## **National Maritime Center**

Keep 'em Safe, Keep 'em Sailing



U.S.C.G. Merchant Marine Exam

Mate Uninspected Fishing Vessels

Q189 Deck Safety

(Sample Examination)

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

- 1. What is the most important characteristic of the extinguishing agent in fighting a class "C" fire?
  - A. Electrical nonconductivity
  - B. Weight
  - C. Cost
  - D. Temperature

Correct answer: A

- 2. Your vessel is discharging containers from the main deck with the ship's cranes. Which of the following must be taken into account when calculating the center of gravity as the containers are discharged?
  - A. The vertical distance from the main deck plus the height of the container
  - B. The vertical distance from the main deck to the heel of the boom plus half the height of the container
  - C. The vertical distance from the main deck plus the vertical distance to the head of the boom
  - D. The vertical distance from the main deck plus half the height of the container

Correct answer: C

- 3. The two factors which make underwater hull repair difficult are accessibility and which other factor?
  - A. The pressure exerted by the water
  - B. The shape of the hull
  - C. The availability of tools
  - D. The threat of progressive flooding

Correct answer: A

- 4. If the cause of severe list is off-center ballast, what will counterflooding into empty tanks accomplish?
  - A. Decrease list
  - B. Increase list
  - C. Increase the righting arm
  - D. Increase the righting moment

Correct answer: A

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

- 6. Which term is given to the difference between the starboard and port drafts caused by shifting a weight transversely in the vessel?
  - A. List
  - B. Trim
  - C. Flotation
  - D. Heel

Correct answer: A

- 7. Your vessel has a midships engine room and the cargo is concentrated in the end holds. Which is TRUE of your vessel?
  - A. The vessel is sagging with compressive stress on main deck
  - B. The vessel is hogging with compressive stress on main deck
  - C. The vessel is hogging with tensile stress on main deck
  - D. The vessel is sagging with tensile stress on main deck

Correct answer: C

- 8. 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. Send the letter K by light and point 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. Fire a green star to the left

Correct answer: B

- 9. Life jackets should be marked with which item?
  - A. The maximum weight allowed
  - B. The stowage space assigned
  - C. The vessel's name
  - D. The vessel's home port

Correct answer: C

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

Correct answer: A

- 11. A fire starts on your vessel while refueling. Which action should you take FIRST?
  - A. Sound the general alarm
  - B. Stop the ventilation
  - C. Attempt to extinguish the fire
  - D. Determine the source of the fire

- 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. Secure the bitter end of the towing hawser to prevent loss if the tow is slipped
  - B. Install chafing gear on the towline
  - C. Have traveling lizards rigged to guide the towline while it is paid-out
  - D. Compare the rate of drift between the ships

Correct answer: D

- 13. What precaution should be taken when testing a line throwing gun?
  - A. Wear asbestos gloves.
  - B. Fire it at an angle of approximately 90 degrees to the horizon.
  - C. Never remove the line from the rocket.
  - D. Always fire the rocket into the wind.

Correct answer: C

- 14. What is the lifesaving signal indicating "You are seen Assistance will be given as soon as possible"?
  - A. Vertical motion of a white light or flare
  - B. Firing of a green star signal
  - C. Vertical motion of white flags
  - D. None of the above

Correct answer: D

- 15. Which statement is TRUE concerning an inflatable liferaft?
  - A. Crew members can jump into the raft without damaging it.
  - B. The floor may be inflated for insulation from cold water.
  - C. The raft may be boarded before it is fully inflated.
  - D. All of the above

Correct answer: D

- 16. Channel 13 (156.65 MHz), the designated bridge-to-bridge channel, may NOT be used to
  - A. conduct necessary tests
  - B. exchange operating schedules with company dispatcher
  - C. exchange navigational information between vessels
  - D. exchange navigational information between a vessel and a shore station

Correct answer: B

- 17. You are involved in an emergency landing of a helicopter on the water. When should you inflate your life jacket?
  - A. After exiting clear of the helicopter
  - B. Prior to reaching the water
  - C. Upon entering the helicopter
  - D. After reaching the water, but prior to exiting the helicopter

- 18. Which statement is TRUE concerning carbon dioxide?
  - A. It is non-conductive.
  - B. It is heavier than air.
  - C. It is used on class B and C fires.
  - D. All of the above are true.

