

Unit 9: Maintain Healthy, Safe, and Secure Working Environment

Assignment Solutions

Multiple-Choice Questions (MCQs)

1. What is the primary goal of the National Policy on Safety, Health, and Environment at Workplace (NPSHEW)?
 - a. To eliminate work-related injuries and promote a preventive safety culture
 - b. To regulate wages and salaries of employees
 - c. To ensure only factories follow health guidelines
 - d. To promote international safety standards

Ans. a

2. Which one of the following is a wrong safety guideline?
 - a. Store all cleaning chemicals in tightly closed containers in separate cupboards.
 - b. Never distract the attention of people who are working near a fire or with some machinery, tools or equipment.
 - c. Wear loose clothing or jewellery while working with machines.
 - d. Make sure all areas have proper lighting.

Ans. c

3. What should be the first step in setting up a workstation for maximum health and safety?
 - a. Place the monitor at a 90-degree angle to the desk
 - b. Set up the keyboard and mouse at a comfortable height
 - c. Ensure that the room has proper lighting
 - d. Use a comfortable chair with lumbar support

Ans. b

4. What should be the first step when identifying workplace hazards?
 - a. Installing safety signs
 - b. Conducting a thorough risk assessment
 - c. Ignoring minor hazards
 - d. Delegating responsibility to the employees

Ans. b

5. What is the role of fire drills in workplace safety?
 - a. Fire drills are meant to train employees on how to use office equipment
 - b. Fire drills familiarize employees with emergency evacuation procedures
 - c. Fire drills are only useful for factory workers
 - d. Fire drills replace the need for proper fire prevention systems

Ans. b

Very Short Answer Questions

1. Define workplace security in one sentence.

Ans. Workplace security means protecting employees, property, and information from threats, theft, and unauthorized access.

2. What is the purpose of an emergency response plan in a workplace?

Ans. It guides employees on how to respond safely during emergencies to minimize harm and ensure quick evacuation.

3. Name two types of PPE.

Ans. Gloves and goggles.

4. Name one common physical hazard that can occur at a workplace.

Ans. Slippery floors.

5. Mention one measure that can help reduce workplace electrical hazards.

Ans. Regular inspection of wires and electrical equipment.

Short Answer Questions-I

1. Why is it important for organizations to have a workplace safety policy?

Ans. A workplace safety policy protects employees from hazards, reduces accidents, ensures legal compliance, improves employee confidence, and builds a culture of responsibility and awareness.

2. Explain how ergonomics contributes to employee health and safety.

Ans. Ergonomics designs workstations that match human needs. Proper chair height, monitor placement, and posture reduce strain, prevent injuries, increase comfort, and improve long-term physical health.

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3. What are some common workplace hazards that employees should be aware of?

Ans. Common hazards include wet floors, electrical faults, poor lighting, sharp tools, chemical spills, fire hazards, excessive noise, and unsafe machinery.

4. How can organizations protect sensitive information from security threats?

Ans. Organizations can use strong passwords, encryption, limited access, firewalls, CCTV systems, employee training, and regular security audits to protect data.

5. What role do employees play in ensuring workplace safety?

Ans. Employees must follow safety rules, use PPE, report hazards, attend training, and behave responsibly to maintain a safe environment. Short Answer Questions-II

Short Answer Questions-II

1. What are some common fire hazards in workplaces, and how can they be prevented?

Ans. Common fire hazards include overheated machines, faulty wiring, flammable items stored near heat sources, blocked exits, and poor housekeeping. Preventive steps include inspecting equipment regularly, proper storage of flammable materials, keeping exits clear, installing fire extinguishers, and providing training. Regular fire drills and maintenance of electrical systems help ensure safety.

2. Describe the different types of workplace hazards with examples.

Ans. Workplace hazards include physical hazards such as noise, slips, or falling objects; chemical hazards like cleaning agents or fumes; biological hazards such as bacteria and viruses; ergonomic hazards from incorrect posture or repetitive tasks; and electrical hazards like exposed wires. Each hazard type may cause injury or illness if not managed.

