

U.S.C.G. Merchant Marine Exam

Master Less than 500-1600 Gross Registered Tons

Q320 Deck General

(Sample Examination)

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

1. When is the effect of wind on exposed areas of the vessel most noticeable?

- A. When backing
- B. When going slow ahead
- C. When turning
- D. When going full ahead

Correct answer: A

2. 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 which condition is met?

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

Correct answer: B

3. Your ship has loaded 6,000 barrels of gasoline, at a cargo temperature of 50°F, departing New Jersey bound for Florida. API gravity is 55°. The volume correction factor (VCF) is .0006. How many gallons would you expect to unload if the cargo temperature is 90°F at the discharge port?

- A. 337,920
- B. 322,080
- C. 295,952
- D. 258,048

Correct answer: D

4. Who cannot commit the crime of barratry?

- A. Ship's unlicensed crewmember(s)
- B. Ship's officer(s)
- C. Master
- D. Ship owner

Correct answer: D

5. A contract of affreightment is a _____.

- A. Bill of Lading
- B. Bottomry Bond
- C. Portage Bill
- D. Manifest

Correct answer: A

6. The effect known as "bank cushion" acts in which of the following ways on a single-screw vessel proceeding along a narrow channel?
- A. It forces the entire vessel away from the bank.
 - B. It heels the vessel toward the bank.
 - C. It forces the stern away from the bank.
 - D. It forces the bow away from the bank.

Correct answer: D

7. Sweat damage will occur in a non-ventilated cargo hold containing cased machinery when which condition exists?
- A. The outside air temperature is colder than the temperature of the cargo
 - B. The dew point of the outside air is lower than the temperature of the cargo
 - C. The dew point of the hold is higher than the temperature of the ship's skin
 - D. The air temperature of the hold is higher than the temperature of the outside air

Correct answer: C

8. What will be accepted as the shipping papers for an unmanned tank barge but will not be accepted if the tank barge is manned?
- A. Manifest
 - B. Logbook entry
 - C. Shipping document
 - D. Bill of Lading

Correct answer: B

9. You are on a single-screw vessel with a right-handed propeller, and you are making headway. What occurs when you enter shallow water?
- A. Your speed will increase without a change in your throttle
 - B. Your vessel will have better rudder response
 - C. Your vessel will tend to ride higher
 - D. Your rudder response will become sluggish

Correct answer: D

10. What must be present in order for combustion to occur inside a piping system such as a vapor collection header in a marine emission control system?
- A. Ignition
 - B. Oxygen
 - C. Fuel
 - D. All of the above

Correct answer: D

11. Which statement about general average is TRUE?

- A. Of the ship, the freight, and the cargo interests, only one need be involved.
- B. Property must have been sacrificed or an expenditure of money incurred.
- C. The loss or damage to deck cargo due to heavy weather constitutes general average.
- D. Damage to a ship must have been incurred while the ship and/or its machinery was being used for its intended purpose.

Correct answer: B

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

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

Correct answer: D

13. While operating your oceangoing vessel you must keep a record of any discharge or disposal of garbage. When should these entries be made?

- A. No later than 24 hours after disposal of the garbage
- B. Before the end of the voyage
- C. Before arriving at your next port
- D. At the time the garbage was disposed

Correct answer: D

14. Which of the flash points would indicate a grade D combustible liquid?

- A. 87°F
- B. 160°F
- C. 155°F
- D. 65°F

Correct answer: A

15. A seaman may not make an allotment to which relation?

- A. Mother-in-law
- B. Minor children
- C. Grandparents
- D. Brother

Correct answer: A

16. You are on a multiple-product chemical tanker and will carry cargoes of ethanolamine, methyl acrylate, and glycerine. Which statement is true?

- A. Glycerine may be stowed adjacent to methyl acrylate but must be segregated from ethanolamine.
- B. Methyl acrylate and ethanolamine are compatible but both must be segregated from glycerine.
- C. Glycerine is compatible with both of the other cargoes.
- D. All of these cargoes are mutually incompatible.

Correct answer: C

17. When loading a high-density, solid bulk cargo, proper distribution of weights is necessary to _____.

- A. prevent negative stability from developing
- B. prevent excessive longitudinal stresses
- C. provide the proper trim
- D. control list

Correct answer: B

18. How many fire axes should be carried by a 700 GT cargo vessel, navigating the Great Lakes?

- A. 2
- B. 8
- C. 4
- D. 6

Correct answer: D

19. Before loading bulk grain, why should the bilge wells be covered with burlap?

- A. To permit rapid flow of water to the bilge wells
- B. To prevent cargo sifting into the bilge wells
- C. To prevent oil, water, or other liquid from reaching the cargo
- D. To add strength to the bilge well strainer

Correct answer: B

20. A seaman you have just discharged from an Oceanographic Research Vessel has a Continuous Discharge Book. Which statement is TRUE?

