



Personal Survival Techniques (PST)

30 Practice Questions and Answers for STCW Exams

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Practice Set 1

Q1. Emergency Position Indicating Radio Beacon (EPIRB) is considered as:

- A) Secondary means of alerting device
- B) None of the above
- C) Primary means of alerting device
- D) Both primary and secondary

Correct Answer: A (Secondary means of alerting device)

Explanation: An EPIRB is a secondary means of alerting, as the primary means is typically through GMDSS radio communications (DSC) initiated from the bridge. The EPIRB serves as a reliable emergency beacon for locating the vessel during abandonment.

Q2. How can a Search and Rescue Radar Transponder (SART) effective range be maximized?

- A) It should be as high as possible
- B) The SART should be placed in water immediately after activation
- C) The SART should be put on high power mode
- D) Mount the SART horizontally with respect to rescue vessel radar

Correct Answer: A (It should be as high as possible)

Explanation: A SART operates by reflecting radar signals from search and rescue vessels. Because it is a line-of-sight device, keeping it as high as possible above the sea surface significantly increases its detection range by radar scanners.

Q3. On a passenger ship, muster of passengers must be carried out:

- A) Within one week after boarding the person
- B) Within 24 hours of leaving the port
- C) Anytime by surprise as decided by the master
- D) Whenever the passengers are settled out

Correct Answer: B (Within 24 hours of leaving the port)

Explanation: Passenger safety is paramount. Regulations require that passengers be mustered and instructed in emergency procedures, including the use of lifejackets and knowledge of the assembly station, within 24 hours of boarding.

Q4. The Thermal Protective Aid (TPA) should permit the wearer to remove it in the water:

- A) Not more than five minutes
- B) Not more than 15 minutes
- C) Not more than two minutes
- D) Not more than 10 minutes

Correct Answer: C (Not more than two minutes)

Explanation: A Thermal Protective Aid (TPA) is designed to protect survivors from hypothermia. LSA regulations require that the



~~Q5. Which channel is designated as the VHF follow-on Communication channel required in all portable survival craft equipment?~~

- A) Channel 16
- B) Channel 06
- C) Channel 70
- D) Channel 13

Correct Answer: A (Channel 16)

Explanation: VHF Channel 16 is the international distress and safety frequency, and it is the designated channel for all follow-on communications between a survival craft and the assisting rescue vessel.

Q6. How many survival craft VHF walkie-talkies are required to be carried on cargo ships above 500 Gross Registered Tonnage (GRT)?

- A) Three numbers
- B) Two numbers
- C) Five numbers
- D) Four numbers

Correct Answer: A (Three numbers)

Explanation: SOLAS regulations require that cargo ships of 500 GRT and above carry at least three two-way VHF radiotelephone apparatuses for use in survival craft to ensure communication with rescue vessels during abandonment.

Q7. You are at sea in an inflatable life raft in high altitudes, the greatest danger is:

- A) Collapse of the raft due to cold temperatures
- B) Starvation
- C) Asphyxiation due to keeping the canopy closed
- D) Hypothermia caused by cold temperature

Correct Answer: D (Hypothermia caused by cold temperature)

Explanation: In a survival craft, the lack of thermal protection and the inability to generate body heat in a wet environment makes hypothermia the primary killer. While cold can affect air pressure, the human physiological limit is the most critical factor.

Q8. Prior to lowering the lifeboat, the most important item to check is:

- A) Sail
- B) Life preservers
- C) Boat plug
- D) Oars

Correct Answer: C (Boat plug)

Explanation: The boat plug, often called a drain plug, must be securely inserted before lowering the lifeboat. If omitted, the boat will flood immediately upon launching, potentially leading to swamping or sinking.



- A) Time of the day
- B) Nature of distress
- C) Your position by latitude and longitude
- D) Your radio call sign

Correct Answer: C (Your position by latitude and longitude)

Explanation: Under GMDSS and IAMSAR procedures, the most essential data for an effective search is the precise geographic location. Latitude and longitude allow the Rescue Coordination Centre (RCC) to direct assets to the correct area.

Q10. What is the type of battery used for EPIRB and your SART?

- A) Lithium non-rechargeable
- B) None of the above
- C) Solar rechargeable cells
- D) Lead acid battery

Correct Answer: A (Lithium non-rechargeable)

Explanation: EPIRBs and SARTs require reliable, long-lasting power sources. Lithium batteries are used because they offer a long shelf-life, high energy density, and reliability in extreme temperatures.

