## **National Maritime Center**

Keep 'em Safe, Keep 'em Sailing



## 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. Who should inspect and test an inflatable liferaft?
  - A. A certificated lifeboatman
  - B. An approved servicing facility
  - C. Shipyard personnel
  - D. The person in charge

Correct answer: B

- 2. Which is an indication that progressive flooding is occurring?
  - A. Excessive list or trim
  - B. Continual worsening of list or trim
  - C. Excessive draft
  - D. Ballast control alarms sounding

Correct answer: B

- 3. When compared to low-expansion foam, a high-expansion foam will .
  - A. be drier
  - B. be heavier
  - C. be more heat resistant
  - D. not cling to vertical surfaces

Correct answer: A

- 4. You are on watch and receive word that a person has fallen overboard from the starboard side. What should your first action be?
  - A. Sound the man overboard alarm
  - B. Put the engines full astern
  - C. Put the wheel hard right
  - D. Notify the Master

Correct answer: C

- 5. If heavy smoke is coming from the paint locker, what should be the FIRST firefighting response?
  - A. Open the door to evaluate the extent of the fire
  - B. Release the CO2 flooding system
  - C. Enter and use a portable extinguisher
  - D. Secure the ventilation

- 6. According to the "Vessel Bridge-to-Bridge Radiotelephone Act", what information that affects your vessel is required to be entered into the radiotelephone log?
  - A. The home address of the vessel's Master or owner
  - B. A record of all routine calls
  - C. A record of your transmissions only
  - D. A summary of all distress calls and messages

Correct answer: D

- 7. What is the Ring life buoy requirement on your small passenger vessel that has a length of 28 feet?
  - A. A minimum of one life buoy not less than 24 inches in diameter
  - B. A minimum of one life buoy less than 20 inches in diameter
  - C. A minimum of two life buoys less than 20 inches in diameter
  - D. A minimum of two life buoys not less than 24 inches in diameter

Correct answer: A

- 8. You have abandoned your vessel and are the person in charge of lifeboat No. 2. Which procedure should be followed when landing a boat under oars through a slight surf?
  - A. Head into the seas and drift astern with the sea anchor deployed until land is reached
  - B. Head into the beach, row steadily and swiftly as possible until land is reached
  - C. Head into the seas, tripping the sea anchor and resetting between swells to allow back-watering to the beach
  - D. Head into the beach, tripping the sea anchor from the stern while steadily rowing towards the beach

Correct answer: C

- 9. Which is TRUE of High-velocity fog?
  - A. It extinguishes a fire by absorbing heat and reducing the supply of oxygen
  - B. It is a finer, more diffuse water spray than low-velocity fog
  - C. It produces an effective fog pattern no more than 6 feet beyond the nozzle
  - D. It requires that the water pressure be no greater than 60 psi

Correct answer: A

- 10. Which is TRUE of the term negative slip on a vessel?
  - A. The distance a vessel travels when all propulsion has been stopped
  - B. The distance a vessel travels in the same direction when rudder has been applied
  - C. The ship is moving slower than the theoretical propeller speed
  - D. The ship is moving faster than the theoretical propeller speed

- 11. What may the firing of a red star signal mean?
  - A. "Slack away"

  - B. "This is the best place to land"C. "You are seen assistance will be given as soon as possible"
  - D. "Tail block is made fast"

Correct answer: A

- 12. You are approaching a ship that is broken down and are preparing to take her in tow. BEFORE positioning your vessel to pass the towline, which action should you take?
  - A. Have traveling lizards rigged to guide the towline while it is paid-out
  - B. Secure the bitter end of the towing hawser to prevent loss if the tow is slipped
  - C. Compare the rate of drift between the ships
  - D. Install chafing gear on the towline

Correct answer: C

- 13. 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. Mid-body
  - B. Amidships
  - C. Center line
  - D. Half length

Correct answer: B

- 14. Puncture leaks in the lower tubes or bottom of an inflatable liferaft should FIRST be stopped by using which item(s)?
  - A. A tube patch
  - B. Sail twine and vulcanizing kit
  - C. Sealing clamps
  - D. Repair tape

Correct answer: C

- 15. The rated operating time of a self-contained breathing device may be reduced in actual use because
  - A. spaces containing poisonous vapors
  - B. pressure differences in the atmosphere
  - C. the length of the hose attached to the facepiece
  - D. the physical exertion of the person wearing the device

- 16. You have hand launched an inflatable liferaft. What should be one of your FIRST actions after all persons have boarded the liferaft?
  - A. Open the equipment pack.
  - B. Cut the sea painter and clear the vessel.
  - C. Decide on food and water rations.
  - D. Inflate the liferaft floor.