- A. An entry should be made in the book and a Certificate of Discharge issued to the seaman.
- B. A Certificate of Discharge form should be attached to the book.
- C. If the vessel was on coastwise articles, the record of discharge will be made in the Official Logbook.
- D. The record of entry in the continuous discharge book shall agree with the entry made in the Ship's Articles.

Correct answer: D

21. Who has the authority to grant an alternate procedure for oil transfer operations?

- A. The nearest Coast Guard office
- B. The Officer-in-Charge, Marine Inspection
- C. The Area Commander
- D. The Captain of the Port

Correct answer: D

22. You are mooring to a buoy. How should you make your approach?

- A. The current should be on the beam
- B. The current should be dead ahead
- C. Place the current astern and drift to the buoy
- D. The current should be broad on the bow

Correct answer: B

23. Which is a precaution you should take before bunkering?

- A. Plug the scuppers
- B. Plug the vents
- C. Plug the sounding pipes
- D. Close the lids on the vents

Correct answer: A

24. You are on a vessel that carries liquefied gasses in bulk. The person on watch is required to have what information about the cargo easily accessible?

- A. Firefighting procedures
- B. Name and address of consignee
- C. Port of loading
- D. Exact quantity on board

Correct answer: A

25. A tanker is loaded with 5,000 barrels of petroleum. The cargo was loaded at a temperature of 70°F, and the coefficient of expansion is .0004. What is the net amount in barrels of cargo loaded?

- A. 4800
- B. 4980
- C. 5020
- D. 5200

Correct answer: B

26. You are docking a vessel. When are the wind and current most favorable in this situation?

- A. When they are crossing your course, both in the same direction
- B. When they are both parallel to the pier from ahead
- C. When they are crossing your course, in opposite directions to the other
- D. When they are both setting you on the pier

Correct answer: B

27. Which is the correct procedure for anchoring a small to medium size vessel in deep water?

- A. Let the anchor fall free from the hawsepipe but apply the brake at intervals to check the rate of fall.
- B. Under power, back the anchor out until it is near, but clear, of the bottom before letting it fall.
- C. Let the anchor fall off the brake right from the hawsepipe but keep a slight strain on the brake.
- D. Back the anchor slowly out of the hawsepipe a few feet, and then let it fall in the normal fashion.

Correct answer: B

28. Which is an exception to the garbage discharge requirements in Annex V to MARPOL 73/78?

- A. The destination port or terminal cannot receive garbage.
- B. The garbage to be discharged will sink.
- C. Garbage accumulation on board has exceeded storage space.
- D. A person falls overboard, and a plastic ice chest is thrown for flotation.

Correct answer: D

29. A vessel loads 5000 tons of manganese ore. The railroad cars that brought the ore to the vessel were previously loaded with iron ore so the ore is contaminated. The agent requests the Master to sign a Clean Bill of Lading and in return the shipper will give him a Letter of Indemnity. What is the best procedure to follow?

- A. Refuse to sign a Clean Bill of Lading.
- B. Sign a Clean Bill of Lading and accept the Letter of Indemnity.
- C. Sign the Clean Bill of Lading and have the agent countersign it.
- D. Sign a Clean Bill of Lading under protest.

Correct answer: A

30. When a helmsman receives the command "Right 15 degrees rudder," what should the helmsman's immediate reply be?

- A. "Right 15 degrees rudder"
- B. "Rudder is right 15 degrees"
- C. "Aye Aye Sir"
- D. No reply is necessary, just carry out the order.

Correct answer: A

31. Nonflammable gases should have what kind of label?

- A. White
- B. Skull and crossbones
- C. Green
- D. Red

Correct answer: C

32. Which ending is NOT acceptable in a wire rope that is free to rotate when hoisting?

- A. Eye formed with a pressure clamped sleeve
- B. Liverpool eye splice
- C. Poured socket
- D. Eye formed by clips

Correct answer: B

33. If an electric cargo winch is being used to lift a draft of cargo and the engine room loses all power, which will occur?

- A. The load will fall rapidly to the deck unless the foot brake is engaged.
- B. A pawl, forced by a spring mechanism, will engage the teeth of the bull gear and hold the load.
- C. The load will slowly lower to the deck under control of the drag of the winch motor.
- D. An electromagnetic brake will hold the load where it is suspended.

Correct answer: D

34. When bunkering at anchorage which of the following signals must be displayed?

- A. A red light by night ONLY
- B. A red flag by day ONLY
- C. A red flag by day, red light by night
- D. No signal required at anchorage

Correct answer: B

35. When does a vessel which is being assisted by an icebreaker, display a flag hoist consisting of the code numeral "4"?

