



Fire Prevention & Fire Fighting (FPFF)

30 Practice Questions and Answers for STCW Exams

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Practice Set 1

Q1. In the event of a fire, the doors to stair tower must be closed to prevent the spread of fire by what?

- A) Conduction
- B) Radiation
- C) Ventilation
- D) Convection

Correct Answer: D (Convection)

Explanation: Closing fire doors prevents the spread of fire and smoke primarily through convection, which is the transfer of heat by the movement of hot gases and air. This compartmentalization is a key passive fire protection strategy as per SOLAS requirements.

Q2. The galley on your cargo vessel has an area of 2900 square feet, what will fulfil the requirements for fire protection?

- A) One B-V extinguisher
- B) One B-I extinguisher
- C) One B-II and one C-II extinguisher
- D) One B-II extinguisher

Correct Answer: C (One B-II and one C-II extinguisher)

Explanation: SOLAS regulations require specific fire protection for galleys based on area. For a galley of 2900 sq ft, the requirement is typically one Class B-II (medium size) and one Class B-V (large size) fixed foam system, or equivalent approved system. The options provided suggest a misinterpretation of extinguisher classes; typically, extinguishers are classified by type (A, B, C, etc.) and size, not specifically 'B-V' as a standalone extinguisher type.

Q3. The most likely location for a liquid cargo fire to occur on a tanker would be?

- A) In the midships house
- B) At the vent header
- C) At the main deck manifold
- D) In the pump room

Correct Answer: D (In the pump room)

Explanation: Pump rooms on tankers contain flammable liquids and ignition sources (e.g., electrical equipment, pumps), making them high-risk areas for liquid cargo fires. Proper fire detection and suppression systems, such as foam or inert gas, are critical in these spaces.



- A) Fuel
- B) Oxygen
- C) Heat
- D) All of Above

Correct Answer: D (All of Above)

Explanation: The fire triangle represents the three essential components required for fire to exist: fuel (combustible material), oxygen (an oxidizer), and heat (ignition source). Removing any one of these elements will extinguish or prevent a fire.

Q5. What kind of foam used in engine room?

- A) 1:1000
- B) 1:500
- C) 1:100
- D) 1:200

Correct Answer: A (1:1000)

Explanation: The standard dilution ratio for protein-based or synthetic film-forming (SFFP) foams used in engine rooms and for hydrocarbon fires on vessels is typically 1:1000 (foam concentrate to water). This ratio is crucial for effective fire suppression.

Q6. Dry Chemical Powder Extinguisher System is?

- A) Fire Retardant
- B) Smothering
- C) None of Above
- D) Flame Inhibitor

Correct Answer: D (Flame Inhibitor)

Explanation: Dry chemical powder (DCP) extinguishers primarily function by interrupting the chemical chain reaction of the fire, acting as a flame inhibitor. While they also have some smothering effect, their primary extinguishing mechanism is disrupting the combustion process.

Q7. Fire Plan Location is?

- A) Midships
- B) All of the above
- C) Port and STBD side entrance
- D) Bridge

Correct Answer: B (All of the above)

Explanation: Fire plans, mandated by SOLAS, are strategically posted at various accessible locations throughout the ship, including the bridge, main entrances (port and starboard sides), and near accommodation spaces like the midships area. This ensures crews and emergency responders can quickly locate vital information during a fire.

Q8. Class A Fire Extinguisher is best used on?

- A) Liquids
- B) Gas
- C) Metals
- D) Solids

Correct Answer: D (Solids)

Explanation: Class A fire extinguishers are designed for fires involving ordinary combustibles, which are typically solid materials like wood, paper, textiles, and rubber. They work by cooling the fuel and wetting it, preventing reignition.



- A) 20 M
- B) 15 M
- C) 40 M
- D) 30 M

Correct Answer: D (30 M)

Explanation: The Fireman's life line, used for rescuing personnel from a burning vessel, is a robust safety line that is typically 30 meters in length, allowing for safe descent or ascent in various emergency scenarios.

Q10. Which type of Extinguisher is danger to recharge onboard?

