1. Which of the following is NOT a mode of fire?
a) Smoldering
b) Combustion
c) Radiation
d) Conduction

Answer: c) Radiation
Explanation: Radiation is a heat transfer mechanism, not a mode of fire. Smoldering refers to a slow, low-temperature burning process, while combustion is the rapid chemical reaction between fuel and oxygen. Conduction involves heat transfer through solids.

2. What is the primary component missing in the fire triangle?
a) Oxygen
b) Fuel
c) Heat
d) Carbon dioxide

Answer: d) Carbon dioxide
Explanation: The fire triangle consists of three components: fuel, oxygen, and heat. These three elements are essential for a fire to ignite and continue burning.

3. Which classification of fire involves combustible metals such as magnesium or sodium?
a) Class A
b) Class B
c) Class C
d) Class D

Answer: d) Class D
Explanation: Class D fires involve combustible metals. Class A fires involve ordinary combustible materials like wood or paper, Class B fires involve flammable liquids, and Class C fires involve electrical equipment.

4. Which type of fire extinguisher is NOT suitable for use on electrical fires?
a) Water extinguisher
b) CO2 extinguisher
c) Foam extinguisher
d) Dry chemical extinguisher

Answer: a) Water extinguisher
Explanation: Water extinguishers are not suitable for use on electrical fires as water conducts electricity and can lead to electric shock or spread the fire. CO2, foam, and dry chemical extinguishers are suitable for electrical fires.

5. Where are fire hydrants typically located in a building?
a) Inside individual rooms
b) Near exits on each floor
c) In stairwells
d) In the basement

Answer: b) Near exits on each floor
Explanation: Fire hydrants are typically located near exits on each floor to provide easy access for firefighters to connect hoses and access water in the event of a fire.

6. What is the primary extinguishing agent in a CO2 fire extinguisher?

a) Water
b) Foam
c) Carbon dioxide
d) Dry chemical powder

Answer: c) Carbon dioxide
Explanation: CO2 fire extinguishers use carbon dioxide gas as the extinguishing agent. When discharged, the CO2 displaces oxygen around the fire, suffocating it.

7. Which component is NOT typically included in a fire safety plan according to IS 1641?
a) Fire escapes
b) Smoke detectors
c) Fire drills
d) Building materials

Answer: d) Building materials
Explanation: While building materials may indirectly impact fire safety, they are not typically included as a specific component in a fire safety plan according to IS 1641.

8. What is the purpose of a fire lift in a building?
a) To transport firefighters to different floors
b) To evacuate occupants during a fire
c) To provide access to fire hydrants
d) To store firefighting equipment

Answer: b) To evacuate occupants during a fire
Explanation: Fire lifts are designed to safely evacuate occupants during a fire by providing a

secure means of vertical transportation.

9. Which type of fire detection system is most suitable for detecting smoke in a building?
a) Heat detectors
b) Flame detectors
c) Ionization smoke detectors
d) Photoelectric smoke detectors

Answer: d) Photoelectric smoke detectors
Explanation: Photoelectric smoke detectors are most suitable for detecting smoke particles in the air. They operate based on light scattering when smoke enters the chamber.

10. What is the primary function of a fire alarm system?
a) Extinguish fires
b) Detect fires
c) Alert occupants
d) Control fire spread

Answer: c) Alert occupants
Explanation: The primary function of a fire alarm system is to alert occupants of a building to the presence of a fire, allowing for evacuation and swift action by emergency responders.

11. Which type of fire control system involves the use of water to extinguish fires?
a) Wet chemical system
b) Foam system
c) Sprinkler system
d) Carbon dioxide system

Answer: c) Sprinkler system
Explanation: Sprinkler systems are fire control systems that use water to extinguish fires. They are commonly installed in buildings to provide automatic fire suppression.

12. What is the purpose of a service duct escape route?
a) To provide access for firefighters
b) To ventilate smoke from the building
c) To provide a pathway for occupants to evacuate
d) To store firefighting equipment

Answer: c) To provide a pathway for occupants to evacuate
Explanation: Service duct escape routes are designated pathways within a building that provide a safe means for occupants to evacuate during a fire or emergency.

13. Which type of portable fire extinguisher is effective for use on flammable liquid fires?
a) Water extinguisher
b) CO2 extinguisher
c) Foam extinguisher
d) Dry chemical extinguisher

Answer: c) Foam extinguisher
Explanation: Foam extinguishers are effective for use on flammable liquid fires as they create a barrier between the fuel and the oxygen, extinguishing the fire.

14. Where are fire escapes typically located in a building?
a) Near the elevators
b) Adjacent to stairwells

c) Attached to windows
d) On the roof

Answer: b) Adjacent to stairwells
Explanation: Fire escapes are typically located adjacent to stairwells to provide occupants with a safe means of egress during a fire.

15. What is the primary purpose of a carbon dioxide storing system in a building?
a) To provide emergency lighting during a fire
b) To suppress fires in enclosed spaces
c) To ventilate smoke from the building
d) To provide backup power to critical systems

Answer: b) To suppress fires in enclosed spaces
Explanation: Carbon dioxide storing systems are designed to suppress fires in enclosed spaces by displacing oxygen, suffocating the fire. They are commonly used in areas where water-based extinguishing agents may cause damage.