U.S.C.G. Merchant Marine Exam

Master Less than 500-1600 Gross Registered Tons

Q120 Deck General

(Sample Examination)
Choose the best answer to the following Multiple Choice Questions.

1. What is a wet cargo?
   - (A) A canned or bottled liquid such as beer
   - (B) A cargo particularly susceptible to damage by moisture
   - (C) A liquid cargo carried in the deep tanks
   - (D) A cargo that contains hygroscopic moisture

   If choice A is selected set score to 1.

2. You are anchoring your vessel. When should you release and payout the anchor?
   - (A) When the vessel is going full astern
   - (B) When the vessel has minimal sternway
   - (C) When the vessel is going full ahead
   - (D) When the vessel is dead in the water

   If choice B is selected set score to 1.

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

   If choice D is selected set score to 1.

4. When a small craft's anchor fouls in a rocky bottom, how should the first attempt to clear it be made?
   - (A) Reversing the angle and direction of pull, with moderate scope
   - (B) Making the line fast to the bitt and bringing the vessel further forward
   - (C) Hauling vertically on the line
   - (D) Increasing the scope and running slowly in a wide circle with the anchor line taut

   If choice A is selected set score to 1.

5. Who will certify the vessel to be gas free before entering the shipyard?
   - (A) A representative from the vessel's class society.
   - (B) A dedicated company representative.
   - (C) The chief officer.
   - (D) A shoreside gas chemist.

   If choice D is selected set score to 1.
6. To allow for the rise or fall in tide and for change in draft of a tankship during cargo transfer, how must the cargo hoses be secured?

- (A) Using slings or saddles placed at 25-foot (8 meter) intervals
- (B) With enough slack to allow vessel to move to its mooring limits
- (C) With topping lifts and runners tied off to winches
- (D) All of the above

*If choice B is selected set score to 1.*

7. Deckhand’s onboard towing vessels shall be divided into 3 watches when the trip exceeds which mileage?

- (A) 1000 miles
- (B) 800 miles
- (C) 700 miles
- (D) 600 miles

*If choice D is selected set score to 1.*

8. How long is the standard container used to measure equivalent units?

- (A) 10 feet (3 meters)
- (B) 20 feet (6 meters)
- (C) 35 feet (11 meters)
- (D) 40 feet (12 meters)

*If choice B is selected set score to 1.*

9. When a tug makes up to a large vessel, why should the spring line be led from as far forward as possible on the tug?

- (A) So that the head line and spring line can be worked simultaneously
- (B) To ensure the friction on the spring line is minimized
- (C) To ensure that the tug can pivot freely
- (D) To keep the length of the spring line minimized

*If choice C is selected set score to 1.*

10. The deck load capacity of a compartment into which you intend to load a cargo of soft brick is 380 lbs. per sq. ft. The stowage factor of the brick is 21.3. Disregarding broken stowage, what is the maximum height the brick may be stacked without endangering the structure?

- (A) 1.7 feet
- (B) 3.6 feet
- (C) 5.0 feet
- (D) 7.1 feet

*If choice B is selected set score to 1.*
11. Open ullage holes in tanks which are not gas-free must be protected by __________.
   - (A) flame screens
   - (B) stop-check valves
   - (C) warning signs
   - (D) PV valves

   *If choice A is selected set score to 1.*

12. To serve as a person in charge of transfer operations on board a self-propelled tank vessel, an individual must hold/be which of the following?
   - (A) Be 30 years old
   - (B) A valid officer credential for inspected vessels
   - (C) A tankerman-PIC endorsement
   - (D) A letter from the company stating his qualification

   *If choice C is selected set score to 1.*

13. Where can the number of certificated lifeboatmen required for a vessel be found?
   - (A) Lifeboat manual
   - (B) Certificate of Inspection
   - (C) Register or Enrollment
   - (D) Muster List ("Station Bill")

   *If choice B is selected set score to 1.*

14. How does the effect known as "bank suction" act on a single-screw vessel proceeding along a narrow channel?
   - (A) It pulls the stern toward the bank.
   - (B) It heels the vessel toward the bank.
   - (C) It pushes the entire vessel away from the bank.
   - (D) It pulls the bow toward the bank.

