

U.S.C.G. Merchant Marine Exam
Master of Unlimited Tonnage
Q302 Deck General
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions:

1. Which item may be substituted for, in the fireman's outfit, on a cargo vessel?

- (A) Flame safety lamp
- (B) Fire ax
- (C) Flashlight
- (D) Rigid helmet

If choice A is selected set score to 1.

2. You are the credentialed operator of a 100 GT towing vessel sailing coastwise. What percentage of the deck crew must be able to understand the language commonly used onboard the vessel?

- (A) 50%
- (B) 100%
- (C) 65%
- (D) 75%

If choice D is selected set score to 1.

3. Prior to being able to sail, each vessel that carries grain in bulk must have a certificate of loading. Which organization issues this certificate?

- (A) U.S. Salvage
- (B) Lloyds of London
- (C) American Bureau of Shipping
- (D) National Cargo Bureau

If choice D is selected set score to 1.

4. Which statement about stopping a vessel is TRUE?

- (A) A tunnel bow thruster can be used in an emergency to reduce the stopping distance.
- (B) A vessel is dead in the water when the back wash from astern operation reaches the bow.
- (C) When a vessel is dead in the water any speed displayed by Doppler log reflects the current.
- (D) A lightly laden vessel requires as much stopping distance as a fully laden vessel when the current is from astern.

If choice C is selected set score to 1.

5. A Permit to Proceed is issued by which organization?

- (A) U.S. Department of Labor
- (B) National Cargo Bureau
- (C) U.S. Coast Guard
- (D) American Bureau of Shipping

If choice C is selected set score to 1.

6. A vessel is to make a voyage between New York and San Juan, Puerto Rico, and return. The crew should be signed on which articles?
- (A) Foreign Articles
 - (B) No articles are required
 - (C) Intercoastal Articles
 - (D) Coastwise Articles

If choice D is selected set score to 1.

7. According to the Chemical Data Guide, what is a characteristic of allyl chloride?
- (A) It is chemically unstable
 - (B) It has sour odor.
 - (C) It is classified as a grade B poison.
 - (D) It may be stored in steel tanks

If choice C is selected set score to 1.

8. In insurance terms, which describes the term Particular Average?
- (A) The average distance steamed per day over the duration of the voyage charter party
 - (B) Charges against all parties in a marine venture to pay for damages incurred to the cargo
 - (C) The cargo loss sustained by only one party
 - (D) Losses claimed after all liens against the vessel are settled

If choice C is selected set score to 1.

9. Fire fighting equipment requirements for a particular vessel may be found on which document?
- (A) Certificate of Registry
 - (B) Certificate of Seaworthiness
 - (C) Classification Certificate
 - (D) Certificate of Inspection

If choice D is selected set score to 1.

10. When will a vessel "squat" while underway?
- (A) Only when in narrow channels
 - (B) In all depths of water
 - (C) Only when in deep water
 - (D) Only when in shallow water

If choice B is selected set score to 1.

11. Multiple factors will have an effect on your vessel when it is maneuvering in restricted waters. Which of the following factors is the combination of sinkage and trim of the vessel?

- (A) Heel
- (B) Bank cushion
- (C) Bank suction
- (D) Squat

If choice D is selected set score to 1.

12. If you are loading fruit in reefer spaces and you notice that the fruit is beginning to mold, which action should you take?

- (A) Write up exceptions on the cargo
- (B) Discharge CO₂ into the compartment after loading
- (C) Carry the cargo at a cooler temperature than originally planned
- (D) Refuse to carry any of the cargo

If choice A is selected set score to 1.

13. 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 vessel will tend to ride higher
- (B) Your vessel will have better rudder response
- (C) Your rudder response will become sluggish
- (D) Your speed will increase without a change in your throttle

If choice C is selected set score to 1.

14. The master or individual in charge of a vessel prepares a certificate of discharge for each mariner being discharged from the vessel. Which party receives the original copy?

- (A) National Maritime Center
- (B) Officer In Charge, Marine Inspection (OCMI)
- (C) Shipping Company
- (D) Mariner

If choice D is selected set score to 1.

