

U.S.C.G. Merchant Marine Exam

Master or Mate Less than 200 Gross Registered Tons

Q396 Deck General - Safety

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. To disengage a survival craft suspended from the cable above the water, you must pull the safety pin and _____.
- (A) pull the hook release handle and use the ratchet bar
 - (B) pull the hook release handle
 - (C) use the ratchet bar and depress the retainer
 - (D) pull the hook release handle and depress the retainer

If choice A is selected set score to 1.

2. You are in port A in the United States, and your Certificate of Inspection has expired. You wish to go to port B in the United States for repairs and to complete the inspection. If the Officer-in-Charge Marine Inspection deems it safe, he may issue a _____.
- (A) Certificate of Seaworthiness
 - (B) Limited Certificate of Inspection
 - (C) Temporary Certificate of Inspection
 - (D) Permit to Proceed

If choice B is selected set score to 1.

3. When are Operators of Uninspected Passenger Vessels are required to keep their Coast Guard credential aboard their vessel?
- (A) At all times
 - (B) only when operating more than one mile from shore
 - (C) only when operating at night
 - (D) only when carrying passengers for hire

If choice D is selected set score to 1.

4. 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 year
 - (B) once a week
 - (C) once a month
 - (D) twice a year

If choice C is selected set score to 1.

5. A fire in a pile of canvas is classified as class _____.

- (A) A
- (B) B
- (C) C
- (D) D

If choice A is selected set score to 1.

6. Which space(s) is(are) exempt when measuring gross tonnage?

- (A) Part of the wheelhouse used to control vessel
- (B) Steering gear room
- (C) Auxiliary machinery spaces above the uppermost continuous deck
- (D) All of the above

If choice D is selected set score to 1.

7. When approaching a fire from leeward you should shield fire fighters from the fire by using _____.

- (A) low-velocity fog
- (B) foam spray
- (C) a straight stream of water
- (D) high-velocity fog

If choice D is selected set score to 1.

8. The forward draft of your ship is 27'-11" and the after draft is 29'-03". The draft amidships is 28'-05". Your vessel is _____.

- (A) listed
- (B) hogged
- (C) sagged
- (D) trimmed by the head

If choice B is selected set score to 1.

9. To coil a left-hand laid rope, you should coil the line in _____.

- (A) either a clockwise or a counterclockwise direction
- (B) a counterclockwise direction only
- (C) an alternating clockwise and counterclockwise direction
- (D) a clockwise direction only

If choice B is selected set score to 1.

10. Ventilation systems connected to a compartment in which a fire is burning are normally closed to prevent the rapid spread of the fire by _____.

- (A) spontaneous combustion
- (B) conduction
- (C) radiation
- (D) convection

If choice D is selected set score to 1.

11. You are on a 30,000 DWT tankship engaged in trade to another country signatory to MARPOL 73/78. Which statement is TRUE?

- (A) The Certificate of Inspection is prima facie evidence of compliance with MARPOL 73/78.
- (B) AN IOPP Certificate is renewed at each inspection for certification.
- (C) The IOPP Certificate is valid for 5 years.
- (D) An IOPP Certificate is invalid if the ship carries cargoes outside the classes authorized thereon.

If choice C is selected set score to 1.

12. When piloting a vessel, how are visual references used to establish a constant rate of turn?

- (A) Visual references cannot be used to maintain a constant rate of turn.
- (B) Begin the turn when the fixed object is on the beam.
- (C) Fixed objects that stay on the same relative bearing when the ship is turning indicate a constant rate of turn.
- (D) Keep the fixed object's relative bearing opening, for a constant rate of turn.

If choice C is selected set score to 1.

13. In weighing CO2 cylinders, they must be recharged if weight loss exceeds _____.

- (A) 15% of weight of full bottle
- (B) 10% of weight of charge
- (C) 10% of weight of full bottle
- (D) 20% of weight of charge

If choice B is selected set score to 1.