   *If choice A is selected set score to 1.*

15. If you intend to land tulip bulbs from Holland in a U.S. port, who must inspect the bulbs?
   - (A) An Animal and Plant Health Service Inspector
   - (B) The Quarantine Officer
   - (C) The Captain of the Port personnel
   - (D) All of the above

   *If choice A is selected set score to 1.*
16. SOLAS requires a lifesaving training manual be provided in each crew cabin or in which other location?

- (A) In the engineering control station
- (B) In the recreation and messrooms
- (C) On the bridge
- (D) In the fire control room

*If choice B is selected set score to 1.*

17. When is the ice strong enough to halt navigation through the St. Lawrence Seaway?

- (A) Late December
- (B) Mid October
- (C) Late January
- (D) Early November

*If choice A is selected set score to 1.*

18. What is NOT a securing system used on a containership?

- (A) Lashing system
- (B) Stacking system
- (C) Locking system
- (D) Buttress system

*If choice B is selected set score to 1.*

19. Who is responsible for seeing that all hands are familiar with their duties, as specified in the muster list, and that the muster list is correct?

- (A) The Chief Mate
- (B) The department heads
- (C) The safety officer
- (D) The Master

*If choice D is selected set score to 1.*

20. Ice concentration is measured in tenths. What concentration range of ice corresponds to 1-3 tenths?

- (A) Very Close Pack
- (B) Open Pack
- (C) Very Open Pack
- (D) Close Pack

*If choice C is selected set score to 1.*
21. At least one reinspection shall be made on each vessel holding a Certificate of Inspection valid for two years. This inspection shall be held between the tenth and fourteenth months of the duration period of the certificate. Which describes the scope of the annual inspection?

- (A) The scope will be equivalent to the inspection required for certification
- (B) The scope will be generally similar to the inspection required for certification, but in less detail
- (C) The scope will be at the discretion of the inspector, but in no lesser detail than required for original certification
- (D) The scope will be at the discretion of the inspector, but in no greater detail than required for original certification

*If choice B is selected set score to 1.*

22. Which type of marine sanitation device (MSD) is used solely for the storage of sewage and flush water at ambient air pressure and temperature?

- (A) Type I
- (B) Type II
- (C) Type III
- (D) Type IV

*If choice C is selected set score to 1.*

23. Which is TRUE of The Articles of Agreement?

- (A) It is also known as a Merchant Mariner’s Document
- (B) They are signed by each crewmember at the end of the voyage
- (C) It advises the crew of the conditions of employment
- (D) It designates the quarters a seaman will occupy during a voyage

*If choice C is selected set score to 1.*

24. The lookout sights a vessel dead ahead. How would this be reported on the bell?

- (A) One strike on the bell
- (B) Two strikes on the bell
- (C) Three strikes on the bell
- (D) Four strikes on the bell

*If choice C is selected set score to 1.*

25. Regardless of local requirements, when in a U.S. port, all oil spills must be reported to which of the following agencies?

- (A) National Response Center (USCG)
- (B) Minerals Management Service
- (C) Environmental Protection Agency
- (D) All of the Above

*If choice A is selected set score to 1.*
26. In accordance with U.S. regulations, no vessel can come or remain alongside a tank vessel while it is loading A, B, or C grade cargo without permission from whom?

   o (A) The terminal manager
   o (B) The tank ship owner
   o (C) The person in charge of the vessel which is loading
   o (D) The USCG captain of the port

   If choice C is selected set score to 1.

27. You are approaching the pilot station with the wind fine on the starboard bow and making about 3 knots. You can help to calm the seas by taking what action just before the pilot boat comes along on the port side?

   o (A) Giving right full rudder
   o (B) Backing full
   o (C) A short burst of ahead full with left full rudder
   o (D) Stopping the engines

   If choice C is selected set score to 1.

28. Vessels subject to SOLAS are required to have which of the following items onboard to aid in SAR communications?

   o (A) GMDSS equipment
   o (B) VHF radio capable of transmission on channel 10
   o (C) Fast rescue boats
   o (D) AMVER certificate

   If choice A is selected set score to 1.

