



Refresher Course

30 Practice Questions and Answers for STCW Exams

Updated for DG Shipping India Exams | Source: brightmariner.com

Practice Set 1

Q1. Fire Triangle Fill up the blanks

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

Correct Answer: C (All of Above)

Explanation: The fire triangle consists of three essential elements: fuel, heat, and oxygen. Removing any one of these elements will result in the extinguishment of the fire.

Q2. Class A involves flammable liquids. True or False?

- A) False
- B) True

Correct Answer: A (False)

Explanation: Class A fires involve solid combustible materials like wood, paper, and textiles. Flammable liquids fall under Class B, making the statement false.

Q3. What is the minimum capacity of emergency fire pumps in meter cube per hour?

- A) 15 meter cube per hour
- B) 30 meter cube per hour
- C) 25 meter cube per hour
- D) 20 meter cube per hour

Correct Answer: C (25 meter cube per hour)

Explanation: Under SOLAS requirements for fire safety systems, the emergency fire pump must have a minimum capacity to deliver a specific volume of water, which is established as 25 cubic meters per hour for cargo ships.

Q4. What is the best fire extinguisher for electrical fires?

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

Correct Answer: A (CO2)

Explanation: CO2 is the preferred medium for electrical fires because it is non-conductive, leaves no residue, and effectively displaces oxygen without damaging sensitive electrical components.



- A) Green
- B) White
- C) Blue
- D) Yellow

Correct Answer: B (White)

Explanation: According to the COLREGs, white light is required for the all-round masthead and stern lights on smaller vessels to ensure visibility in all directions, acting as a navigational signal.

Q6. Fire extinguishing system required for propelling machines and diesel-driven motors:

- A) CO2
- B) Hyper mist
- C) DCP
- D) Foam

Correct Answer: B (Hyper mist)

Explanation: Hyper mist (Water mist) systems are highly effective for engine room machinery as they cool the fire and provide localized protection without the oxygen-depleting risks of CO2.

Q7. How many hours should a diesel-driven fire pump run?

- A) 18 hours
- B) 14 hours
- C) 12 hours
- D) 16 hours

Correct Answer: A (18 hours)

Explanation: Under SOLAS requirements, the emergency fire pump must be capable of continuous operation for at least 18 hours to ensure sufficient firefighting capability during a prolonged emergency.

Q8. Dry chemical powder extinguisher works on what principle?

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

Correct Answer: B (Inhibition)

Explanation: Dry Chemical Powder (DCP) extinguishes fire primarily by chemical inhibition, where the powder interferes with the free radicals in the combustion chain reaction.

Q9. Class B bulkheads are classified as B15 and B0. True or False?

- A) False
- B) True

Correct Answer: B (True)

Explanation: Class B divisions are structural fire protection barriers; B15 prevents smoke/flame and limits temperature rise for 15 minutes, while B0 prevents smoke/flame but lacks insulation requirements.



- A) 300 degrees centigrade
- B) 350 degrees centigrade
- C) 250 degrees centigrade
- D) 400 degrees centigrade

Correct Answer: C (250 degrees centigrade)

Explanation: According to the FTP Code, the average temperature on the unexposed side of a B class division must not rise more than 225 degreesC above initial, with a maximum of 250 degreesC at any point.

Q11. DCP firefighting system is used in which types of vessels?

- A) Chemical tankers
- B) Bulk carriers
- C) Oil tankers
- D) Gas carriers

Correct Answer: D (Gas carriers)

Explanation: DCP systems are primarily used on gas carriers because the powder is chemically inert and effectively tackles fires involving liquefied gases where other agents may be ineffective.

Q12. What is the maximum weight of a portable extinguisher?

- A) 23 KG
- B) 25 kgs
- C) 12 kgs
- D) 16 kgs

Correct Answer: A (23 KG)

Explanation: Portable fire extinguishers under SOLAS/FSS Code regulations are limited to a maximum mass of 23 kg to ensure they are manageable by a single crew member during an emergency.

Q13. Class A fire extinguisher is best used on:

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

Correct Answer: D (Solids)

Explanation: Class A fires involve ordinary combustible solids like wood, paper, and textiles. Water is the primary extinguishing agent as it provides a cooling effect.

Q14. In which language is the fire control plan written on board?

- A) Any local language
- B) Spanish
- C) French
- D) English

Correct Answer: D (English)

Explanation: As per SOLAS requirements, the fire control plan must be written in the working language of the ship and in either English, French, or Spanish.



- A) Accommodation
- B) Engine room
- C) None of the above
- D) Main deck

Correct Answer: C (None of the above)

Explanation: Automatic CO2 systems are not used in occupied spaces like the accommodation or engine room due to the extreme danger of suffocation to crew members.

Q16. How often should rescue boards be launched with their assigned crew and manning water?

- A) Every month
- B) Once in three months
- C) Once in two weeks
- D) Every week

Correct Answer: B (Once in three months)

Explanation: SOLAS regulations require that rescue boats be launched with their assigned crew, and the boat must be maneuvered in the water at least once every three months.

Q17. Your vessel is in collision and you are not sure if your vessel is sinking. How will you handle the situation?