Correct answer: B

- 17. Fires are grouped into what categories?
  - A. Flammable solids, liquids, and gases
  - B. Class A, B, C, and D
  - C. Type 1, 2, 3, and 4
  - D. Combustible solids, liquids, and gases

Correct answer: B

- 18. Inflatable liferafts are provided with which item?
  - A. A Very pistol
  - B. A towing connection
  - C. A sail
  - D. Canned milk

Correct answer: B

- 19. All of the following are recognized distress signals under the Navigation Rules EXCEPT which signal?
  - A. The repeated raising and lowering of outstretched arms
  - B. Red flares
  - C. Orange-colored smoke
  - D. A green star signal

Correct answer: D

- 20. Which signaling devices are required on inflatable liferafts?
  - A. Orange smoke signal
  - B. Lantern
  - C. Air horn
  - D. Very pistol

Correct answer: A

- 21. Which type of portable fire extinguishers is NOT designed for use on flammable liquid fires?
  - A. Dry chemical
  - B. Carbon dioxide
  - C. Foam (stored-pressure)
  - D. Water (cartridge-operated)

22.	/hich is the required amount of water for each person in a lifeboat on an oceangoing vessel, on	an
	ternational voyage?	

- A. 1 liter
- B. 2 liters
- C. 3 liters
- D. 4 liters

Correct answer: C

- 23. Which term indicates how many tons of cargo a vessel can carry?
  - A. Bale cubic
  - B. Loaded displacement
  - C. Deadweight
  - D. Gross tonnage

Correct answer: C

- 24. Actuating the CO2 fixed system causes which of the following to shut down?
  - A. Electrical lighting
  - B. Fuel supply
  - C. Mechanical ventilation
  - D. Natural ventilation

Correct answer: C

- 25. What is the space above the engine room called?
  - A. Gold locker
  - B. Fidley
  - C. Noble
  - D. Middle hatch

Correct answer: B

- 26. Transverse frames are more widely spaced on a ship that is designed with the \_\_\_\_\_\_.
  - A. transverse system of framing
  - B. centerline system of framing
  - C. isometric system of framing
  - D. longitudinal system of framing

Correct answer: D

- 27. To lubricate the swivel or remove corrosion from a fire hose coupling, which should be used?
  - A. Fresh water and soap
  - B. Graphite
  - C. Kerosene
  - D. Glycerine

- 28. What is the function of wearing rings found on some centrifugal pumps?
  - A. Seal pump shaft against entry of air
  - B. Dampen the turbulent discharge flow
  - C. Isolate the outlet side from the inlet side
  - D. Absorb erosion of high-velocity discharge stream

Correct answer: C

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

Correct answer: D

- 30. On every vessel, where must distress signals be stowed?
  - A. On the flying bridge not closer than 15 feet to any bulkhead
  - B. In an enclosed space below the freeboard deck away from heat
  - C. On or near the navigating bridge
  - D. Above the freeboard deck away from heat

Correct answer: C

- 31. Which types of portable fire extinguishers are designed for use on electrical fires?
  - A. Dry chemical and carbon dioxide
  - B. Carbon dioxide and foam (stored pressure)
  - C. Foam (stored pressure) and soda-acid
  - D. Dry chemical and soda-acid

Correct answer: A

- 32. Which defines the "flammable limits" of an atmosphere?
  - A. The two temperatures between which an atmosphere will burn if an ignition source is present
  - B. The two temperatures between which an atmosphere will self-ignite
  - C. The upper and lower pressures between which an atmosphere will not burn
  - D. The upper and lower percentage of vapor concentrations in an atmosphere which will burn if an ignition source is present

Correct answer: D

- 33. Using a sea anchor will accomplish which of the following?
  - A. Reduce your drift rate
  - B. Increase your visibility
  - C. Aid in the maneuverability of the liferaft
  - D. Keep the liferaft from turning over

0328 Deck Safety J.S.C.G. Merchant Marine Exam Mate Less than 500-1600 Gross Registered Tons Hustrations: 0	
34. A short ton is a unit of weight consisting of	
<ul><li>A. 2,240 pounds</li><li>B. 2,000 pounds</li><li>C. 2,205 pounds</li><li>D. 1,000 pounds</li></ul>	
Correct answer: B	
35. How should the letter "D" be pronounced when spoken on the radiotelephone?	
A. DELL TAH B. DA VID C. DUKE D. DOG	
Correct answer: A	
36. Which system is most likely to be subject to fading or static interference?	
<ul><li>A. Digital Selective Calling on channel 70</li><li>B. INMARSAT</li><li>C. VHF ARQ</li><li>D. HF SITOR</li></ul>	
Correct answer: D	
37. Which term refers to a transverse curvature of the deck?	
<ul><li>A. Flare</li><li>B. Deadrise</li><li>C. Camber</li><li>D. Freeboard</li></ul>	
Correct answer: C	
38. Which type of weld testing can be used to detect internal flaws?	
<ul><li>A. Radiographic</li><li>B. Dye penetrant</li><li>C. Magnetic particle</li><li>D. Chemical reaction</li></ul>	
Correct answer: A	

