

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q328 Deck Safety

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

1. What power source actuates a solenoid valve?

- A. Mechanical force
- B. Electric current
- C. Air pressure
- D. Hydraulic pressure

Correct answer: B

2. Which is an indication that progressive flooding is occurring?

- A. Ballast control alarms sounding
- B. Excessive list or trim
- C. Continual worsening of list or trim
- D. Excessive draft

Correct answer: C

3. Tonnage openings must be closed by means of _____.

- A. wooden hatch boards
- B. press board
- C. steel plates
- D. steel hatch boards

Correct answer: C

4. Which is the primary type of welding employed in shipyards in the construction of cargo vessels?

- A. electric arc
- B. thermite welding
- C. pressure welding
- D. brazing

Correct answer: A

5. What is TRUE concerning frapping lines?

- A. They are used to clear the puddings.
- B. They are normally attached to the davit span.
- C. They are needed only on radial davits.
- D. They are used to steady a lifeboat when lowered.

Correct answer: D

6. In heavy seas, how should the helmsman steer the lifeboat?

- A. In a series of figure-eights
- B. In the same direction as the seas
- C. With the seas slightly off of the bow
- D. Broadside to the seas

Correct answer: C

7. You abandoned ship in the North Atlantic and one of the crew members is hypothermic. During a SAR helicopter extraction which lifting device should be avoided when hoisting this patient to the aircraft?
- A. The rescue litter
 - B. The rescue sling
 - C. The rescue basket
 - D. The rescue net

Correct answer: B

8. A drill must be conducted in the use of the line throwing appliance. How often is this drill required to be conducted?
- A. 2 months
 - B. 3 months
 - C. 4 months
 - D. 5 months

Correct answer: B

9. A well in the uppermost deck of a shelter deck vessel which has only a temporary means of closing for the purpose of gaining an exemption from tonnage measurement is called a(n) _____.
- A. tonnage opening
 - B. exemption space
 - C. tonnage deck
 - D. cofferdam

Correct answer: A

10. While underway, if you are required to have a radiotelephone, you must maintain a continuous listening watch on which of the following channels?
- A. 6 (156.3 MHz)
 - B. 12 (156.6 MHz)
 - C. 14 (156.7 MHz)
 - D. 16 (156.8 MHz)

Correct answer: D

11. Where a propeller shaft passes through the hull, which device prevents water from entering the hull?
- A. Stuffing box
 - B. Sea cock
 - C. Stop-water
 - D. Propeller boss

Correct answer: A

12. Which of the following statements is FALSE concerning the proper procedure in handling a fire hose?

- A. A 1½ inch hose should be deployed with a minimum of a nozzleman and hoseman.
- B. Back-up hosemen should be placed wherever the hose makes a significant turn.
- C. The nozzleman should always hold the nozzle with one hand on top, to prevent kickback.
- D. Use of a spanner wrench when attaching nozzles or additional lengths of hose is always critical.

Correct answer: D

13. How do you operate a portable CO2 fire extinguisher?

- A. Break the rupture disc.
- B. Pull pin, squeeze grip.
- C. Turn cylinder upside-down.
- D. Point the horn down.

Correct answer: B

14. Your vessel has 3 lifeboats on each side. The middle lifeboat on the port side is designated as which boat number?

- A. 2
- B. 2 PORT
- C. 3
- D. 4

Correct answer: D

15. You are picking up a conscious person that has fallen overboard in one of the vessels motor boats. Recovery is easier in a light breeze if you approach from which direction?

- A. Leeward with the victim to windward
- B. Approach with the wind on your starboard side
- C. Windward with the victim to leeward
- D. Approach with the wind on your port side

Correct answer: C

16. Which class of fire is an oil fire classified?

- A. Class A
- B. Class B
- C. Class C
- D. Class D

Correct answer: B

17. On a small boat, if someone fell overboard and you did not know over which side the person fell, which action should you take?

- A. Stop the propellers from turning and throw a ring buoy over the side
- B. First put the rudder hard over in either direction
- C. Immediately reverse the engines
- D. Increase speed to full to get the vessel away from the person

Correct answer: A

18. Which is the best action to take when plugging holes below the waterline for the safety of the vessel?

- A. Only plug holes in machinery or other vital spaces
- B. Plug the largest holes first
- C. Reduce the entry of water as much as possible
- D. Eliminate all water entering the hole

Correct answer: C

19. Lifesaving regulations in Subchapter W require that a fire drill include which of the following?

- A. Checking the operation of watertight doors
- B. Checking arrangements for abandon ship
- C. Starting the fire pumps
- D. All of the above

Correct answer: D

20. If the situation arose where it became necessary to tow a disabled vessel, which statement is TRUE concerning the towing line?

