

## UNIT -1

### TWO MARK QUESTION & ANSWER

#### 1. How do you prevent electric shocks?

Dos and don'ts to avoid electric shocks at home

- Never use a damaged extension cord.
- Never use a defective electrical device.
- Pull on the plug and not on the cable to unplug an electrical device.
- Unplug the toaster before trying to dislodge stuck toast.
- Before changing a lightbulb, switch the light off or unplug the lamp.

#### 2. What is electrical shock safety?

Do not use outlets or cords that have exposed wiring. Do not use portable cord-and-plug connected power tools if the guards are removed. Do not block access to panels and circuit breakers or fuse boxes. Do not touch a person or electrical apparatus in the event of an electrical incident.

#### 3. What is prevention of electrical accident?

Never touch anything electrical with wet hands or while standing in water. Wear rubber shoes in wet areas. If you get a tingle or shock when touching a sink, tub, or other wet area, turn off the power at the main panel (if it's safe) and immediately call an electrician.

#### 4. What are the 4 types of electrical shock?

There are four main types of electrical injuries: flash, flame, lightning, and true. Flash injuries, caused by an arc flash, are typically associated with superficial burns, as no electrical current travels past the skin.

#### 5. How does electric shock occur?

Electric shock is a reflex response possibly involving trauma which occurs when electrical current passes over or through a worker's body. It usually involves burns and abnormal heart rhythm and unconsciousness. Electrocution occurs when electrical current passes over or through a worker's body resulting in a fatality.

#### 6. What is the prevention of accident?

Accident prevention refers to the strategies, preparatory methods, and the measures instituted to prevent accidents. Accident prevention is an umbrella term that encompasses all steps taken by an entity to reduce the risk of accidents, to save lives, and to mitigate the risks of injury or to lessen its severity.

#### 7. What are the safety rules in electrical?

- Always turn off the Power
- Have the Appropriate Fire Extinguisher on Hand.
- Use More Than One Outlet.
- Feel Your Outlets
- Investigate Flickering Lights.
- Install Arc-Fault Circuit-Interrupters.
- Don't Use Extension Cords Long-Term.

**8. What is the difference between shock and electric shock?**

Static shock is created through human effort and electrical shock is created through electrical means. Static shock doesn't give a harmful result and electrical shock can cause no to life threatening results.

**9. What are the main effects of electric shock?**

People who receive an electric shock often get painful muscle spasms that can be strong enough to break bones or dislocate joints. This loss of muscle control often means the person cannot 'let go' or escape the electric shock.

**10. What is safety and prevention?**

Safety is about taking steps to avoid or reduce risk. This includes steps you take while working, driving, playing sports, and doing chores. Prevention is about the choices you make each day regarding, among other things, tobacco and alcohol.

**11. What is electric shock and its effects?**

A shock can affect the nervous system. Nerves are tissue that offers very little resistance to the passage of an electric current. When nerves are affected by an electric shock, the consequences include pain, tingling, numbness, weakness or difficulty moving a limb. These effects may clear up with time or be permanent.

**12. What is the medical treatment for electric shocks?**

Medical Care-Treatment for less severe incidences of electrical shock may include pain medication, antibiotic ointment, and dressing changes for minor burns. Higher voltage injuries will require a higher level of care and often have poorer outcomes. Emergency medical care may require: Resuscitation.

**13. What are the 4 main types of electrical injuries?**

There are four main types of electrical injuries:

- Electrocution (fatal)
- Electric shock.
- Burns/Arc blast.
- Fatal falls from height (ladders) caused as a result of contact with electrical energy.

**14. What are the 3 treatments for electrical shock?**

Take these actions immediately while waiting for medical help:

- Turn off the source of electricity, if possible. ...
- Begin CPR if the person shows no signs of circulation, such as breathing, coughing or movement.
- Try to prevent the injured person from becoming chilled.
- Apply a bandage.

**15. What are the two types of electric shock?**

There are two types of electric shock: direct current and alternating current. Direct currents cause involuntary muscular contractions, while alternating currents cause heart complications. Regardless of the type of electrical shock you may receive, electric shocks cause severe negative effects on your whole body.

**16. What are the 15 safety precautions when working with electricity?**

The following precautions should be taken while using electricity.

- Never touch/handle any electrical appliance with wet hands
- Never try to pull away from a person who has contacted a live wire.
- Wiring.
- Joints in wires.
- Electrical connections
- Repairs or replacement.
- Fuse
- Earthing.

**17. What is the basic electrical safety?**

Don't work with exposed conductors carrying 50 volts or more. Make sure electrical equipment is properly connected, grounded and in good working order. Extension cords may not be used as permanent wiring and should be removed after temporary use for an activity or event.

**18. What is the most important rule of electrical safety?**

The first rule of electrical safety is to always disconnect whatever you're working on. This might mean unplugging an appliance that requires repairs or turning off a circuit breaker. You must disconnect before performing any electrical work to reduce the risk of electrocution.

**19. What is the safe DC voltage for human body?**

Since the DC is easier to shake off, if the current shock duration is 1 second, then the corresponding comparative limit value is 50mA (see Figure 3), then current values  $\leq 60V$  are very safe for human body.

**20. How do you diagnose electric shock?**

Diagnosis of Electrical Injuries-Doctors check people for burns, fractures, dislocations, and spinal cord or other injuries. (ECG) is done to monitor the heartbeat in some people. For some people, blood and urine tests may be needed. If people are unconscious, imaging tests.