15. Which publication would give detailed information on the commercial vessel traffic reporting system for connecting waters from Lake Erie to Lake Huron?

- (A) U.S. Coast Guard Light List - Vol. VII
- (B) United States Coast Pilot Number 6 - Great Lakes
- (C) Code of Federal Regulations - Title 33
- (D) The appropriate Great Lakes Navigation Chart

If choice C is selected set score to 1.

16. Which type of ice is a hazard to navigation?

- (A) Ice rind
- (B) Frazil ice
- (C) Growlers
- (D) Pancake ice

If choice C is selected set score to 1.

17. While standing look-out at night, which is the BEST way to see a dim light on the horizon?

- (A) Look a little below the horizon
- (B) Look directly towards the light
- (C) Look a little above the horizon
- (D) Look quickly above then quickly below the horizon

If choice C is selected set score to 1.

18. Which item do you NOT have to provide for the Coast Guard representative at the time of a stability test?

- (A) General arrangement plans of decks, holds and inner bottoms
- (B) Capacity plans showing the vertical and longitudinal centers of gravity of stowage spaces and tanks.
- (C) A stability letter.
- (D) Tank sounding tables and draft mark locations.

If choice C is selected set score to 1.

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

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

If choice A is selected set score to 1.

20. When do the pollution prevention regulations in MARPOL apply to U. S. flag vessels that are certified for ocean service?

- (A) Only when the vessel is on international voyages outside U.S. territorial waters
- (B) Only when the vessel is on the Great Lakes and international waters
- (C) Only when the vessel is on the western rivers and international waters
- (D) When the vessel is on all international and inland waters

If choice D is selected set score to 1.

21. The signal man assisting the crane operator has his arm extended, his fingers closed, and his thumb pointing downward. This is the signal to _____.

- (A) lower the load
- (B) hoist the load
- (C) lower the boom
- (D) raise the boom

If choice C is selected set score to 1.

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

If choice D is selected set score to 1.

23. If you shorten the scope of anchor cable, what is the effect of your anchor's holding power?

- (A) Holding power has no relation to scope
- (B) The holding power decreases
- (C) The holding power increases
- (D) The holding power remains the same

If choice B is selected set score to 1.

24. The tankship Northland is loaded as shown in table BL-0004 below. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.

BL-0004

| 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) 49.73 numeral
- (B) 52.76 numeral
- (C) 55.29 numeral
- (D) 57.93 numeral

If choice A is selected set score to 1.

25. Which is the root cause of wake damage to a vessel or structure in a narrow channel?

- (A) Slack mooring lines
- (B) Trim of the vessel
- (C) Improper steering of the vessel
- (D) Excessive speed

If choice D is selected set score to 1.

26. You have been granted authorization to use chemical agents on an oil spill. What is the main purpose for using the chemicals?

- (A) To dissolve the oil in the water
- (B) To facilitate the removal of the pollutant from the water
- (C) To absorb the oil for easy removal
- (D) To sink the oil to the bottom of the sea bed

If choice B is selected set score to 1.

27. By law, a user of marijuana shall be subject to which of the following?

- (A) termination of employment
- (B) reprimand by the US Coast Guard
- (C) loss of pay during the period of such use
- (D) revocation of Merchant Mariner Credential

If choice D is selected set score to 1.

28. You are loading a cargo that includes cylinders of acetylene aboard your break bulk vessel. Which statement is true?

- (A) The cylinders must have a red label for flammability and a green label for compressed gas.
- (B) The cylinders may be protected from the radiant heat of the Sun by laying a tarp on them.
- (C) The cylinders must be stowed at least 10 horizontal feet from corrosive materials in the same space.
- (D) Stowage in the upper deck-deck is considered to be the equivalent of "on deck" stowage for this cargo.

If choice C is selected set score to 1.

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

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

If choice D is selected set score to 1.