- A. The towing line between the two vessels should be clear of the water.
- B. There should be a catenary so the line dips into the water.
- C. The towing line should be taut at all times between the vessels.
- D. None of the above.

Correct answer: B

21. What is meant by the term "overhaul" in firefighting?

- A. Break up solid objects to ensure that any deep-seated fires are extinguished
- B. Cover the fire with foam
- C. Smother the fire with a blanket or similar object
- D. Slow down the spread of fire by cooling adjacent structures

Correct answer: A

22. You are on watch and receive word that a person has fallen overboard from the starboard side. What should your first action be?

- A. Put the engines full astern
- B. Put the wheel hard right
- C. Notify the Master
- D. Sound the man overboard alarm

Correct answer: B

23. Which type of hull damage should be repaired FIRST?

- A. Damage in way of machinery rooms
- B. Damage to interior watertight boundaries
- C. Damage at or just above the waterline
- D. Damage below the waterline

Correct answer: C

24. When is firefighting foam most effective?

- A. When it is kept saturated with low-velocity water fog
- B. If it penetrates to the bottom of the fire
- C. When it completely covers the top of the burning liquid
- D. As it mixes with the burning fuel oil

Correct answer: C

25. What is the maximum length of time that distress flares are approved for?

- A. 1 and 1/2 years
- B. 2 years
- C. 3 and 1/2 years
- D. 5 years

Correct answer: C

26. Which statement is TRUE concerning an inflatable liferaft?

- A. The raft may be boarded before it is fully inflated.
- B. Crew members can jump into the raft without damaging it.
- C. The floor may be inflated for insulation from cold water.
- D. All of the above

Correct answer: D

27. When should the external inflation bladder on an immersion suit be inflated?

- A. After you enter the water
- B. After you notice that your suit is losing buoyancy
- C. After one hour in the water
- D. Before you enter the water

Correct answer: A

28. The strength of a deck will be increased by adding which item?

- A. Sheer
- B. Deck beam brackets
- C. Hatch beams
- D. Camber

Correct answer: B

29. Where would spontaneous combustion most likely to occur?

- A. In dirty swabs and cleaning gear
- B. In overloaded electrical circuits
- C. In rags soaked in linseed oil
- D. In partially loaded fuel tanks

Correct answer: C

30. Which is TRUE concerning the painter of an inflatable liferaft?

- A. Stowed under the raft to protect from the elements
- B. Staged for free running on the deck
- C. Faked out next to the case on deck
- D. Secured to permanent object on deck via weak link

Correct answer: D

31. What term indicates the immersed body of the vessel forward of the parallel mid-body?

- A. Run
- B. Flare
- C. Entrance
- D. Sheer

Correct answer: C

32. What would be the most effective agent to use to extinguish a fire in drums of flammable liquids stowed on the weather deck of a vessel?

- A. Foam
- B. Carbon dioxide
- C. Steam
- D. Water fog

Correct answer: A

33. Distress signals may be _____.

- A. smoke signals
- B. red flares
- C. sound signals
- D. Any of the above

Correct answer: D

34. If you have a fire in the engine room, what is the FIRST action you should take?

- A. Secure the fuel supply and ventilation to the engine room
- B. Discharge the fixed CO2 system into the engine room
- C. Have all of your crew get into the liferaft
- D. Maneuver your vessel into the wind

Correct answer: A

35. Which distress signal is required for a liferaft in ocean service and could be effectively used to attract the attention of aircraft at night?

