

CLASS: X
SUBJECT: INFORMATION TECHNOLOGY (402)
Unit-IV Maintain Healthy, Safe and Secure Working Environment

1. Why health, safety, and security are important in the workplace?

Answer – In a workplace accident, illness, or dispute, there is a cost to the organization, as well as a cost to injured individuals and their families. It is our responsibility to create a safe workplace. This will improve the work environment and the productivity.

2. What is health, safety, and security policy?

Answer – A health, safety, and security policy is a written statement by an employer stating the company's commitment to the protection of the health, safety, and security of employees and the public.

3. What are the policies of health, safety, and security in the workplace?

Answer – There are several reasons that can be specified for safety policy as given below-

It indicates the company's commitment to their employee health and safety.

It shows the performance of the business and the safety performance are compatible with each other.

It states that the company is not only making profits but it is taking care of employees also.

The accountability of everyone working for the company is outlined for the workplace health, safety, and security. Company can comply with national policy on Occupational Health and Safety (OH&S) of the Government of India. Injuries and illness of the employees are prevented through such policy.

4. What do you mean by hazards?

Answer – The most common definition of a hazard is 'a danger or risk in any place.'.

5. What are workplace safety hazards?

Answer – Workplace hazards pose potential harm to people at work, and that can cause damage to the work environment. Hazards may result in poor health as well as losses for organizations in terms of property and equipment.

6. What do you mean by physical hazards?

Answer – It is the risks arising from the physical work environment, including floors, walls, and ceilings, working with electrically powered equipment or machinery.

7. What are the different physical hazards present in the workplace?

Answer – The different physical hazards present in the workplace are –

Falling Off Heights, Slipping and Tripping

Electrical Hazards

Fire Hazards

Health Hazards

8. What are the potential sources of hazards in an organization?

Answer – Bright light sources behind the display screen can create contrast problems, making it difficult to clearly see your work. Apply the following possible solutions to avoid this.

Use blinds or drapes on windows to eliminate bright light.

Use indirect or shielded lighting where possible and avoid intense or uneven lighting in your field of vision. Reorient the workstation so bright lights from open windows are at right angles with the computer screen. High contrast between light and dark areas of the computer screen, the horizontal work surface, and the surrounding areas can cause eye fatigue and headaches.

9. What are the safety guidelines/checklist in any organization?

Answer – The safety guidelines checklist in any organization is –

Store all cleaning chemicals in tightly closed containers in separate cupboards.

Throw garbage daily.

Make sure all areas have proper lighting.

Do not wear loose clothing or jewelry when working with machines.

Never distract the attention of people who are working near a fire or with some machinery, tools, or equipment.

Where required, wear protective items, such as goggles, safety glasses, masks, gloves, and hair nets.

Shut down all machines before leaving for the workplace.

Do not play with electrical controls or switches.

10. What are the different ways to analyse water pollution?

Answer – Air and water pollution can be analysed by using three different methods. There are three common forms of analysis: physical, chemical, and biological.

11. What are the guidelines for clean air and clean water in any organisation?

Answer – The guidelines of clean air and clean water in any organisation are Avoid dust production and the generation of solid particles and gases in the air.

Organisations must use a limited number of vehicles to avoid air pollution.

The generation of ozone gas must be kept at a low level by the organisation.

Organisations have to take care that their wastewater is not mixed with the surrounding water.

Extensive use of fertilisers and pesticides must be avoided as it can make the groundwater polluted.

12. What is ergonomics science?

Answer – Ergonomics is the science concerned with designing and arranging things so that people can use them easily and safely. Applying ergonomics can reduce the potential for accidents and injury to improve performance and productivity.

13. In the office, what types of ergonomics do we have to use?

Answer – In the office work, following ergonomics we have to follow –

Use the backrest of the chair; put a small pillow or lumbar support on the backrest of the chair.

Put the document holder or prop it up so you can see without leaning forward.

Move or raise the monitor to the centre of the desk and check if the headset is available.

Move closer to the keyboard. Bring mouse down to level of keyboard.

Add a wrist rest to the front of the keyboard and mouse pad rest.

Rest your eyes periodically and do simple eye exercises.

Reorient your desk and computer so light is not directly behind or in front of you.

13. What is a musculoskeletal disorder?

Answer – This problem includes different areas of your body, such as neck, back, chest, arms, shoulders, and feet. It occurs because of your wrong posture and uncomfortable chair for sitting that is not ergonomically correct while working on the computer.

14. What do you mean by occupational overuse syndrome?

Answer – Occupational overuse syndrome, also known as repetition strain injury (RSI), is a collective term for a range of conditions characterised by discomfort or persistent pain in muscles, tendons, and other soft tissues, with or without physical manifestations.

15. How to reduce the risks of visual problems?

Answer – To reduce the risks of visual problems are –

Adjust the brightness of your computer screen to save your eyes from strain.

Reposition the screen to avoid glare from lights or windows.

Keep a proper vision distance from the computer screen and blink your eyes in an interval.

Wear anti-glare glasses while working on the computer.

Keep the screen clean and use a desk lamp to make it easier to see.

Ensure the screen colours are easy to look at and that the characters are sharp and legible.

16. What is an accident?

Answer – An accident is an unplanned, uncontrolled, or unforeseen event resulting in injury or harm to people and damages to goods. For example, a person falling down and getting injured or a glassware item that broke upon being knocked over.

17. What is an emergency?

Answer – An emergency is a serious or crisis situation that needs immediate attention and action. For example, a customer having a heart attack or a sudden outbreak of fire in your organisation needs immediate attention.

18. What are the different types of accidents in any organisation?

Answer – The following are some of the commonly occurring accidents in organisations:

Trip and Fall

Slip and Fall

Injuries caused by escalators or elevators (or lifts)

Accidents due to Falling of Goods

Accidents due to Moving Objects

19. Who to handle accidents?

Answer – In case of an injury to a colleague due to an accident, do the following.

Attend to the Injured Person Immediately

Inform your supervisor.

Assist your Supervisor

20. What are the general evacuation procedures?

Answer – Each organisation has its own evacuation procedures as listed in its policies. You should be aware of these procedures and follow them.

Leave the premises immediately and start moving towards the nearest emergency exit.

Guide your customers to the emergency exits.

If possible, assist the person with a disability to move towards the emergency exit.

Do not use the escalators or elevators (lifts) to avoid overcrowding.

Go to the emergency assembly area.

Work & Labor Issues

21. What is a fire extinguisher? What are the different types?

Answer – A fire extinguisher is a protection device used to extinguish fires. It is a cylindrical pressure vessel containing an agent that can be discharged to extinguish a fire. There are four different types of fire extinguisher.

Class A Material: materials such as wood, cloth, and paper, which won't ignite on their own but will continue to burn once exposed to a heat source.

Class B Material: all liquid, grease, and gas materials that burn when exposed to ignition sources.

Class C Material: electrical materials and equipment. These materials cause fires very quickly and present a serious risk of arc flash.

Class D Material: any materials that are volatile and able to quickly ignite, such as magnesium, potassium, and sodium.

22. What is CPR?

Answer – A victim may require cardiopulmonary resuscitation (CPR). CPR can save a life during cardiac arrest, when the heart stops beating.

Necessary steps you have to take if any emergency is there:

If the victim is breathing and has a heartbeat, give first aid for injuries and treat for shock.

Ensure the victim gets medical care as soon as possible.

The physician attending the victim must have detailed information to properly diagnose and care for the victim.