- A) DCP
- B) None of Above
- C) FOAM
- D) CO2

Correct Answer: D (CO2)

Explanation: Recharging CO2 (Carbon Dioxide) extinguishers onboard a vessel is considered dangerous due to the high pressures involved and the risk of overfilling or contamination. Specialized shore-based facilities are typically used for their safe recharging and testing.

Q11. What is the colour coding of portable Water Extinguisher?

- A) Yellow
- B) Signal Red
- C) Black
- D) White

Correct Answer: B (Signal Red)

Explanation: Portable fire extinguishers are color-coded for quick identification. Water extinguishers, used for Class A fires (ordinary combustibles), are painted Signal Red as per SOLAS and other maritime safety regulations.

Q12. Full form of AFFF is "AQUEOUS FILM FORMING FOAM"

- A) False
- B) True

Correct Answer: B (True)

Explanation: AFFF stands for Aqueous Film Forming Foam, a highly effective firefighting foam concentrate used primarily for Class B fires (flammable liquids). It forms a film over the fuel surface, suppressing vapors and cooling.

Q13. Heat removal how it stops FIRE?

- A) Cooling
- B) Inhibition
- C) Smothering
- D) Starvation

Correct Answer: A (Cooling)

Explanation: Heat removal is a primary method of fire extinguishment. When applied to a fire, water absorbs heat and turns into steam, thereby lowering the temperature of the fuel below its ignition point. This process is known as cooling.



- A) Protein foam solution
- B) Sea water jet stream
- C) Carbon Dioxide (CO₂) or non-conductive dry powder
- D) Fresh water spray

Correct Answer: C (Carbon Dioxide (CO₂) or non-conductive dry powder)

Explanation: CO₂ and non-conductive dry powder are non-conductive agents safe for electrical equipment fires.

Q15. What is the duration of SCBA Bottle for 1200 LTRS?

- A) 30 Min.
- B) 15 Min.
- C) 45 Min
- D) 20 Min.

Correct Answer: A (30 Min.)

Explanation: A standard 1200-liter capacity SCBA bottle is designed to provide approximately 30 minutes of breathable air at a normal breathing rate. This duration is crucial for safe escape and firefighting operations in oxygen-deficient environments.

Q16. What is the duration of EEBD?

- A) 5 Min.
- B) 10 Min.
- C) 12 Min.
- D) 8 Min.

Correct Answer: B (10 Min.)

Explanation: An EEBD (Emergency Escape Breathing Device) is designed for escape purposes only, providing a limited supply of air for approximately 10 minutes. This duration is sufficient to allow personnel to reach a safe area during an emergency.

Q17. Proper use of Fire Extinguisher "PASS"?

- A) Pull, Aim, Squeeze, Sweep
- B) Pass, Aim, Shut, Sit
- C) Pass, At, Sure, Speed
- D) Pass, Aim, Squeeze, Sweep

Correct Answer: A (Pull, Aim, Squeeze, Sweep)

Explanation: The PASS acronym is a mnemonic for the correct operation of most portable fire extinguishers: Pull the pin, Aim the nozzle at the base of the fire, Squeeze the operating lever, and Sweep the nozzle from side to side.

Q18. The visible range of Hand Flare in night time?

- A) 40 NM
- B) 30 NM
- C) 10 NM
- D) 25 NM

Correct Answer: C (10 NM)

Explanation: A handheld red distress flare, as specified by SOLAS, is designed to be visible for at least 10 nautical miles (NM) at night. Its bright red light is intended to attract attention from vessels or aircraft for rescue.



- A) Every Month
- B) Every Week
- C) Once in Three Month
- D) Every Year

Correct Answer: C (Once in Three Month)

Explanation: SOLAS regulations require that lifeboats and rescue boats be launched with their assigned crew and maneuvered in the water at least once every three months. This ensures the equipment is operational and the crew is proficient.

Q20. Automatic CO2 release system is for which spaces?

- A) Main Deck
- B) Engine Room
- C) None of Above
- D) Bridge

Correct Answer: C (None of Above)

Explanation: Automatic CO2 release systems are typically installed in high-risk machinery spaces such as engine rooms, boiler rooms, and paint lockers, where flammable liquids or large fires are a concern. These spaces are not typically the bridge or main deck.