- A. Red flares
- B. Smoke marker
- C. Orange dye marker
- D. The water light

Correct answer: A

36. The oxygen indicator is an instrument that measures the _____.

- A. amount of combustible gas as a percentage of the lower explosive limit in a confined space
- B. amount of oxygen in the atmosphere of a confined space
- C. concentration of CO₂ as a percentage of oxygen in a confined space
- D. None of the above

Correct answer: B

37. Why is it necessary to secure the forced ventilation to a compartment where there is a fire?

- A. To prevent additional oxygen from reaching the fire
- B. To allow the exhaust fans to remove smoke
- C. To extinguish the fire by carbon monoxide smothering
- D. To protect firefighting personnel from smoke

Correct answer: A

38. When should the control of flooding of your vessel be addressed?

- A. Only if a threat exists
- B. Following restoration of vital services
- C. Following control of fire
- D. First

Correct answer: C

39. Fire may be spread by which means?

- A. Conduction of heat to adjacent surfaces
- B. Direct radiation
- C. Convection
- D. All of the above

Correct answer: D

40. When compared to a high-expansion foam, a low-expansion foam will _____.

- A. cling to vertical surfaces
- B. be dryer
- C. be lighter
- D. be more heat resistant

Correct answer: D

41. On the all-purpose nozzle, what is the position of the nozzle valve when the handle is all the way forward?

- A. fog
- B. shut
- C. solid stream
- D. spray

Correct answer: B

42. What is the usual depth of a beam bracket?

- A. same depth as the beam
- B. 2 1/2 times the depth of the beam
- C. 5 times the depth of the beam
- D. 10 times the depth of the beam

Correct answer: B

43. What is the color of the signal flare sent up by a submarine indicating that a torpedo has been fired in a training exercise?

- A. White
- B. Red
- C. Green
- D. Yellow

Correct answer: C

44. What is the signal to guide vessels in distress, indicating, "This is the best place to land"?

- A. Horizontal motion of a white flag
- B. Firing of a white star signal
- C. The code flag S as a hoist
- D. The letter K in Morse code given by light

Correct answer: D

45. Fires are grouped into what categories?

- A. Class A, B, C, and D
- B. Type 1, 2, 3, and 4
- C. Combustible solids, liquids, and gases
- D. Flammable solids, liquids, and gases

Correct answer: A

46. You have just abandoned ship and boarded a raft. After the raft is completely inflated you hear a whistling noise coming from a safety valve. Which action should you take?

- A. Do not become alarmed unless it continues for a long period of time
- B. Unscrew the deflation plugs
- C. Remove the safety valve and replace it with a soft patch
- D. Plug the safety valve

Correct answer: A

47. You are releasing carbon dioxide gas (CO₂) into an engine compartment to extinguish a fire. In which situation will the CO₂ be most effective?

- A. The compartment is closed and ventilators are opened
- B. The compartment is closed and airtight
- C. The compartment is left open to the air
- D. Air flow to the compartment is increased with blowers

Correct answer: B

48. The vessel shown in illustration D025DG has broken down and you are going to take her in tow. The wind is on her starboard beam. She is making more leeway than you. Where should you position your vessel when you start running lines?

- A. A
- B. B
- C. C
- D. D

Correct answer: D

49. A 750-foot passenger vessel operating on the Great Lakes, not subject to SOLAS regulations, is required to carry how many ring life buoys?

- A. 24
- B. 18
- C. 12
- D. 6

Correct answer: A

50. You are at sea and have received a General Emergency message announcing the outbreak of war in Europe. You are directed to comply with the instructions in NGA (NIMA) PUB 117, Chapter Eight. Which statement is TRUE?

- A. You should attempt to coordinate with the Shipping Control Team
- B. When over 200 miles from a port in the danger zone, you should not darken ship
- C. If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port
- D. You should only enter a port in the danger zone during hours of darkness

Correct answer: A

51. How should a message warning of a tropical storm be sent?

- A. Distress message
- B. Routine message
- C. Safety message
- D. Urgent message

Correct answer: C

52. Inflatable liferafts are less maneuverable than lifeboats due to their _____.

- A. shape
- B. shallow draft
- C. large sail area
- D. All of the above

Correct answer: D

- 53.** A man aboard a vessel, is signaling by raising and lowering his outstretched arms to each side. What does this signal indicate?
- A. All is clear, it is safe to pass
 - B. All is clear, it is safe to approach
 - C. Danger, stay away
 - D. A distress signal

Correct answer: D

- 54.** Oily rags stored in a pile that is open to the atmosphere are a hazard because they may _____.
- A. attract lice and other vermin and serve as a breeding ground
 - B. spontaneously heat and catch fire
 - C. deteriorate and give off noxious gasses
 - D. None of the above

Correct answer: B

- 55.** Which is TRUE if passengers are on board when an abandon ship drill is carried out?
- A. Passengers should go to their quarters during drills
 - B. The passengers should stay out of the way and do what they want
 - C. The passengers should take part in the drill
 - D. The passengers should just watch