- A. Any time the speed begins to drop
- B. When it becomes icebound
- C. When the vessel stops
- D. If it receives ice damage

Correct answer: B

36. What is the minimum number of fire axes required on a vessel of 900 GT?

- A. 2
- B. 4
- C. 6
- D. 8

Correct answer: C

37. An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "M" (Mike). What does this signal signify?

- A. I am altering my course to port
- B. My vessel is stopped and making no way through the water
- C. I am operating astern propulsion
- D. I am altering my course to starboard

Correct answer: B

38. Which should you check before letting the anchor go?

- A. The wildcat is disengaged
- B. The chain is clear
- C. The anchor is clear of obstructions
- D. All of the above

Correct answer: D

39. Which defines the process of "Block stowage"?

- A. Using port marks on the cargo
- B. Stowing all the cargo for a port in the same area
- C. Separation cloths to separate different kinds of cargo
- D. To have the cargo on pallets

Correct answer: B

40. Which is a common occurrence when a vessel is running into shallow water?

- A. The vessel is more responsive to the rudder
- B. "Squat" will cause a decrease in bottom clearance and an increase in draft
- C. The wake is less pronounced
- D. All of the above

Correct answer: B

41. You are in charge of a towing vessel that operates exclusively on inland waters. You regularly tow barges that provide services (cargo lighters, fuel barges, etc.) to foreign flag vessels in port. What will be accepted as proper credentials for you and your crew?

- A. Social Security card
- B. State driver's license with photo ID
- C. No credentials are required since you operate on inland waters only
- D. Merchant Mariner Credential

Correct answer: D

42. A vessel has arrived in a U.S. port from a foreign voyage. Preliminary entry has been made. Formal entry must be made within how many hours after arrival (Sundays and holidays excepted)?

- A. 12
- B. 24
- C. 48
- D. 72 without exception

Correct answer: C

43. Which is a predictable result of a vessel nearing a bank or edge of a steep banked channel?

- A. The vessel will be drawn bodily into the bank unless the engines are stopped
- B. The vessel continues in a straight line, but with greatly reduced maneuverability
- C. The bow sheers toward the bank
- D. The stern is drawn to the bank as the bow sheers off

Correct answer: D

44. How can the Coast Guard determine that a crew member is "able to understand any order spoken by the officers"?

- A. Require a demonstration by the officer and the crew member
- B. Require that an interpreter be provided
- C. Require a written test
- D. All of the above

Correct answer: A

45. A U.S. Coast Guard icebreaker, while escorting ships in ice, has sounded four short and one long blasts on the whistle. What does this indicate?

- A. The vessel is increasing the distance between vessels
- B. The vessel has its engines full astern, stay clear
- C. The vessel is increasing speed; watch for broken ice
- D. The vessel has become icebound, Stop

Correct answer: D

46. What is NOT considered maritime property in a salvage claim?

- A. Buoys
- B. Sea plane
- C. Cargo
- D. Semi-submerged shipwreck

Correct answer: A

47. Where may a crewmember find information on the fire and abandon ship stations and his/her assigned duties?

- A. The crewman's duty list
- B. The Certificate of Inspection
- C. The muster list
- D. The shipping articles

Correct answer: C

48. Which substance is NOT considered to be "Oil" under the pollution prevention regulations?

- A. Oil refuse and oil mixed with wastes
- B. Petroleum and fuel oil
- C. Sludge
- D. Oil mixed with dredge spoil

Correct answer: D

49. Which agency must approve the safety equipment on board inspected vessels?

- A. The U.S. Coast Guard
- B. The Safety Standards Bureau
- C. The National Safety Council
- D. The Occupational Safety and Health Administration (OSHA)

Correct answer: A

50. By regulation, cargo tank atmosphere must be inert before and during which operation?

- A. crude oil washing
- B. topping off
- C. stripping
- D. All of the above

Correct answer: D

51. You are making a sharp turn in a channel and using a buoy four points on the bow to gauge your rate of turn. If you observe the buoy moving aft relative to you, what should you do?

- A. Maintain a constant rate of turn
- B. Increase the rate of turn
- C. Decrease the rate of turn
- D. Decrease speed

Correct answer: B

52. Which spaces are required to be segregated from cargo tanks carrying grades A, B, C, or D cargoes?

- A. Enclosed deck spaces
- B. Cofferdams
- C. Navigation spaces
- D. Pump rooms

Correct answer: C

53. Your vessel is loaded with nonhygroscopic cargoes and is going from a cold to a warm climate. Which action should you take to avoid sweat damage while on the voyage?