14. Leeway is the _____.

- (A) difference between the true course and the compass course
- (B) lateral movement of a vessel downwind of her intended course
- (C) displacement of a vessel multiplied by her speed
- (D) momentum of a vessel after her engines have been stopped

If choice B is selected set score to 1.

15. To find the cause of a gasoline engine's failure to start, you should _____.

- (A) break the joint in the fuel line at the engine and let the gas run in the bilges
- (B) ventilate the space, then check the battery, spark plugs, carburetor, and fuel line
- (C) prime the engine with ether through spark plug openings
- (D) disconnect the wires at the spark plugs and make the spark jump the gap

If choice B is selected set score to 1.

16. Which will most likely occur when entering shallow water?

- (A) The vessel's trim will change.
- (B) An increase in speed will occur.
- (C) The vessel's list will change.
- (D) Rudder action will become more effective.

If choice A is selected set score to 1.

17. Under normal operating conditions aboard a ship, who has the overall responsibility in maintaining the Oil Record Book?

- (A) Chief Engineer
- (B) Master
- (C) First Assistant Engineer
- (D) Chief Mate

If choice B is selected set score to 1.

18. A Chinese stopper (two lines) will hold best when you _____.

- (A) twist the ends together and hold them at right angles to the mooring line
- (B) twist the ends together and hold them in the direction opposite to the pull
- (C) fasten the bitter ends to the mooring line with half hitches
- (D) twist the ends together and hold them in the direction of the pull

If choice D is selected set score to 1.

19. The standing part of a tackle is _____.

- (A) the hook that engages the weight to be moved
- (B) that part to which power is applied
- (C) all the fall except the hauling part
- (D) that part of the falls made fast to one of the blocks

If choice D is selected set score to 1.

20. Which type of rudder may lose its effectiveness at angles of 10 or more degrees?

- (A) Balanced spade
- (B) Contra-guide
- (C) Unbalanced
- (D) Flat plate

If choice A is selected set score to 1.

21. Carbon dioxide as a fire fighting agent has which advantage over other agents?

- (A) It is cheaper.
- (B) It is safer for personnel.
- (C) It is most effective on a per unit basis.
- (D) It causes minimal damage.

If choice D is selected set score to 1.

22. Providing you are not sailing in the Red Sea or another special area as listed in ANNEX V of MARPOL, how many miles from land must you be to throw garbage including bottles, rags, and glass that has not been ground up into the sea?

- (A) 3 nm
- (B) 6 nm
- (C) 12 nm
- (D) 25 nm

If choice C is selected set score to 1.

23. You are a watchstanding mate and have come to the bridge to relieve the watch. After reviewing the chart and having been briefed by the off-going mate, you are now ready to effect the relief. The watch is officially transferred to you after _____.

- (A) the mate being relieved says, "You have the conn" and you state the ship's course
- (B) you say, "I relieve you" and you state the course per gyro and magnetic compasses
- (C) the mate being relieved tells you the vessel's course and speed and states that you have the watch
- (D) you state the vessel's charted position, present course and port of destination

If choice B is selected set score to 1.

24. A journal kept by the officer of the watch in which day to day happenings are recorded regarding the deck department is the _____.

- (A) bell book
- (B) deck rough log
- (C) cargo record book
- (D) Official Logbook

If choice B is selected set score to 1.

25. Which effect does speed through the water have on a vessel which is underway in shallow water?

- (A) A decrease in the speed results in a decrease in steering response and maneuverability.
- (B) A decrease in speed results in the vessel sucking down on an even plane.
- (C) An increase in speed results in the stern sucking down lower than the bow.
- (D) An increase in speed results in the vessel rising on an even plane.

If choice C is selected set score to 1.

26. As a rule, ships of most configurations, when drifting in calm water with negligible current, will lie _____.

- (A) stern to the wind
- (B) beam to the wind
- (C) with the wind on the quarter
- (D) bow to the wind

If choice B is selected set score to 1.