29. What is NOT a requirement for a salvage claim?

   o (A) The property saved must be "maritime property."
   o (B) The salvage service must be voluntary.
   o (C) The property must be in peril.
   o (D) The salvors must save or attempt to save any life in peril.

   If choice D is selected set score to 1.

30. The Officers Competency Certificates Convention of 1936 applies to all of these vessels operating seaward of the boundary line. Which vessel is exempt?

   o (A) An offshore supply vessel over 200 gross tons
   o (B) A passenger vessel of 295 gross tons
   o (C) An uninspected towing vessel of less than 200 gross tons
   o (D) An inspected towing vessel of 305 gross tons

   If choice C is selected set score to 1.
31. 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

*If choice C is selected set score to 1.*

32. In accordance with U.S. regulations for cargo vessels, what is the maximum number of sleeping accommodations a barge may have before it is required to have fire pumps, hydrants, hose, and nozzles installed?

- (A) 5
- (B) 8
- (C) 12
- (D) 15

*If choice C is selected set score to 1.*

33. While transiting a channel your vessel's bow swings away from the bank. What is the term for this effect?

- (A) Bank suction
- (B) Yaw
- (C) Sheer force
- (D) Bank cushion

*If choice D is selected set score to 1.*

34. According to the Chemical Data Guide, what are the flammable limits of ethylene oxide?

- (A) 1.9 - 88.0%
- (B) 1.85 - 48.0%
- (C) 2 - 100%
- (D) 2.7 - 34%

*If choice C is selected set score to 1.*

35. When making way in heavy seas you notice that your vessel's screw is being lifted clear of the water and racing. Which action will correct the situation?

- (A) Shift more weight forward
- (B) Shift the rudder back and forth several times
- (C) Decrease the vessel's speed
- (D) Increase the vessel's speed

*If choice C is selected set score to 1.*
36. Which is TRUE of the Great Lakes Edition of the Notice to Mariners?

- (A) It is published biweekly by the Commandant, U.S. Coast Guard
- (B) It is published monthly by the Naval Oceanographic office
- (C) It is published weekly by the 9th Coast Guard District
- (D) It is published monthly by the Army Corps of Engineers

*If choice C is selected set score to 1.*

37. If a tug equipped with flanking rudders is to be turned in a confined circle, when going astern, which is the best action to take to make the stern move to port?

- (A) The rudder is hard to port and the flanking rudders are hard to starboard
- (B) The rudder is amidships and the flanking rudders are hard to port
- (C) All of the rudders are hard to starboard
- (D) The rudder is hard to port and the flanking rudders are hard to port

*If choice D is selected set score to 1.*

38. While assigned to a 90 GRT vessel, you are required to sign "foreign" articles on a voyage from Philadelphia to which port?

- (A) San Francisco, CA
- (B) Montreal, Canada
- (C) Tampico, Mexico
- (D) Baltimore, MD

*If choice A is selected set score to 1.*

39. You are in the Baltic Sea which is a special area listed in ANNEX V of MARPOL. How many miles from land must you be to discharge ground rags, glass, and bottles into the sea?

- (A) 3
- (B) 12
- (C) 25
- (D) Must be retained aboard

*If choice D is selected set score to 1.*

40. 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) Wake current
- (B) Forward current
- (C) Propeller current
- (D) Directional current

*If choice A is selected set score to 1.*
41. 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. How much chain should you out?

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

*If choice D is selected set score to 1.*

42. You are docking a vessel in a slip which has its entrance athwart the tide. You land the ship across the end of the pier, stemming the tide, preparatory to breaking the ship around the corner. You have one tug to assist. Where would you generally tie up the tug?

- (A) Tie her up on the inshore bow to hold the ship off the end.
- (B) Have her on a hawser from the stern.
- (C) Tie her up on the offshore bow.
- (D) Tie her up on the inshore quarter to lift the stern.

*If choice C is selected set score to 1.*

43. Your vessel is taking on fuel when a small leak develops in the hose. You order the pumping stopped. Before you resume pumping, you should __________.