3. What steps should be taken to handle office equipment safely and prevent injuries?

Ans. Employees should receive training, follow operating instructions, unplug equipment before maintenance, keep machines clean, report defects immediately, and avoid overloading sockets. Equipment must be placed on stable surfaces, and safety notices should be displayed.

4. What role do regular breaks play in preventing workplace injuries?

Ans. Regular breaks reduce fatigue, improve concentration, and prevent repetitive strain injuries. They allow physical and mental recovery, reduce stress, and minimize accidents caused by tiredness. Breaks improve overall productivity and well-being.

5. How can an organization create an effective emergency preparedness plan, and what key elements should it include?

Ans. An emergency plan should identify risks, mark evacuation routes, install alarms, assign roles, and train staff. Key elements include communication systems, assembly points, first-aid kits, emergency contact lists, and regular drills. Plans should be updated as needed to ensure readiness.

Long Answer Questions

1. Discuss the significance of health, safety, and security measures in workplaces and their impact on productivity and employee well-being.

Ans. Health, safety, and security measures ensure employees work in a protected and supportive environment. These measures reduce accidents, illnesses, and stress, leading to higher morale and productivity. Proper ventilation, lighting, clean surroundings, and safe walkways support physical health. Safety drills and emergency procedures make employees confident during unexpected events. Security systems such as access control and surveillance prevent theft and unauthorized entry. When workers feel safe, they focus better and work more efficiently. Fewer accidents reduce downtime and costs while improving company reputation. A strong safety culture increases motivation, teamwork, and long-term organizational success by prioritizing employee well-being.

2. Explain workplace health and safety policies in India and how they contribute to a safe working environment.

Ans. Workplace health and safety in India is governed by policies like the OSHWC Code, the Factories Act, and the National Policy on Safety, Health, and Environment. These regulations ensure safe working conditions by mandating proper ventilation, sanitation, working hours, PPE usage, and emergency planning. Organizations must conduct hazard assessments, maintain safety equipment, and train employees. Regular inspections enforce compliance and reduce accidents. These policies protect worker rights, prevent health risks, and promote a safety-conscious culture. When followed properly, they reduce legal liabilities, improve productivity, and create a workplace where employees feel valued and secure.

3. What steps should be followed for hazard identification and risk control in an organization? Provide suitable examples.

Ans. Hazard identification begins with careful workplace observation to detect risks such as spills, damaged tools, exposed wiring, and unsafe machinery. Next, risk assessment is performed to analyze the likelihood and severity of harm. Control measures include eliminating hazards, repairing equipment, installing guards, improving ventilation, and enforcing safety rules. For example, oil spills should be cleaned immediately, faulty wiring replaced, and untrained workers restricted from machinery use. Administrative controls like training and signage improve awareness. PPE is used when hazards cannot be removed. Continuous monitoring ensures the workplace stays safe and risks remain minimal.

4. Discuss various security threats faced by workplaces and the measures that can be taken to mitigate these threats.

Ans. Workplaces face physical threats such as unauthorized access, theft, vandalism, and equipment tampering. Digital threats include hacking, malware, phishing, and data theft. These risks compromise safety, disrupt operations, and expose sensitive information. To mitigate them, organizations can install CCTV cameras, biometric entry systems, strong locks, and alarm systems. Digital protection measures include firewalls, antivirus software, encryption, and regular password updates. Employee training reduces risks from social engineering. Visitor management systems, secure storage areas, and regular audits strengthen security further. Combining physical and digital security provides comprehensive protection.

5. Describe the importance of PPE in ensuring workplace safety. What types of PPE are commonly used in different industries?

Ans. PPE protects workers from injuries, harmful substances, extreme temperatures, and biological or chemical exposure. It is essential when hazards cannot be fully removed through engineering or administrative controls. PPE improves confidence, reduces accidents, and maintains productivity. Common PPE includes helmets, gloves, safety shoes, goggles, earplugs, masks, respirators, and protective clothing. In construction, workers use helmets and steel-toe boots; healthcare workers use masks, gloves, and gowns; industrial workers use ear protection, respirators, and heat-resistant clothing. Proper training and maintenance of PPE ensure maximum safety.