27. In order to reduce your wake in a narrow channel you should _____.

- (A) apply enough rudder to counter the effect of the current
- (B) reduce your speed
- (C) shift the weight to the stern
- (D) change your course to a zigzag course

If choice B is selected set score to 1.

28. Which statement about tunnel bow thrusters fitted to large vessels is TRUE?

- (A) When going astern at slow speed, they provide effective steering control.
- (B) Because of their location, most modern installations have as much power as a tug.
- (C) They are fully effective at all drafts.
- (D) They are effective on most vessels at speeds up to 10 knots.

If choice A is selected set score to 1.

29. The force exerted by a propeller which tends to throw the stern right or left is called _____.

- (A) rotational force
- (B) sidewise force
- (C) thrust
- (D) slip

If choice B is selected set score to 1.

30. The spread of fire is prevented by _____.

- (A) removing combustibles from the endangered area
- (B) cooling surfaces adjacent to the fire
- (C) shutting off the oxygen supply
- (D) All of the above

If choice D is selected set score to 1.

31. 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 only enter a port in the danger zone during hours of darkness.
- (C) You should attempt to submit an AMVER report to NSA.
- (D) When over 200 hundred miles from a port in the danger zone, you should not darken ship.

If choice C is selected set score to 1.

32. Fire in an engine compartment is best extinguished with carbon dioxide gas (CO₂) and by _____.

- (A) closing the compartment except for the ventilators
- (B) leaving the compartment open to the air
- (C) increasing the air flow to the compartment by blowers
- (D) completely closing the compartment

If choice D is selected set score to 1.

33. Recharging a previously used cartridge-operated dry-chemical extinguisher is accomplished by _____.

- (A) recharging the cartridge and refilling it with powder
- (B) authorized fire equipment servicing personnel only
- (C) replacing the propellant cartridge and refilling with powder
- (D) puncturing the cartridge seal after installation

If choice C is selected set score to 1.

34. You have abandoned ship and are in charge of a liferaft. How much water per day should you permit each occupant to drink after the first 24 hours?

- (A) 1 pint
- (B) 1 can
- (C) 1 quart
- (D) 1 gallon

If choice A is selected set score to 1.

35. If help has not arrived in 10-12 hours after abandoning a vessel in a rescue boat, you should _____.

- (A) go in one direction until the fuel runs out
- (B) shut down the engines if installed and put out the sea anchor
- (C) steer a course for the nearest land
- (D) steer a course for the nearest sea lane

If choice B is selected set score to 1.

36. When a man who is conscious has fallen overboard is being picked up by a lifeboat, the boat should approach with the wind _____.

- (A) ahead and the victim just off the bow
- (B) just off the bow and the victim to leeward
- (C) just off the bow and the victim to windward
- (D) astern and the victim just off the bow

If choice B is selected set score to 1.

37. What is the MOST important consideration when determining how to fight an electrical fire?

- (A) Whether the fire is in machinery or passenger spaces
- (B) Maintaining electrical power
- (C) The amount of toxic fumes created by the extinguisher
- (D) Danger of shock to personnel

If choice D is selected set score to 1.

38. A person has fallen overboard and is being picked up with a lifeboat. If the person appears in danger of drowning, the lifeboat should make _____.

- (A) an approach across the wind
- (B) an approach from windward
- (C) the most direct approach
- (D) an approach from leeward

If choice C is selected set score to 1.

39. While you are on watch, you learn that a crewman has not been seen on board for the past three hours. Which type of turn is best in this man-overboard situation?

- (A) Scharnow
- (B) Racetrack
- (C) Round
- (D) Single turn of 180°

If choice A is selected set score to 1.

40. You are on watch and see a man fall overboard. Which man overboard turn should NOT be used in this situation?

- (A) Racetrack
- (B) Scharnow
- (C) Single turn
- (D) Williamson

If choice B is selected set score to 1.