- A. Ventilate the cargo holds
- B. Start the intake blowers
- C. Do not ventilate the cargo holds
- D. Start the exhaust blowers

Correct answer: C

54. Which is the proper term used to describe a stream of water immediately surrounding a moving vessel's hull, flowing in the same direction as the vessel?

- A. Directional current
- B. Wake current
- C. Forward current
- D. Propeller current

Correct answer: B

55. To determine the weight capacity of a deck in a cargo hold, which reference would you refer to?

- A. The deck capacity plan
- B. The general arrangement plan
- C. The cubic capacity tables
- D. The deadweight scale

Correct answer: A

56. The Immigration and Naturalization Service is concerned with which document on a vessel making preliminary entry into a U.S. port from a foreign port?

- A. Certified Cargo Manifest
- B. Curio List
- C. Shipping Articles
- D. Crew List form I-418

Correct answer: D

57. You are shifting a gas free tank barge to dry dock for repairs. The barge must have onboard which document?

- A. A Permit to Proceed and Hot Work Permit
- B. A Gas Free Certificate
- C. A valid Certificate of Inspection
- D. All of the above

Correct answer: C

58. Which term defines "An electronic or electric device that indicates the rate of turn of a vessel"?

- A. Gyrocompass
- B. Magnetic compass
- C. Swing meter
- D. Odometer

Correct answer: C

59. Which is TRUE before a Master relieves a Pilot of the conn?

- A. The Master should foresee any danger to the vessel on the present course
- B. The vessel must be in extremis
- C. The Master should agree to sign a release of liability form
- D. The Master must first request the Pilot to take corrective action

Correct answer: A

60. When is the best time to work a boat into a slip?

- A. At slack water
- B. When the wind is against you
- C. When there is a cross current
- D. When the current is setting against you

Correct answer: A

61. To safely anchor a vessel there must be sufficient "scope" in the anchor cable. Which BEST defines the term scope?

- A. The ratio of the weight of cable to the weight of vessel
- B. The ratio of the length of cable to the depth of water
- C. The ratio of the weight of cable to the weight of the anchor
- D. The ratio of the length of anchor to the depth of water

Correct answer: B

62. Pedestal cranes have limit switches to restrict the movement of which function?

- A. Slew travel limits
- B. Swivel power limits
- C. Luff rate limits
- D. Slew rate limits

Correct answer: A

63. In a tank vessel constructed in 1970, carrying grade A, B, C, or D liquid cargo, what is required to isolate cargo pumps from sources of vapor ignition?

- A. Cofferdams
- B. General cargo spaces
- C. Passageways or living quarters
- D. Gastight bulkheads

Correct answer: D

64. If you carry packaged hazardous cargoes on a break bulk vessel bound foreign, you must _____.

- A. log the receipt of hazardous cargoes in the Official Logbook
- B. have the shipping papers indicate the proper shipping name and the technical name of n.o.s. cargoes
- C. remove the hazardous cargo labels from a portable tank after the tank is emptied
- D. stow the hazardous cargoes on deck available for jettisoning if necessary

Correct answer: B

65. Ice concentration is measured in tenths. What concentration range of ice corresponds to "Open Pack"?

- A. < 1 tenth
- B. 1 - 3 tenths
- C. 4 - 6 tenths
- D. 7 - 8 tenths

Correct answer: C

66. When passing a moored vessel in a narrow channel which actions will help minimize wake damage?

- A. Go half astern when abeam of the moored vessel
- B. Reduce speed and make a notation in the bell book
- C. Stay on outside of channel and make a notation in the logbook
- D. Check the rudder several times while passing the vessel

Correct answer: B

67. Grade D liquids are those having flash points of _____.

- A. 212°F or greater
- B. greater than 80°F and less than 150°F
- C. 80°F or less
- D. 150°F or greater but less than 212°F

Correct answer: B

68. When anchoring a vessel under normal conditions, which scope of chain is recommended?

- A. Two and one-half times the depth of water
- B. Fifteen times the depth of water
- C. Four times the depth of water
- D. Five to seven times the depth of water

Correct answer: D

69. The forecastle card is a copy of which document?

- A. Quarters allocation
- B. Shipping agreement
- C. Unlicensed shipping card from the union
- D. Muster List ("Station Bill")

Correct answer: B

70. A clause in the charter party requires a vessel's owner to pay dispatch money when which of the conditions exists?

- A. The vessel does not load and discharge its cargo in the time specified
- B. The vessel changes berths to expedite loading or discharging
- C. The vessel is not ready to load or discharge cargo
- D. The vessel loads and discharges its cargo in less time than specified

Correct answer: D