Q11. Which statement concerning locating signals in the GMDSS is false?

- A) Locating signals are transmitted by survival craft VHF transceivers
- B) Locating signals are not transmitted by auto alarm generators
- C) Locating signals are transmitted by search and rescue radar transponders
- D) Locating signals are intended to facilitate the finding of distress vessel or survivors

Correct Answer: A (Locating signals are transmitted by survival craft VHF transceivers)

Explanation: Survival craft VHF transceivers are communication devices, not 'locating signals' within the context of GMDSS. Locating signals, such as SARTs or AIS-SART, are specifically designed to be detected by radar or AIS for target identification.

Q12. The person aboard a vessel signaling by raising and lowering his or her outstretched arms to each side is indicating:

- A) All is clear, it is safe to approach
- B) All is clear, it is safe to pass
- C) Danger, stay away
- D) distress signal

Correct Answer: D (distress signal)

Explanation: According to the International Aeronautical and Maritime Search and Rescue (IAMSAR) manual and COLREGs Annex IV, this physical gesture is a recognized visual signal of distress.

Q13. You are involved in an emergency landing of a helicopter in water. You should inflate your life jacket:

- A) Upon entering the helicopter
- B) After clear of the helicopter
- C) After reaching the water but prior to exiting the helicopter
- D) Prior to reaching the water

Correct Answer: B (After clear of the helicopter)

Explanation: Inflating a life jacket inside a capsizing helicopter can trap the occupant and prevent escape through narrow exits. It must be inflated only once the survivor is clear of the fuselage to ensure buoyancy.

Q14. Choose the right combination of VHF channels for emergency communication during search and rescue for ship-to-ship and ship-to-aircraft communication:



- A) Channel 06 and 30
- B) Channel 16 and 06
- C) Channel 21 and 23
- D) Channel 70 and 16

Correct Answer: B (Channel 16 and 06)

Explanation: Channel 16 is the international distress, safety, and calling frequency. Channel 06 is the primary designated inter-ship safety channel for coordinated search and rescue operations.

Q15. Davit-launched life raft can be boarded:

- A) By jumping down onto it
- B) Through the escape tube
- C) From the water only
- D) At the deck

Correct Answer: D (At the deck)

Explanation: Davit-launched life rafts are designed to be inflated and boarded at the embarkation deck, allowing survivors to enter the craft safely before it is lowered into the water.

Q16. Cargo ships of 100 meters and above but less than 150 meters should have how many life buoys?

- A) 30
- B) 8
- C) 12
- D) 14

Correct Answer: A (30)

Explanation: According to SOLAS Chapter III, ships of 100 meters and upwards but less than 150 meters in length must carry a minimum of 12 lifebuoys.

Q17. Which onboard equipment will detect a signal from a search and rescue radar transponder (SART)?

- A) Satellite communication terminals
- B) Digital selective calling (DSC) receiver
- C) X-band radar
- D) S-band radar

Correct Answer: C (X-band radar)

Explanation: A SART is designed to operate in the 9 GHz band (X-band). When pulsed by an X-band radar, the SART sends back a specific response that appears on the radar display as a line of 12 dots.

Q18. With a sprinkler system and air system on and all hatches shut, the survival craft will provide protection from:

- A) Fire and toxic environment
- B) Storm or a hurricane
- C) Sea creatures
- D) Nuclear environment

Correct Answer: A (Fire and toxic environment)

Explanation: Enclosed survival craft feature water spray systems for hull cooling and air support systems (compressed air cylinders)



~~Q19. What must be the characteristics of a lifebuoy attached with a self-igniting light and smoke?~~

- A) Two hours of light with two hours of smoke
- B) 15 minutes of light with 15 minutes of smoke
- C) One hour of light with 15 minutes of smoke
- D) Two hours of light with two candle luminous intensity with 15 minutes of smoke

Correct Answer: D (Two hours of light with two candle luminous intensity with 15 minutes of smoke)

Explanation: SOLAS requirements state that a lifebuoy with a self-igniting light must provide at least 2 cd for 2 hours, and a smoke signal must provide at least 15 minutes of smoke.