41. A situation has occurred in which your vessel must be towed. When the towing vessel passes the towing line to you, you should secure the line _____.

- (A) to the forward part of the deckhouse
- (B) to the forward-most bitts
- (C) to the base of the foremast
- (D) at the stern

If choice B is selected set score to 1.

42. 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, you must _____.

- (A) compare the rate of drift between the ships
- (B) install chafing gear on the towline
- (C) secure the bitter end of the towing hawser to prevent loss if the tow is slipped
- (D) have traveling lizards rigged to guide the towline while it is paid-out

If choice A is selected set score to 1.

43. Fuel for use on a vessel (300 GT or more constructed before July 1, 1974) may be carried in independent tanks forward of a collision bulkhead if the _____.

- (A) tanks were designated, installed, or constructed for fuel oil carrying before July 1, 1974
- (B) shell of the tank is of the same thickness or greater than that of the vessel's hull
- (C) fuel has a flash point above 180°F
- (D) tank is 18 inches inboard of the hull structure

If choice A is selected set score to 1.

44. You are at sea and not in a special area as defined in ANNEX V of MARPOL. How many nautical miles from land must you be to discharge ground garbage that will pass through a one-inch (25 mm) screen into the sea?

- (A) 3 nm
- (B) 25 nm
- (C) 6 nm
- (D) 12 nm

If choice A is selected set score to 1.

45. How many months after its expiration date may a Coast Guard credential be renewed without retaking the complete exam?

- (A) 1 month
- (B) 6 months
- (C) 12 months
- (D) 24 months

If choice C is selected set score to 1.

46. The number of able seamen required on board is stated in the _____.

- (A) Certificate of Inspection
- (B) Classification Certificate
- (C) SOLAS Certificate
- (D) American Bureau of Shipping code

If choice A is selected set score to 1.

47. 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 "Charlie Quebec-Mayday-Quiet".
- (B) Switch to flag hoists.
- (C) Key the microphone three times in quick succession.
- (D) Broadcast "Seelonce Distress".

If choice D is selected set score to 1.

48. You see an iceberg that has not been reported. What kind of radio message do you transmit to warn others?

- (A) Routine message
- (B) Safety message
- (C) Distress message
- (D) Urgency message

If choice B is selected set score to 1.

49. The color of rockets, shells, or rocket parachute flares used to indicate that the vessel is in distress and requires immediate assistance is _____.

- (A) white
- (B) green
- (C) yellow
- (D) red

If choice D is selected set score to 1.

50. You are using the anchor to steady the bow while maneuvering. You have the proper scope of anchor cable when the _____.

- (A) scope is not more than 5 times the depth of the water
- (B) bow is held in position with the engines coming slowly ahead
- (C) cable enters the water at an angle between 60° and 85° from the horizontal
- (D) anchor is just touching the bottom

If choice B is selected set score to 1.

51. You are the Master of a single-screw vessel. You are docking at a port which has no tugs available. You decide to drop the offshore anchor to help in docking. The amount of chain you should pay out is _____.

- (A) equal to the depth of the water
- (B) 1 1/2 to 2 times the depth of the water
- (C) 5 to 7 times the depth of the water
- (D) you should NEVER use the anchor to help in docking

If choice B is selected set score to 1.

52. The enclosed area defined as the intersection of the surface of the water and the hull of a vessel is the _____.

- (A) amidships plane
- (B) longitudinal reference plane
- (C) waterplane
- (D) baseline

If choice C is selected set score to 1.

53. The weight of the liquid displaced by a vessel floating in sea water is equal to the _____.

- (A) reserve buoyancy
- (B) total weight of the vessel
- (C) weight required to sink the vessel
- (D) displaced volume

If choice B is selected set score to 1.

54. The horizontal port or starboard movement of a vessel is called _____.

- (A) heave
- (B) surge
- (C) yaw
- (D) sway

If choice D is selected set score to 1.