30. Grade E combustible liquids are those having flash points of _____.

- (A) greater than 80°F and less than 115°F
- (B) 150°F or greater
- (C) 80°F or less
- (D) greater than 115°F and less than 150°F

If choice B is selected set score to 1.

31. How is the anchor chain marked for 30 fathoms?

- (A) Two links on each side of the 30 fathom detachable link are painted white
- (B) Only the detachable link is painted red
- (C) One link on each side of the 30 fathom detachable link is painted white
- (D) Three links on each side of the 30 fathom detachable link are painted white

If choice A is selected set score to 1.

32. 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.

33. The scuppers had been plugged as required at the time a small oil spill occurs on deck from a leaking dresser coupler. After shutting down the transfer, the engine room should first be informed and then which action should be taken?

- (A) Remove the plugs from the scuppers
- (B) Sound the general alarm
- (C) Rig a fire hose to wash down the deck
- (D) Spread an absorbent material, such as sawdust

If choice D is selected set score to 1.

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

- (A) Slew travel limits
- (B) Turntable limits
- (C) Luff travel limits
- (D) All of the above

If choice D is selected set score to 1.

35. Your vessel is chartered under a time charter party. Under this type of charter party, what is your responsibility as Master?

- (A) It is solely to the owner, as under normal conditions
- (B) It is to the owner for vessel administration and to the charterer for cargo operations and schedule
- (C) It is solely to the cargo shippers and consignees
- (D) It is solely to the charterer for all matters pertaining to cargo and ship administration

If choice B is selected set score to 1.

36. Which of the following statements is/are TRUE in regard to Ro-Ro vessels' spaces that are "specially suitable for vehicles"?

- (A) The spaces are prohibited from being fitted with fixed CO2 fire extinguishing systems.
- (B) The spaces shall have designated smoking areas.
- (C) The spaces shall be fitted with an approved fire or smoke detecting system.
- (D) All of the above

If choice C is selected set score to 1.

37. Your vessel is disabled and in imminent danger of grounding on a lee shore. The Master agrees to salvage services using Lloyd's Open Form of Salvage Agreement. Which is TRUE?

- (A) Underwriters will repudiate the agreement if it is unsuccessful, due to their increased liability.
- (B) The salvor becomes the owner of the vessel until the salvage award, if any, is paid.
- (C) The salvage award will be decided by suit in Admiralty Court.
- (D) The salvage service is on a "no cure-no pay" basis.

If choice D is selected set score to 1.

38. Your vessel is proceeding through a narrow channel. What actions can you take to avoid any sudden sheers of the vessel?

- (A) Increase speed and stay to the outer limits of the channel
- (B) Reduce speed and stay to the out limits of the channel
- (C) Put your offshore anchor well in the water
- (D) Reduce speed and stay in the deepest part of the channel

If choice D is selected set score to 1.

- 39.** You are loading 530,000 barrels of cargo oil. At 0945 on 13 April, you find that you have loaded 202,000 barrels. At 1130, you find that you have loaded 223,000 barrels. When will you complete loading if you continue at the same rate?
- (A) 1322, 13 April
 - (B) 1920, 13 April
 - (C) 1120, 14 April
 - (D) 1305, 14 April

If choice D is selected set score to 1.

- 40.** A seaman deserts the vessel in a foreign port. What should the Master do with any of the deserter's personal effects remaining on board?
- (A) Sell them at auction and deposit the money in the ship's morale or welfare fund.
 - (B) Donate them to a local charity upon return to the United States.
 - (C) Transfer them to the appropriate district court of the U.S. at the end of the voyage.
 - (D) Inventory them, make an appropriate entry in the Official Logbook and dispose of them at sea.

If choice C is selected set score to 1.

- 41.** When the dew point of the outside air is higher than the dew point of the air in the cargo hold, which action should you take?
- (A) Energize the intake blowers
 - (B) Do not ventilate the cargo holds
 - (C) Energize the exhaust blowers
 - (D) Ventilate the cargo holds

If choice B is selected set score to 1.

