dermatitis of the hands and the ergonomic problems resulting from long periods of standing in tiring postures.
5. In ventilation, the incoming air should not be free impurities such as dust and odour.
6. Asthma can be aggravated by exposure to air pollution.
7. Chronic obstructive pulmonary disease (COPD) causes shortness of breath, coughs and sputum production.
8. It is the work of Government but not supervisors to induct new employees on safety requirements and to inspect and service equipment regularly.
9. Environmental health officer is concerned with administration, inspection, education and regulations in respect of environmental health.
10. Stress sets off an alarm in the brain, which responds by preparing the body for defensive action.
11. In Botswana, there is no comprehensive up-to-date and overarching legislation that addresses issues of health and safety at the workplace like it is happening in other developed and middle income countries.
12. Employers are not responsible for ensuring that a workplace is free from a recognised hazards.



13. Accidents represent problems that must be solved through investigations.

14. Accidents are not caused by human error of one kind or another.

15. Incident is an unplanned, undesired event that adversely affects completion of a task.



SECTION B:

[5 MARKS]

1. Individual suffering from stress may exhibit the following symptoms or patterns of behavior.

- a) Nervousness
- b) Indecision
- c) Eating disorders
- d) Happiness

2. Any of the following conditions amounts to or results in permanent loss of bodily function or temporary severe loss of bodily function.

- a) Bone fracture
- b) crushing
- c) laceration
- d) Head ache

3. Organisational culture can also cause stress, especially because of the following: _____.

- a) Communication problems
- b) Lack of resources
- c) Effective teams
- d) No feedback

4. The factors determining the toxicity of a chemical is: _____.

- a) Colour of a chemical
- b) The total dose of chemical absorbed
- c) Genetic make-up of the individual
- d) Allergic make-up of the chemical

5. Which of these diseases is caused by biological agents?

- a) Athletes foot
- b) H.I.V/AIDS
- c) Bilharzia
- d) Malaria



SECTION C:

[50 MARKS]

The answer the case study below.

WINSTON STEEL MANUFACTURERS

Reuben, the production manager at Winston Steel Manufactures, was very satisfied with the changes to the operations department as the business continues to grow. Reuben was keen to get the changes put into place as quickly as possible, even though George (the new job schedule planner) would not be available for four weeks, owing to his agreed finishing date at his previous organization. Peter, as the new planning manager, had a lot to learn about his new position. Although Peter was certainly aware of some aspects of the Job, Reuben nevertheless felt he would need specific induction training for the role, as he had relieved only twice before in a managerial position. He would now have eight staff members under him. Their jobs had changed only slightly, but Reuben could see some difficulties that might be faced in light of their changed responsibilities and duties. Reuben would recommend Induction and Training.

During induction of new employees the Occupational Health and Safety Officer reiterated the need for relevant ergonomics in the workplace. The company in its plant manufactures both metal and plastic chairs for their market. After rigorous marketing structure was put in place, the company has now won several tenders and enormous orders from individuals, government and private sector. This, has resulted to workers being overworked and have little rest even though the salaries remained the same.

The day to day business of the company is basically production. The company buys raw materials such as timber, plastic, glue and other adhesives, dyes, metal bars, rods and sheets, nails, rivets etc. All these are used in production. During production, designs are made and from there workers cut wood, metal sheets and rods and assemble them into designs in order to come up with models. Metal rods and bars are normally heated when they are formed into different shapes. Some employees developed a habit of eating while handling tools and chemicals without even sterilizing their hands, and this, according to Reuben is not hygienic. During this process, employees are exposed to numerous hazards and Risks.



The output of this production of course is going to be chairs, both plastic and metal chairs. There is also a lot of waste material that is at disposal such as dust from timber, metal particles, water contaminated with chemicals etc. This poses further hazard to employees and the environment as well. Reuben therefore has a challenge of disposing this waste in respect of environmental laws accordingly.

QUESTION 1

With the aid of examples, define the following words:

- a) Risk **(5 Marks)**
- b) Hazard **(5 Marks)**
- c) Ergonomics **(5 Marks)**
- d) Occupational Hygien **(5 Marks)**

QUESTION 2

Illustrate with a simple diagram of a system, the activities of Winston Steel Manufacturers (Show Inputs, Processes and Outputs). **(15 marks)**

QUESTION 3

- a) Give examples of substances that are hazardous and match them with the three (3) routes of entry into the body. **(9 Marks)**



- b) Advise Reuben and his company on the disposal of waste from his company. (6 Marks)

SECTION D:

[30 MARKS]

Each question carries 15 marks. Answer any two questions.

QUESTION 1

Discuss any three (3) categories of factors that cause job stress. (15 Marks)

QUESTION 2

Write brief notes on local exhaust ventilation (LEV). (15 Marks)

QUESTION 3

Identify and discuss any two (2) factors that affect the visibility of an object. (15 Marks)

END OF THE PAPER!