39. Portable foam fire-extinguishers are designed for use on which class of fires?

A. Class B and class C firesB. Class A and class B firesC. Class A and class C fires

- D. Class A, class B, and class C fires

- 40. Your vessel has been damaged and is partially flooded. The first step to be taken in attempting to save the vessel is to .
  - A. plug the hole(s) in the outer shell
  - B. pump out the water inside the vessel
  - C. calculate the free surface effect and lost buoyancy to determine the vessel's stability
  - D. establish flooding boundaries and prevent further spread of flood water

Correct answer: D

- 41. You are picking up a conscious person that has fallen overboard in one of the vessels motorboats. Recovery is easier in a light breeze if you approach from which direction?
  - A. Leeward with the victim to windward
  - B. Windward with the victim to leeward
  - C. Approach with the wind on your starboard side
  - D. Approach with the wind on your port side

Correct answer: B

- 42. You are on watch at sea on course 090°T. A man falls overboard on your starboard side. You immediately start a Williamson Turn. Which action is NOT a part of a Williamson Turn?
  - A. Shift the helm to left full rudder.
  - B. Stop the engines until clear of the man.
  - C. Come right full rudder until the vessel heads 150°T.
  - D. Continue with left rudder until on course 270°T.

Correct answer: B

- 43. When a helicopter is lifting personnel from a rescue boat, what should the other individuals in the boat do?
  - A. Remove their lifejackets to prepare for their transfer to the helicopter
  - B. Remain seated inside to provide body weight for stability
  - C. Stand on the outside of the boat to assist the person being lifted
  - D. Enter the water in case the person being lifted slips from the sling

Correct answer: B

- 44. When transferring survivors from an enclosed lifeboat to a rescue vessel, personnel on board the boat should take which action?
  - A. Climb on top of the boat while waiting for their turn to transfer to the rescue vessel
  - B. Remain seated inside and make the transfer one person at a time
  - C. Enter the water and swim over to the rescue vessel
  - D. Remove their life preservers to make it easier to climb on board the rescue vessel

- 45. You are on the beach and want to signal to a small boat in distress that your present location is dangerous and that they should land to the left. How would you indicate this?
  - A. Fire a green star to the left
  - B. Send the code signal S followed by L
  - C. Place an orange signal to your left as you signal with a white light
  - D. Send the letter K by light and point to the left

Correct answer: B

- 46. Which is an advantage of an ABC dry chemical over a carbon dioxide extinguisher?
  - A. Less damage to electrical components
  - B. Lack of toxicity
  - C. Greater multipurpose extinguishing ability
  - D. Burn-back protection

Correct answer: C

- 47. Radiation spreads a fire by \_\_\_\_\_.
  - A. transferring heat across an unobstructed space
  - B. transmitting the heat of a fire through the ship's metal
  - C. burning liquids flowing into another space
  - D. heated gases flowing through ventilation systems

Correct answer: A

- 48. When a helicopter is lifting personnel from an enclosed lifeboat, what should the other individuals in the boat do?
  - A. Remain seated inside to provide body weight for stability
  - B. Remove their life preservers to prepare for their transfer to the helicopter
  - C. Enter the water in case the person being lifted slips from the sling
  - D. Stand on the outside of the boat to assist the person being lifted

Correct answer: A

- 49. What is the most important reason for taking anti-seasickness pills as soon as possible after entering a liferaft?
  - A. Prevents impaired judgment due to motion-induced deliriousness
  - B. Reduces appetite by decreasing nausea
  - C. To assist in sleeping
  - D. Prevents loss of body moisture due to vomiting

Correct answer: D

- 50. A galley grease fire on the stove may be extinguished using .
  - A. water
  - B. fire dampers
  - C. foam
  - D. the range hood extinguishing system

- 51. You are fighting a fire in a cargo hold on your vessel. Which action is most important concerning the stability of the vessel?
  - A. Shutting off electricity to damaged cables
  - B. Draining firefighting water and pumping it overboard
  - C. Maneuvering the vessel so the fire is on the lee side
  - D. Removing burned debris from the cargo hold

Correct answer: B

- 52. How is the external flotation bladder of an immersion suit inflated?
  - A. It inflates by seawater bleeding into the inflation bladder and reacting with a chemical.
  - B. It is inflated by a small CO2 bottle that is automatically tripped when the front zipper is at the top of the zipper track.
  - C. It is inflated by a small CO2 bottle that is manually tripped.
  - D. It is inflated by blowing through an inflation tube.