- 42.** Which portable fire extinguisher is classified as a type B-III extinguisher?
- (A) 12 gallon soda acid
 - (B) 20 gallon foam
 - (C) 30 pound carbon dioxide
 - (D) 20 pound dry chemical

If choice D is selected set score to 1.

- 43.** Which term defines cargo that is highly susceptible to damage by tainting from odorous cargo?
- (A) Dry cargo
 - (B) Delicate cargo
 - (C) Clean cargo
 - (D) Immune cargo

If choice B is selected set score to 1.

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

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

If choice C is selected set score to 1.

45. You are standing the wheel watch on entering port and the Master gives you a rudder command which conflicts with a rudder command from the Pilot. What should you do?

- (A) Bring the rudder to a position midway between the two conflicting positions.
- (B) Obey the Pilot.
- (C) Obey the Master.
- (D) Ask the Pilot if he relinquishes control.

If choice C is selected set score to 1.

46. You are planning the stowage of two incompatible products on your multiple-product tankship. What will NOT provide the minimum required segregation?

- (A) Solid (non-intercostal) bulkhead
- (B) Tank containing a third cargo compatible with the other two
- (C) Diagonally adjacent tanks
- (D) Empty tank

If choice A is selected set score to 1.

47. Which is a requirement of a Type III marine sanitation device?

- (A) Produces an effluent having a fecal coliform bacteria count not greater than 500 per 100 milliliters and floating solids
- (B) Produce an effluent having a fecal coliform bacteria count no greater than 1,000 per 100 milliliters and no visible floating solids
- (C) A device that is designed to prevent the overboard discharge of treated or untreated sewage
- (D) Produces an effluent having a fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter

If choice C is selected set score to 1.

48. The number of certificated able seamen and lifeboatmen required on a vessel is determined by which organization?

- (A) Coast Guard
- (B) Corps of Engineers
- (C) International Maritime Organization
- (D) American Bureau of Shipping

If choice A is selected set score to 1.

49. The possibility of wake damage can be reduced by following which action?

- (A) Slow down when passing moored vessels
- (B) Alternate engine speeds
- (C) Apply rudder in both port and starboard directions
- (D) Passing close aboard to the moored vessel

If choice A is selected set score to 1.

50. How long is a credential issued by the U.S. Coast Guard for Master of Towing Vessels valid for?

- (A) 2 years and must be renewed
- (B) 3 years and must be renewed
- (C) 5 years and must be renewed
- (D) life and need not be renewed

If choice C is selected set score to 1.

51. On stud-link anchor chain, how much does the addition of the stud increase the strength of the link?

- (A) 10%
- (B) 15%
- (C) 20%
- (D) 50%

If choice B is selected set score to 1.

52. 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) fuel
- (B) oxygen
- (C) ignition
- (D) All of the above

If choice D is selected set score to 1.

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

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

If choice D is selected set score to 1.

54. As a general guide, under which condition should hygroscopic cargoes be ventilated?

- (A) When the outside dew point is 60°F (16°C) and the cargo temperature is 54°F (12°C)
- (B) When going from a warm to a cold climate
- (C) When the dew point of the air in the hold is very low
- (D) When the dew point of the outside air is greater than the dew point of the air in the hold

If choice B is selected set score to 1.

55. Which describes ice blink?

- (A) The soft light appearance on the underside of a cloud layer due to reflection from a surface of open water
- (B) A whitish glare on the underside of a cloud layer
- (C) The dark appearance of the underside of a cloud layer due to reflection of a surface of open water
- (D) A water sky

If choice B is selected set score to 1.

56. You are piloting your vessel in a narrow channel. How will the vessel react to a steep bank on your starboard side?

- (A) The bow will swing toward the bank, and the stern will swing away from the bank
- (B) The vessel will be bodily drawn into the bank
- (C) The bow will swing away from the bank, and stern will swing into the bank
- (D) The vessel will be bodily pushed away from the bank

If choice C is selected set score to 1.

57. After an IOPP Certificate is issued to an inspected vessel, how many other surveys of the vessel's pollution prevention equipment are conducted during the period of validity of the certificate?