- (A) notify the terminal superintendent
- (B) place a large drip pan under the leak and plug the scuppers
- (C) repair the hose with a patch
- (D) replace the hose

*If choice D is selected set score to 1.*

44. Which statement about general average is TRUE?

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

*If choice C is selected set score to 1.*

45. You are underway in heavy weather and your bow is into the seas. Which action should you take to prevent pounding?

- (A) Put the seas on a 85 degree angle from the bow
- (B) Increase the speed of the vessel
- (C) Decrease the speed of the vessel
- (D) Secure all loose gear on your vessel

*If choice C is selected set score to 1.*
46. Overcarriage is best prevented by __________.
   • (A) Assuring heavy cargo is stowed low in the vessel
   • (B) Checking the vessel's load line calculations carefully
   • (C) Stowing the cargo which is to be discharged last on the bottom
   • (D) Inspection of the hold at completion of discharge

   If choice D is selected set score to 1.

47. Which describes how flanking rudders effect a vessel's heading when going astern?
   • (A) The water flow due to the vessel's movement through the water
   • (B) The discharge current being channeled to impinge on the vessel's deadwood
   • (C) The tunnel effect of the water flow past opposing rudders
   • (D) The effect of the propeller flow on the rudders

   If choice D is selected set score to 1.

48. Which statement concerning dual-tonnage vessels is TRUE?
   • (A) The dual-tonnage mark is always marked above the load line marks.
   • (B) The dual-tonnage mark must never be submerged beyond the freshwater allowance.
   • (C) A single-deck vessel may not be assigned dual tonnages.
   • (D) The tonnages referred to are the displacement tonnage and gross tonnage.

   If choice C is selected set score to 1.

49. On an inspected vessel, which abbreviation refers to the horizontal distance between perpendiculars taken at the forward-most and the after-most points on the waterline at her deepest operating draft?
   • (A) LBP
   • (B) LLL
   • (C) LOA
   • (D) LWL

   If choice A is selected set score to 1.

50. Depending on its concentration, which product(s) can be classified as either grade D or E?
   • (A) 1,1,1-trichloroethane
   • (B) Sulfuric acid
   • (C) Formaldehyde solutions 37% to 50%
   • (D) All of the above

   If choice C is selected set score to 1.
51. What is NOT required of the cargo tank venting on a tank barge carrying grade A liquids?

- (A) Each cargo tank must have a vent.
- (B) A vent header must be fitted with a pressure-vacuum valve.
- (C) The diameter of the vent must be greater than 4 inches in diameter.
- (D) The vent must extend to a reasonable height above the weather deck.

*If choice C is selected set score to 1.*

52. When oily ballast has been pumped overboard, an entry must be made in which log?

- (A) Engine rough log
- (B) Deck rough log
- (C) Official Logbook
- (D) Oil Record Book

*If choice D is selected set score to 1.*

53. Which of the following is not an acceptable unit of measure to be used consistently throughout an Oil Record Book?

- (A) Gallons
- (B) Cubic meters
- (C) Tons
- (D) Barrels

*If choice C is selected set score to 1.*

54. The Federal Water Pollution Control Act requires the person in charge of a vessel to immediately notify the Coast Guard as soon as he/she knows of any oil discharge. Failure to notify the Coast Guard can lead to a monetary fine and imprisonment of what time period?

- (A) 5 years
- (B) 2 years
- (C) 1 year
- (D) 3 years

*If choice A is selected set score to 1.*

55. After casting off moorings at a mooring buoy in calm weather, which action should you take?

- (A) Back away a few lengths to clear the buoy and then go ahead on the engines
- (B) Go half ahead on the engines and put the rudder hard right
- (C) Go half ahead on the engines and pass upstream of the buoy
- (D) Go full ahead on the engine(s)

*If choice A is selected set score to 1.*
56. The safe working load for the assembled cargo gear and the minimum angle to the horizontal for which the gear is designed shall be marked on the __________.

- (A) heel of the boom
- (B) mast or king post
- (C) head of the boom
- (D) deck

*If choice A is selected set score to 1.*

57. When an Official logbook is not required, an unofficial logbook is required to be kept aboard for review by a marine inspector for __________.

- (A) 12 months
- (B) one month
- (C) six months
- (D) None of the above

*If choice A is selected set score to 1.*

58. The charterer has completed loading the vessel in 3 days instead of the 5 days agreed to in the charter party. Which action may be a result of this?