Correct answer: D

- 19. What does a pyrometer measure on a diesel engine?
  - A. Water pressure
  - B. Water temperature
  - C. Air box pressure
  - D. Exhaust temperature

Correct answer: D

- 20. When a vessel's LCG is aft of her LCB, how will the vessel respond?
  - A. The vessel will be on an even keel
  - B. The vessel will be trimmed by the head
  - C. The vessel will have a list
  - D. The vessel will be trimmed by the stern

Correct answer: D

- 21. A thrust bearing is designed to accomplish which action?
  - A. To transmit the thrust of the propeller to the vessel
  - B. To transmit the thrust of the engine to the propeller
  - C. To absorb the shock of wave pressure at the bow
  - D. To be placed between the engines and the foundation to absorb the vibration

Correct answer: A

- 22. Which is the MOST important consideration for a tank vessel?
  - A GM
  - B. The longitudinal center of gravity
  - C. The vertical center of gravity
  - D. The stress on the hull

Correct answer: D

- 23. Which sequence is correct when launching a lifeboat stowed in gravity davits?
  - A. Release tricing pennants, turn on emergency disconnect switch, release frapping lines
  - B. Operate limit switches, release gripes, lift brake
  - C. Release gripes, lift brake, release tricing pennants
  - D. Release gripes, turn on emergency disconnect switch, release frapping lines

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24.	When compared to low-expansion foam, a high-expansion foam will
	<ul> <li>A. be more heat resistant</li> <li>B. be drier</li> <li>C. not cling to vertical surfaces</li> <li>D. be heavier</li> </ul>
	Correct answer: B
25.	Loading cargo above the vessel's center of gravity will increase the vessel's vertical center of gravity. How will this affect the vessel?
	<ul> <li>A. If your vessel's stability is increasing, the rolling period will increase</li> <li>B. If your vessel's stability is increasing, the rolling period will remain the same</li> <li>C. If your vessel's stability is decreasing, the roll period will increase</li> <li>D. If your vessel's stability is decreasing, the rolling period will decrease</li> </ul>
	Correct answer: C
26.	Which type of portable fire extinguisher is NOT designed for use on flammable liquid fires?
	<ul><li>A. Dry chemical</li><li>B. Water (cartridge-operated)</li><li>C. Foam</li><li>D. Carbon dioxide</li></ul>
	Correct answer: B
27.	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?
	<ul> <li>A. When over 200 miles from a port in the danger zone, you should not darken ship</li> <li>B. You should attempt to coordinate with the Shipping Control Team</li> <li>C. If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port</li> <li>D. You should only enter a port in the danger zone during hours of darkness</li> </ul>
	Correct answer: B
28.	The two courses of action if the underwater hull is severely damaged are to plug the openings or to take which action?
	<ul> <li>A. Secure power to the compartment</li> <li>B. Dewater the compartment</li> <li>C. Ballast to maintain even keel</li> <li>D. Establish and maintain flooding boundaries</li> </ul>
	Correct answer: D
29.	Small hull leaks can be temporarily repaired by

A. seizingB. parbucklingC. caulkingD. parceling

- 30. Your vessel is listing because of a negative GM. To lower G below M, which action should you take?
  - A. Deballast double bottoms
  - B. Ballast on the high side
  - C. Add weight symmetrically below G
  - D. Transfer weight to the high side

Correct answer: C

- 31. The "Vessel Bridge-to-Bridge Radiotelephone Act" applies to which towboat?
  - A. A 90-foot towboat tied to the pier
  - B. A 400 GT towboat anchored
  - C. A 100 GT towboat, 24 feet in length
  - D. A 60-foot towboat pushing ahead

Correct answer: D

- 32. Your vessel is conducting helicopter evacuation operations for an injured crew member. Which of the following statements is true concerning the hoisting line?
  - A. Allow the line to touch the deck to discharge the static electricity
  - B. A tag line is required to be attached to the hoist cable for securing
  - C. Secure the graining line to the deck railings
  - D. As a safety measure wrap the line around the patient before attaching it to the basket

Correct answer: A

- 33. 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. Dry chemical and soda-acid
  - D. Foam (stored pressure) and soda-acid