Q20. The most important reason for taking anti-seasickness pills as soon as possible after entering into a life raft is to:

- A) Assist in sleeping
- B) Prevent loss of body moisture by vomiting
- C) Prevent impact judgment due to motion-induced deliriousness
- D) Reduce appetite by decreasing nausea

Correct Answer: B (Prevent loss of body moisture by vomiting)

Explanation: Seasickness induces vomiting, which leads to rapid dehydration. In a survival situation, maintaining hydration is critical to longevity, making early prevention of fluid loss vital.

Q21. The rescue vessel is approaching an activated SART at a distance of five miles. What indication appears on the rescue vessel radar screen?

- A) Wide arcs
- B) series of 12 equally spaced blips outward from the SART's position along its line of bearing
- C) Concentric circles
- D) SOS symbol appears on the display of the radar screen

Correct Answer: B (series of 12 equally spaced blips outward from the SART's position along its line of bearing)

Explanation: When a SART is within range, it responds to the ship's X-band radar pulses by displaying a series of 12 dots spaced 0.6 nautical miles apart along the line of bearing from the radar.

Q22. On what frequency do EPIRBs transmit information to satellites on emergency activation?

- A) 406 MHz
- B) 121.5 MHz
- C) 243 MHz
- D) 156.8 MHz

Correct Answer: A (406 MHz)

Explanation: 406 MHz is the frequency dedicated for satellite-based distress alerting via the Cospas-Sarsat system, which provides global coverage and identifies the vessel.



- A) Possibility of Capsizing
- B) Building of compartments
- C) Oil pollution
- D) Damage to the ship

Correct Answer: A (Possibility of Capsizing)

Explanation: After a collision, loss of intact stability or reserve buoyancy due to flooding leads to capsizing, which is the most immediate threat to the lives of all personnel on board.

Q24. What should be the duration and luminous intensity of a hand flare?

- A) 60 seconds with 15,000 candles
- B) 120 seconds with 30,000 candles
- C) 60 seconds with 30,000 candles
- D) 120 seconds with 15,000 candles

Correct Answer: A (60 seconds with 15,000 candles)

Explanation: SOLAS LSA Code mandates that hand flares must have a luminous intensity of at least 15,000 candela and burn for a minimum of 60 seconds.

Q25. One of the main characteristics of a life jacket is:

- A) To swim
- B) To float
- C) All of the above
- D) To maintain the face of an unconscious person above the water level

Correct Answer: D (To maintain the face of an unconscious person above the water level)

Explanation: A key requirement for a life jacket is the ability to turn an unconscious person's face out of the water within a specified time, preventing drowning.

Q26. Crew duties to passengers in an emergency especially in a passenger vessel involve:

- A) All of the above
- B) Warn all passengers
- C) Seeing that they have suitably donned the life jackets in a correct manner
- D) Keeping the movement of the passengers towards the muster station

Correct Answer: A (All of the above)

Explanation: During an emergency, the crew is responsible for the safety of passengers, which includes alerting them, guiding them to muster stations, and ensuring lifejackets are donned correctly.

Q27. What indication does an EPIRB give on activation?

- A) Gives out a printout of distress message sent
- B) Strobe lights or flashes on top of the EPIRB
- C) Voice prompt saying EPIRB is activated
- D) All of the above

Correct Answer: B (Strobe lights or flashes on top of the EPIRB)

Explanation: EPIRBs are required to have a visual indicator, typically a flashing strobe light, which assists rescuers in locating the unit during nighttime or low-visibility operations.



- A) Six
- B) Two
- C) None
- D) Four

Correct Answer: C (None)

Explanation: Buoyant smoke signals are typically associated with lifebuoys or lifeboats, but for the bridge area specifically, the carriage requirement for buoyant orange smoke floats is zero.

Q29. A life jacket has:

- A) Reflective tape
- B) Whistle and light
- C) Whistle, reflective tape, and a light
- D) Only a whistle

Correct Answer: C (Whistle, reflective tape, and a light)

Explanation: Modern SOLAS-compliant life jackets must be equipped with a whistle to attract attention and a light to provide visibility in dark or low-light conditions.

Q30. How do you know how many persons a lifeboat can accommodate?

- A) None of the above
- B) No limitations, you can put maximum persons inside
- C) Number of persons it can hold is clearly marked on the outside of the lifeboat
- D) Ask your chief officer

Correct Answer: C (Number of persons it can hold is clearly marked on the outside of the lifeboat)

Explanation: The maximum number of persons permitted on board a survival craft must be clearly and permanently marked on the exterior of the craft for quick reference during an emergency.