Correct answer: D

- 53. According to the regulations, where is the capacity of a liferaft required to be marked?
  - A. At the liferaft stowage location
  - B. On the Certificate of Inspection
  - C. On the Muster List ("Station Bill")
  - D. In the Operations Manual

Correct answer: A

- 54. Which item is a safety feature provided on all inflatable liferafts?
  - A. Built in seats
  - B. Water stabilizing pockets
  - C. Internal releasing hooks
  - D. Overhead safety straps

Correct answer: B

- 55. When possible, what is the FIRST step in fighting an engine fuel-pump fire which results from a broken fuel line?
  - A. Check the spread of the fire with foam.
  - B. Cast the barge off the wharf.
  - C. Close the fuel line valve.
  - D. Secure all engine room doors, hatches, and vents.

Correct answer: C

- 56. When patching holes in the hull, how can pillows, bedding, and other soft materials be used?
  - A. As shores
  - B. As wedges
  - C. As strongbacks
  - D. As gaskets

- 57. The distress message of a ship should include considerable information which might facilitate the rescue. Which is TRUE concerning the information?
  - A. The information is ALWAYS included in the initial distress message and repeated as required
  - B. The information should be transmitted as a series of short messages, if time allows
  - C. The message must be sent to a Coast Guard station FIRST
  - D. The distress message shall include the vessel's draft

Correct answer: B

- 58. On a class "B" fire, which portable fire extinguisher would be the LEAST desirable?
  - A. Dry chemical
  - B. Water (stored pressure)
  - C. Foam
  - D. Carbon dioxide

Correct answer: B

- 59. Small quantities of flammable liquids needed at a work site should be
  - A. tightly capped and stowed with other tools near the job site when securing at the end of the day
  - B. in a metal container with a tight cap
  - C. used only under the supervision and direction of a ship's officer
  - D. used only when a pressurized fire hose is laid out ready for immediate use

Correct answer: B

- 60. For the purpose of training and drills, if reasonable and practicable, how frequently should rescue boats be launched with their assigned crew?
  - A. Once a month
  - B. Once a week
  - C. Twice a year
  - D. Once a year

Correct answer: A

- 61. How is the inside light in an inflatable liferaft activated?
  - A. At night via photosensitive switch
  - B. With a switch near the boarding handle
  - C. Automatically as the liferaft inflates
  - D. By screwing the bulb in after the raft is inflated

Correct answer: C

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

- 63. What is the flammable limit range of petroleum vapors mixed with air?
  - A. 0% to 1%
  - B. 1% to 10%
  - C. 10% to 15%
  - D. 12% to 20%

Correct answer: B

- 64. Which is TRUE concerning immersion suits and their use?
  - A. They provide sufficient flotation to do away with the necessity of wearing a life jacket.
  - B. Only a light layer of clothing may be worn underneath.
  - C. They should be tight fitting.
  - D. A puncture in the suit will not appreciably reduce its value.

Correct answer: A

- 65. In plugging submerged holes; why are rags, wedges, and other materials used in conjunction with plugs?
  - A. To prevent progressive flooding
  - B. To reduce the water leaking around the plugs
  - C. To reduce the possibility of stress fractures
  - D. To reduce the water pressure on the hull

Correct answer: B

- 66. A situation has occurred where it becomes necessary for you to be towed. What action should be taken to prevent your vessel from yawing?
  - A. Throw excess weight overboard
  - B. Shift weight to the bow
  - C. Shift weight to the center of the boat
  - D. Shift weight to the stern

Correct answer: D

- 67. What is one of the FIRST actions you should take after abandoning and clearing away from a vessel?
  - A. Arrange watches and duties.
  - B. Identify the person in charge.
  - C. Prepare for arrival of rescue units.
  - D. Gather up useful floating objects.

- 68. Which statement is TRUE concerning spare charges for portable fire extinguishers on unmanned tank barges?
  - A. Spare charges shall be carried for at least 50 percent of each size and variety required on board.
  - B. Spare charges shall be stowed in watertight containers on deck.
  - C. Regulations concerning spare charges do not apply to unmanned barges.
  - D. If the unit cannot be charged by the vessel's personnel, one spare unit shall be carried in lieu of spare charges.

Correct answer: C

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

Correct answer: B

- 70. What shall be conducted during a fire and boat drill?
  - A. Fire pumps shall be started and all exterior outlets opened.
  - B. All lifeboat equipment shall be examined.
  - C. All watertight doors in the vicinity of the drill shall be operated.
  - D. All of the above