Correct answer: C

- 56.** Which statement is TRUE concerning a motor lifeboat?
- A. It must be able to maintain a loaded speed of 6 knots.
 - B. It has a sufficient fuel capacity, if motorized, for 48 hours of operation.
 - C. It is propelled by engine or hand-propelling gear.
 - D. All of the above

Correct answer: A

- 57.** The welds used to join shell plates in flush construction are known as _____.
- A. seam welds
 - B. continuous welds
 - C. butt welds
 - D. fillet welds

Correct answer: C

- 58.** What is the purpose of a striking plate?
- A. It prevents valve stem over-travel
 - B. It provides a surface for applying force on machinery
 - C. It absorbs machinery vibration
 - D. It provides a landing surface for the sounding bob

Correct answer: D

59. When using a handheld smoke signal aboard a survival craft, how should you activate the signal?

- A. On the downwind side of the craft
- B. At the stern of the craft
- C. On the upwind side of the craft
- D. Inside the craft

Correct answer: A

60. You are fighting a fire in a cargo hold on your vessel. Which action is most important concerning the stability of the vessel?

- A. Maneuvering the vessel so the fire is on the lee side
- B. Draining firefighting water and pumping it overboard
- C. Shutting off electricity to damaged cables
- D. Removing burned debris from the cargo hold

Correct answer: B

61. The difference in water spray pattern between the high-velocity tip and low-velocity applicator used with the all-purpose nozzle is due to _____.

- A. the method of breaking up the water stream
- B. a difference in water pressure
- C. the length of the applicator
- D. All of the above

Correct answer: A

62. You are proceeding to a distress site and expect large numbers of people in the water. Which statement is TRUE?

- A. You should stop to windward of the survivors in the water and only use the ship's boats to recover the survivors.
- B. An inflatable liferaft secured alongside can be an effective boarding station for transfer of survivors from the boats.
- C. If the survivors are in inflatable rafts you should approach from windward to create a lee for the survivors.
- D. Survivors in the water should never be permitted alongside due to the possibility of injury from the vessel.

Correct answer: B

63. Why are lifeboats usually double-enders?

- A. They are more seaworthy and less likely to be swamped or broach to.
- B. There is no particular reason for this.
- C. They require less space for stowing aboard ship.
- D. They can go forward and backward more easily.

Correct answer: A

- 64.** Your vessel has an injured crew member onboard that will require evacuation. Which of the following publications should you review for the procedures in conducting rescue/medivac helicopter operations?
- A. Pub 117 Radio Aids to Navigation
 - B. International Maritime Organization Life-Saving Appliance Code Manual
 - C. International Aeronautical and Maritime Search and Rescue Manual
 - D. Merchant Marine Officers Handbook

Correct answer: C

- 65.** Which has the MOST effect on the range of a SSB transmission?
- A. Atmospheric noise and radiated power
 - B. The frequency band selected and time of day or night
 - C. Radiated power and nearness to shore
 - D. Interference and position of the moon

Correct answer: B

- 66.** When is it recommended that seawater be used for drinking?
- A. Under no conditions should seawater be drunk
 - B. If gathered during or immediately after a hard rain
 - C. Only at a maximum rate of two ounces per day
 - D. After mixing with an equal quantity of fresh water

Correct answer: A

- 67.** Which term is used to describe the point that is halfway between the forward and after perpendicular and is a reference point for vessel construction?
- A. Half length
 - B. Center line
 - C. Amidships
 - D. Mid-body

Correct answer: C

- 68.** Which is an advantage of a dry chemical over a carbon dioxide fire extinguisher?
- A. Greater discharge range
 - B. Cleanliness
 - C. Noncorrosive
 - D. All of the above

Correct answer: A

69. When abandoning ship and jumping into the water from a substantial height without a life jacket, you should _____.

- A. jump feet first, holding your knees to your chest
- B. hold your arms firmly at your sides and jump feet first
- C. jump feet first, covering your nose and mouth with one hand and grasping the opposing upper arm with the other
- D. dive headfirst, using your hands to break the surface of the water

Correct answer: C

70. In heavy seas how should the helmsman steer the motor lifeboat?

- A. Into the seas slightly off the bow
- B. In a series of figure-eights
- C. Broadside to the seas
- D. In the same direction as the seas

Correct answer: A



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