- (A) None
- (B) One
- (C) Two
- (D) Three

If choice D is selected set score to 1.

58. When bunkering at a dock which of the following signals must be displayed?

- (A) A red flag by day, a blue light by night
- (B) A yellow flag by day, red light by night
- (C) A green flag by day, green light by night
- (D) A red flag by day, red light by night

If choice D is selected set score to 1.

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

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

If choice A is selected set score to 1.

60. In some cases, the 50% duty on all foreign repairs made to American flag merchant vessels may be remitted. Which work does NOT come under the remitting policy of U.S. Customs?

- (A) Repairs to hull structural damage
- (B) Chipping, painting, and scaling by foreign labor
- (C) Repairs to the main propulsion machinery
- (D) Repairs due to damage done by heavy weather

If choice B is selected set score to 1.

61. Which is the proper term for a band or collar on the top end of a boom to which the topping lift, midships guy, and outboard guys are secured?

- (A) The guy band
- (B) A pad eye collar
- (C) The spider band
- (D) A collar band

If choice C is selected set score to 1.

62. A vessel puts into the port of Kobe, Japan to discharge cargo. While awaiting completion of the cargo operation, the vessel contracts with a local shipyard to have the hull chipped, scaled, and painted. How is the cost of this maintenance handled with the Collector of Customs?

- (A) A declaration is required and duty is involved on the total cost.
- (B) A declaration is made and duty is charged on the materials only.
- (C) A declaration is made, but duty is charged on the labor only.
- (D) No declaration is required since this is considered routine maintenance.

If choice A is selected set score to 1.

63. When referring to dry bulk cargoes, which defines the term "flow state"?

- (A) The saturation of a dry bulk product with a liquid to the point where it behaves as a liquid
- (B) The minimum granule size of a particular product where it will flow like a liquid at an angle of 30°
- (C) The suitability of loading a cargo by flowing down inclined chutes
- (D) The state of a commodity when the ship is heeled past the angle of repose

If choice A is selected set score to 1.

64. Prior to handling Class 1 explosive materials, which signal(s) is/are required to be displayed by the vessel?

- (A) an announcement on VHF channel 16 every hour
- (B) the Bravo flag and signs posted prohibiting smoking
- (C) an all-round flashing blue light
- (D) the Bravo flag and a flashing red all-round light

If choice B is selected set score to 1.

65. A 100-GT vessel, constructed before July 1, 1974, is loading diesel fuel. What is the minimum capacity of the portable container required for placement under or around each fuel tank vent, overflow, and fill pipe?

- (A) 1 gallon
- (B) 5 gallons
- (C) 1 barrel
- (D) 2 barrels

If choice B is selected set score to 1.

66. According to U.S. regulations, how often are you are required to test cargo discharge piping?

- (A) 6 months
- (B) 12 months
- (C) 18 months
- (D) 24 months

If choice B is selected set score to 1.

67. When turning a ship in restricted space with a strong wind, which is the BEST action to take?

- (A) Turn so that the tendency to back into the wind can be used, if on a single-screw vessel
- (B) Go ahead on both engines with the rudder hard to one side, if on a twin-screw vessel
- (C) Take advantage of the tendency to back to port, if on a twin-screw vessel
- (D) Back down with the rudder hard to one side, if on a single-screw vessel

If choice A is selected set score to 1.

68. The tank barge on which you are preparing to load petroleum is required to have on board one B-II fire extinguisher. What does NOT meet this requirement?

- (A) 2-1/2 gallon foam
- (B) 5 gallon water (stored pressure)
- (C) 10 pound dry chemical
- (D) 15 pound CO₂

If choice B is selected set score to 1.

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

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

If choice B is selected set score to 1.

70. You are on a 120,000 DWT loaded bulk carrier. What is the maximum safe docking speed when coming alongside?

- (A) 0.2 foot per second (0.12 knot)
- (B) 0.5 foot per second (0.30 knot)
- (C) 0.1 foot per second (0.06 knot)
- (D) 0.75 foot per second (0.44 knot)

If choice A is selected set score to 1.