- A) Leave the vessel and stay close by.
- B) Wait and see the situation.
- C) Search for missing persons, monitor the situation, prepare for abandonment if required.
- D) Ensure the lifeboat has enough fuel to reach land.

Correct Answer: C (Search for missing persons, monitor the situation, prepare for abandonment if required.)

Explanation: The primary response to a collision is to assess the damage and structural integrity. Monitoring the situation is crucial before committing to abandoning the vessel.

Q18. The visible range of parachute flares at nighttime is:

- A) 25 nautical miles
- B) 15 nautical miles
- C) 10 nautical miles
- D) 8 nautical miles

Correct Answer: A (25 nautical miles)

Explanation: According to LSA code, parachute flares are required to have a high intensity and visibility, capable of being seen at significant distances to alert SAR assets.

Q19. What should be done in case of a fire on board?

- A) Reduce speed, keep the fire zone leeward.
- B) Let the wind follow the fire to reduce oxygen.
- C) Let the stem be up against the wind.
- D) Continue on course and speed.

Correct Answer: A (Reduce speed, keep the fire zone leeward.)

Explanation: Maneuvering to keep the fire leeward ensures that the wind blows smoke and flames away from the rest of the ship, assisting the fire-fighting team.



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

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

Explanation: PASS is the standard mnemonic for operating portable fire extinguishers: Pull the pin, Aim at the base, Squeeze the handle, and Sweep from side to side.

Q21. How should the painter of a life raft, which is fitted with an HRU, be secured to the ship?

- A) It should not be secured in any way.
- B) Directly to a secure point on the ship.
- C) Secured via a weak link to a secure point.
- D) Secured to a part of the hydrostatic release unit that is designed to break free.

Correct Answer: C (Secured via a weak link to a secure point.)

Explanation: The painter is secured via a weak link so that if the vessel sinks, the raft will float free, and the link will break once the raft is inflated, preventing it from being dragged down.

Q22. Before lifting a lifeboat from water, it must be ensured that:

- A) The engine is going astern.
- B) The bottom plug is shipped.
- C) Fall wires are clear and looped securely.
- D) The anchor is streamed.

Correct Answer: C (Fall wires are clear and looped securely.)

Explanation: Ensuring the fall wires are clear and looped securely prevents fouling or jamming, which could lead to accidental or uneven release during the recovery of the lifeboat.

Q23. What is the duration of an emergency escape breathing device (EBD)?

- A) 12 minutes
- B) 8 minutes
- C) 5 minutes
- D) 10 minutes

Correct Answer: D (10 minutes)

Explanation: EEEDs are designed for personnel to escape a fire-affected space; SOLAS requires them to have a service duration of at least 10 minutes.

Q24. A self-contained air breathing apparatus bottle with 1200 liters of air will last for how many minutes?

- A) 25 minutes
- B) 45 minutes
- C) 30 minutes
- D) 20 minutes

Correct Answer: C (30 minutes)

Explanation: Standard breathing rate is roughly 40 liters/min. A 1200-liter bottle lasts for 30 minutes ($1200 / 40 = 30$), accounting for standard consumption during fire operations.

Q25. The extinguisher that can be used for class F or class K fires is:



- A) Wet chemical
- B) Foam
- C) CO2
- D) Dry chemical powder

Correct Answer: A (Wet chemical)

Explanation: Wet chemical extinguishers are specifically designed for Class F/K fires, typically involving cooking oils and fats, as they form a soap-like film to prevent re-ignition.

Q26. Oxygen removal stops fire by:

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

Correct Answer: C (Smothering)

Explanation: Smothering involves depriving the fire of oxygen, one of the primary elements of the fire triangle, thereby extinguishing the combustion process.

Q27. What is the fourth component of a fire tetrahedron?

- A) Molecular chain reaction
- B) Inhibition
- C) Fire reaction
- D) None of the above

Correct Answer: A (Molecular chain reaction)

Explanation: The fire tetrahedron adds the 'Chemical Chain Reaction' to the classic fire triangle (Fuel, Heat, Oxygen), explaining why chemical inhibition is effective.

Q28. What is the color coding of a portable water extinguisher?

- A) Blue
- B) Signal red
- C) Yellow
- D) Cream

Correct Answer: B (Signal red)

Explanation: Portable fire extinguishers are color-coded for identification. Under international standards, water extinguishers are identified by a signal red body color.

Q29. What is the length of a fireproof line of a self-contained air breathing apparatus?

- A) 20 meters
- B) 50 meters
- C) 10 meters
- D) 30 meters

Correct Answer: D (30 meters)

Explanation: SOLAS requires that the lifeline of a self-contained breathing apparatus must be fireproof and have a minimum length of 30 meters.

Q30. Which dangerous condition should be kept in mind after using a 15-pound CO2 fire extinguisher on a small oil fire on the engine room floor plates?

Refresher Course Exam Prep

brightmariner.com



- A) Possible suffocation from the CO2 gas.
- B) Forgetting to secure the engine room ventilation system.
- C) CO2 gas being drawn into nearby engine or air compressor intakes.
- D) Rekindling of the fire.

Correct Answer: D (Rekindling of the fire.)

Explanation: CO2 is not a cooling agent. After using it, the danger remains that the hot fuel or surfaces may cause the fire to reignite once the gas dissipates.