- (A) The charterer may receive dispatch money
- (B) The ship-owner may charge for two lay days
- (C) The consignee may be required to pay a ceaser fee
- (D) The stevedore may collect demurrage

*If choice A is selected set score to 1.*

59. Generally speaking, which is the most favorable bottom for anchoring your vessel?

- (A) Rocky with vegetation
- (B) Very soft mud
- (C) Loose sand bottoms
- (D) A mixture of mud and clay

*If choice D is selected set score to 1.*

60. The boom indicator tells the operator at what angle the boom is compared to the __________.

- (A) horizontal position of the load being lifted
- (B) vertical position of the boom
- (C) horizontal position of the boom
- (D) vertical position of the load being lifted

*If choice C is selected set score to 1.*
61. Which statement about a tunnel bow thruster is TRUE?

- (A) It will allow you to hold a position when the current is from astern.
- (B) It can be used to slow the ship in addition to backing down.
- (C) It provides lateral control without affecting headway.
- (D) It is fully effective at speeds up to about six knots.

If choice C is selected set score to 1.

62. Your vessel is required to have a slop chest. Which of the following articles is NOT required by law to be carried in the slop chest?

- (A) Blankets
- (B) Foul weather clothing
- (C) Tobacco products
- (D) Candy

If choice D is selected set score to 1.

63. You are operating a non-ocean going vessel, how much of the accumulated oily waste must you be able to retain on board?

- (A) 25%
- (B) 50%
- (C) 75%
- (D) 100%

If choice D is selected set score to 1.

64. What is the period of validity of a Safety Management Certificate?

- (A) 60 months
- (B) 48 months
- (C) 42 months
- (D) 36 months

If choice A is selected set score to 1.

65. Which certificate is issued by the American Bureau of Shipping?

- (A) Safety Equipment Certificate
- (B) Certificate of Inspection
- (C) Permit to Proceed for repairs
- (D) Load Line Certificate

If choice D is selected set score to 1.
66. 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) No credentials are required since you operate on inland waters only
- (B) Merchant Mariner Credential
- (C) State driver's license with photo ID
- (D) Social Security card

*If choice B is selected set score to 1.*

67. On the cargo manifest, which defines the term gross weight?

- (A) The combined weight of the cargo and the box
- (B) The weight of the box
- (C) The maximum weight the container is rated to carry
- (D) The weight of the cargo only

*If choice A is selected set score to 1.*

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

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

*If choice A is selected set score to 1.*

69. How should a vessel spotted at 45° relative be reported?

- (A) Broad on the starboard bow
- (B) 4 points abaft the starboard beam
- (C) On the starboard beam
- (D) 4 points forward of starboard bow

*If choice A is selected set score to 1.*
70. The tankship Northland is loaded as shown in table BL-0003 below. Use the salmon colored pages in the Stability Data Reference to determine the sagging numeral.

LONGITUDINAL BENDING STRESSES (PSI)

DESCRIPTION

1. FORE PEAK 0
2. DEEP TANK P/S 0
3. FWD STORES 6
4. FWD BUNKERS 1600
5. FWD COFFERDAM 0
6. #1 CARGO TANK 5229
7. #2 CARGO TANK 5193
8. #3 CARGO TANK 4229
9. #4 CARGO TANK 5116
10. BRIDGE CREW 3
11. BRIDGE STORES 12
12. BRIDGE F.W. 15
13. #5 CARGO TANK 3956
14. #6 BALLAST TANK 1628
15. #7 CARGO/BALLAST TANK 5929
16. #8 CARGO/BALLAST TANK 6012
17. #9 CARGO/BALLAST TANK 0
18. #10 CARGO TANK 5417
19. #11 CARGO TANK 3257
20. AFT COFFERDAM 0
21. AFT BUNKERS 900
22. AFT SETTLERS 325
23. DISTILLED WATER 56
24. AFT STORES 75
25. AFT CREW 7
26. F.W. AFT 57
27. AFT PEAK 375

- (A) 71.07 numeral
- (B) 74.95 numeral
- (C) 77.56 numeral
- (D) 78.29 numeral

If choice D is selected set score to 1.