Q21. In which language FIRE CONTROL PLAN is written Onboard?

- A) Spanish
- B) French
- C) English
- D) Russian

Correct Answer: C (English)

Explanation: Fire control plans, which detail the fire protection systems and equipment onboard, are required to be readily available and are usually written in English. This ensures clear communication and understanding by international crews and rescue services.

Q22. Class-C Fire Extinguisher is best used on?

- A) Electrical
- B) Metal
- C) Gas
- D) Solid

Correct Answer: A (Electrical)

Explanation: Class C fires involve energized electrical equipment. Extinguishing agents used for Class C fires must be non-conductive to prevent electrical shock hazards, making CO2 or dry chemical powder suitable choices.

Q23. What is the maximum weight of a Portable Extinguisher?

- A) 15 KG
- B) 9 KG
- C) 23 KG
- D) 5 KG

Correct Answer: C (23 KG)

Explanation: While regulations can vary, a common upper limit for the weight of a portable fire extinguisher that a single person can reasonably handle is around 23 kg. This ensures portability and ease of use during firefighting operations.



- A) Oil Tanker
- B) Bulk Carriers
- C) Container Ship
- D) Gas Carriers

Correct Answer: A (Oil Tanker)

Explanation: Foam is a highly effective extinguishing agent for flammable liquid fires, making it a standard fixed firefighting system in cargo and slop tanks of oil tankers. It suppresses vapors and cools the surface.

Q25. Maximum temperature of unexpected side of B- Class Divisions is?

- A) 350
- B) 300
- C) 225
- D) 400

Correct Answer: C (225)

Explanation: B-Class divisions, which relate to bulkheads and decks, are designed to prevent the passage of flame for a specified period. The maximum temperature allowed on the non-fire side is typically 75 degrees Celsius above ambient, meaning around 225 degrees Celsius.

Q26. Foam Extinguisher work on?

- A) Smothering
- B) Inhibition
- C) Starvation
- D) Cooling

Correct Answer: A (Smothering)

Explanation: Foam extinguishers work by forming a foam blanket over the surface of flammable liquids, which separates the fuel from the air, thus extinguishing the fire. This process is known as smothering.

Q27. How many hours diesel driven Fire Pump should run?

- A) 14 Hrs
- B) 20 Hrs
- C) 18 Hrs
- D) 16 Hrs

Correct Answer: C (18 Hrs)

Explanation: According to SOLAS, diesel-driven fire pumps must be capable of operating continuously for a minimum of 18 hours. This ensures a sustained water supply for firefighting operations during extended emergencies.

Q28. Which is the best Fire Extinguisher for Liquid Fire?

- A) CO2
- B) Foam
- C) Water
- D) DCP

Correct Answer: B (Foam)

Explanation: Foam extinguishers are considered the most effective for liquid fires (Class B) because they form a film that suppresses vapors and prevents re-ignition. Water would spread the burning liquid, and CO2/DCP may be less effective on large liquid surfaces.



- A) 15 m³/ Hrs
- B) 25 m³/ Hrs
- C) 20 m³/ Hrs
- D) 10 m³/ Hrs

Correct Answer: B (25 m³/ Hrs)

Explanation: SOLAS mandates that the minimum capacity of emergency fire pumps on vessels is 25 m³/hour. This ensures a sufficient flow rate of water for essential firefighting operations in critical situations.

Q30. What is the primary purpose of conducting regular boundary cooling during a shipboard compartment fire?

- A) Drain water into the bilge pump
- B) Reduce sea chest suction pressure
- C) Prevent heat conduction through bulkheads and decks from igniting combustible materials in adjacent spaces
- D) Cool the firefighter's breathing apparatus

Correct Answer: C (Prevent heat conduction through bulkheads and decks from igniting combustible materials in adjacent spaces)

Explanation: Boundary cooling prevents thermal conduction from transferring heat through bulkheads and igniting combustibles in neighboring compartments.