Correct answer: A

- 34. When collecting condensation for drinking water, which is TRUE?
  - A. It should be strained through a finely woven cloth
  - B. Chlorine tablets should be used to make it drinkable
  - C. A sponge used to mop up and store condensation must be kept salt free
  - D. Only condensation on the bottom of the canopy should be collected

Correct answer: C

- 35. How is the sea painter secured in an open lifeboat?
  - A. A turn around a forward thwart with a toggle pin thru the eye
  - B. An eye splice placed over one of the hooks of the releasing gear
  - C. A bowline knot around a thwart
  - D. All of the above

Q189 Deck Safety U.S.C.G. Merchant Marine Exam Mate Uninspected Fishing Vessels Illustrations: 1 36. When abandoning ship and jumping into the water from a substantial height without a life jacket, you A. dive headfirst, using your hands to break the surface of the water B. jump feet first, holding your knees to your chest C. hold your arms firmly at your sides and jump feet first D. jump feet first, covering your nose and mouth with one hand and grasping the opposing upper arm with the other Correct answer: D 37. How do the lights on the outside of the canopy on an inflatable liferaft operate? A. By a light sensor B. By turning the globe clockwise C. By a switch at each light D. Automatically when the raft is inflated Correct answer: D 38. Which formula can be used to calculate metacentric height? A. KB + BM B. KM - GM C. KM-KG D. KM + GM Correct answer: C 39. When is it recommended that seawater be used for drinking? A. Under no conditions should seawater be drunk B. Only at a maximum rate of two ounces per day C. If gathered during or immediately after a hard rain D. After mixing with an equal quantity of fresh water Correct answer: A 40. 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. Both vessels are making the same amount of leeway. Where should you position your vessel when you start running lines? A. A B. B C. C D. D Correct answer: C 41. To prevent the spread of fire by convection you should take which action? A. Cool the bulkhead around the fire

Correct answer: C

B. Remove combustibles from direct exposure

C. Close all openings to the areaD. Shut off all electrical power

- 42. A fuel line breaks, sprays fuel on the hot exhaust manifold, and catches fire. What should be your FIRST action?
  - A. Secure the fuel supply
  - B. Batten down the engine room
  - C. Start the fire pump
  - D. Apply carbon dioxide to the fire

Correct answer: A

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

Correct answer: A

- 44. You are the first vessel to arrive at the scene of a distress. Due to the volume of traffic on the radio, you are unable to communicate with the vessel in distress. Which action should you take?
  - A. Broadcast "Seelonce Mayday"
  - B. Key the microphone three times in quick succession
  - C. Broadcast "Charlie Quebec-Mayday-Quiet"
  - D. Switch to flag hoists

Correct answer: A

- 45. One of your crew members falls overboard from the starboard side. You should IMMEDIATELY take which action?
  - A. Begin backing your engines
  - B. Apply left rudder
  - C. Position your vessel to windward and begin recovery
  - D. Throw the crew member a life preserver

Correct answer: D

- 46. When the mainline valve of a self-contained breathing apparatus is open, the bypass valve should be
  - A. partially opened
  - B. completely closed
  - C. disconnected
  - D. completely open

Correct answer: B

- 47. A concentration of weight has been shifted inboard to the center line of the vessel. Generally speaking, what effect will this have on the vessel?
  - A. The vessel's rolling period will increase
  - B. The vessel's rolling period will remain the same
  - C. The vessel's rolling period will decrease
  - D. The vessel's rolling period will be rapid

- 48. Which statement concerning carbon dioxide is FALSE?
  - A. It is safe to use near personnel in a confined space.
  - B. It displaces the oxygen in the air.
  - C. It cannot be seen.
  - D. It cannot be smelled.

Correct answer: A

- 49. Which term defines the minimum concentration of a vapor in air which can form a mixture that ignites and burns?
  - A. Lower flammable limit (LFL)
  - B. Threshold limit value (TLV)
  - C. Auto-ignition point
  - D. Flash point

Correct answer: A

- 50. Repairing damage to the hull at or above the waterline reduces which threat?
  - A. Wind heel
  - B. Free surface effects
  - C. Continued progressive flooding
  - D. Rapid capsizing of vessel

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