55. The greatest effect on stability occurs from loose liquids flowing _____.

- (A) from fore to aft in the tanks of a vessel
- (B) from side to side in the tanks of the vessel
- (C) in and out of a vessel that is holed in a wing tank
- (D) in and out of a vessel that is holed in a peak tank

If choice C is selected set score to 1.

56. Free communication will adversely affect transverse stability only when the flooded space is _____.

- (A) completely flooded
- (B) open to the sea above and below the waterline
- (C) off-center
- (D) on the centerline

If choice C is selected set score to 1.

57. The brickwork surrounding the firebox of a boiler is known as _____.

- (A) the water wall
- (B) refractory
- (C) the screen wall
- (D) fire plate

If choice B is selected set score to 1.

58. Before starting any diesel or gasoline engine, which of the following must be checked?

- (A) Exhaust discharge
- (B) Flow of cooling water
- (C) Oil level
- (D) All of the above

If choice C is selected set score to 1.

59. The wire rope used for cargo handling on board your vessel has a safe working load of eight tons. It shall be able to withstand a breaking test load of _____.

- (A) 32 tons
- (B) 40 tons
- (C) 48 tons
- (D) 64 tons

If choice B is selected set score to 1.

60. When fruit is carried as refrigerated cargo, the most frequent cause of its being infected at the discharge port is _____.

- (A) carriage at the wrong temperature
- (B) improper cleaning of the cargo spaces
- (C) improper pre-cooling of the cargo spaces
- (D) leaks in the ship's refrigeration system

If choice B is selected set score to 1.

61. A precaution you should take before bunkering is to _____.

- (A) plug the sounding pipes
- (B) plug the scuppers
- (C) close the lids on the vents
- (D) plug the vents

If choice B is selected set score to 1.

62. Open ullage holes in tanks which are not gas-free must be protected by _____.

- (A) stop-check valves
- (B) warning signs
- (C) PV valves
- (D) flame screens

If choice D is selected set score to 1.

63. What is the minimum number of fire pumps required on a cargo vessel of 2,000 GT?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

If choice B is selected set score to 1.

64. The trim and stability booklet must be approved by the _____.

- (A) International Maritime Organization
- (B) National Cargo Bureau
- (C) Society of Naval Architects and Marine Engineers
- (D) United States Coast Guard

If choice D is selected set score to 1.

65. In which case is the IOPP Certificate of an inspected vessel NOT invalidated?

- (A) An annual survey is conducted fifteen months after the date of certificate issuance.
- (B) The ship is transferred to Liberian registry.
- (C) A 15 ppm oily-water separator is replaced by a 100 ppm oily-water separator.
- (D) The required oily-water separator malfunctions.

If choice D is selected set score to 1.

66. Normally It is desirable to have screens on the vents of potable water tanks to _____.

- (A) prevent backups
- (B) prevent explosions
- (C) filter the incoming air
- (D) stop insects from entering

If choice D is selected set score to 1.

67. Normally Before taking drinking water on board in the U.S. or its possessions, the responsible person from the vessel should determine that the source _____.

- (A) is used by a city
- (B) is approved by the Public Health Service
- (C) is not from surface water
- (D) has been treated with chlorine

If choice B is selected set score to 1.

68. Number 3 lifeboat would be _____.

- (A) the forward boat on the starboard side
- (B) behind boat number 2 on the port side
- (C) behind boat number 1 on the starboard side
- (D) behind boat number 1 on the port side

If choice C is selected set score to 1.

69. What size bilge pump is required for a lifeboat which has a capacity of 675 cubic feet?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

If choice B is selected set score to 1.

70. The breaking strength of the service lines of the rockets used with an impulse-projected, rocket type line throwing appliances is _____.

- (A) 300 lbs
- (B) 500 lbs
- (C) 1000 lbs
- (D) 1500 lbs

If choice B is selected set score to 1.