

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. You are on a 120,000 DWT loaded bulk carrier. What is the maximum safe docking speed when coming alongside?
- (A) 0.5 foot per second (0.30 knot)
 - (B) 0.2 foot per second (0.12 knot)
 - (C) 0.1 foot per second (0.06 knot)
 - (D) 0.75 foot per second (0.44 knot)

If choice B is selected set score to 1.

2. Which data can NOT be found on a moisture equilibrium chart?
- (A) Dry bulb temperature
 - (B) Vapor pressure
 - (C) Moisture content
 - (D) Wet bulb temperature

If choice D is selected set score to 1.

3. In terms of vessel manning, which defines a watch?
- (A) The direct performance of cargo loading and discharge operations only
 - (B) The performance of lookout duties
 - (C) The direct performance of deck or engine operations in a scheduled and fixed rotation
 - (D) The performance of maintenance work necessary for the vessel's safe operation, on a daily basis

If choice C is selected set score to 1.

4. According to the Chemical Data Guide, what does ethyl chloride produce when ignited?
- (A) Poisonous phosgene gas
 - (B) Poisonous chlorine gas
 - (C) Toxic fumes of lead
 - (D) Toxic fumes of oxides of nitrogen

If choice A is selected set score to 1.

5. What are the type and number of hand portable fire extinguishers required outside and in the vicinity of the paint locker exit?
- (A) One A-I
 - (B) Two A-IIs
 - (C) One B-II
 - (D) One C-II

If choice C is selected set score to 1.

- 6.** Two vessels are abreast of each other and passing port to port in a confined waterway. What should you expect as your bow approaches the screws of the other vessel?
- (A) Your bow will sheer towards the other vessel.
 - (B) Your draft will significantly decrease.
 - (C) Your speed will significantly increase.
 - (D) Your bow will sheer away from the other vessel.

If choice A is selected set score to 1.

- 7.** The shipping papers for the products being carried in your tankship are NOT required to contain which information?
- (A) The grades of the cargoes
 - (B) The location of the delivery point(s)
 - (C) The name of the consignee(s)
 - (D) The exact quantity of the cargoes

If choice D is selected set score to 1.

- 8.** 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.

- 9.** The number of certificated able seamen and lifeboatmen required on a vessel is determined by which organization?
- (A) Corps of Engineers
 - (B) Coast Guard
 - (C) American Bureau of Shipping
 - (D) International Maritime Organization

If choice B is selected set score to 1.

- 10.** The maneuvering information required to be posted in the wheelhouse must be based on certain conditions. Which of the following is NOT one of these conditions?
- (A) The depth of the water must be at least one and one-half times the draft.
 - (B) There must be no current.
 - (C) The hull must be clean.
 - (D) There must be calm weather-wind 10 knots or less and a calm sea.

If choice A is selected set score to 1.

11. You are docking a vessel. Which statement is TRUE?

- (A) You should approach the dock at a 90° angle
- (B) You should go in against the current
- (C) You should pass a mooring line to the dock and let the crew pull the vessel to
- (D) You should go in with the current

If choice B is selected set score to 1.

12. While on watch at sea you must maintain a proper lookout at all times. On a 700-foot cargo vessel being hand-steered during daylight hours in good visibility and clear of any navigational hazards, who may be the lookout?

- (A) The helmsman
- (B) The mate on watch
- (C) Either A or B
- (D) Neither A nor B

If choice B is selected set score to 1.

13. Who is responsible for the preparation of muster lists and signing of same?

- (A) The owner of the vessel
- (B) The Master of the vessel
- (C) The Chief Officer of the vessel
- (D) The United States Coast Guard

If choice B is selected set score to 1.

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

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

If choice B is selected set score to 1.

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

If choice B is selected set score to 1.

16. Which expresses the term leeway?

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

If choice B is selected set score to 1.

17. Which statement about a tunnel bow thruster is TRUE?

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

If choice B is selected set score to 1.

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

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

If choice A is selected set score to 1.

19. Which indicates the holding capability of an anchor?

- (A) The anchor's ability to dig in
- (B) The stowage of the anchor on board
- (C) The shape of the anchor
- (D) The size of the vessel and its draft

If choice A is selected set score to 1.

20. 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) Bank cushion
- (B) Bank suction
- (C) Heel
- (D) Squat

If choice D is selected set score to 1.

21. An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "I" (India) to signify that "_____".

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

If choice A is selected set score to 1.

22. According to the Chemical Data Guide, which reactive group(s) is/are not compatible with the products polybutene and o-xylene?

- (A) Amides
- (B) Alcohols, glycols
- (C) Phenols, cresols
- (D) Nitric acid

If choice D is selected set score to 1.

23. What statement is true regarding a Contract Salvage Agreement?

- (A) There is a "no cure-no pay" agreement
- (B) Lloyd's Open Form (LOF) Salvage Agreement is a Contract Salvage Agreement
- (C) The crew is allotted the largest percentage of the salvage award
- (D) The cost of the salvage is set at a fixed price

If choice D is selected set score to 1.

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

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

If choice B is selected set score to 1.

25. Which is the length of a standard "shot" of anchor chain?

- (A) 12 fathoms
- (B) 15 fathoms
- (C) 18 fathoms
- (D) 20 fathoms

If choice B is selected set score to 1.

26. What is the Reid vapor pressure of allyl chloride?

- (A) 16.5 (psia)
- (B) 14.0 (psia)
- (C) 12.9 (psia)
- (D) 10.3 (psia)

If choice D is selected set score to 1.

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

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

If choice D is selected set score to 1.

28. 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

If choice D is selected set score to 1.

29. A tank is loaded with 9,000 barrels of gasoline. The temperature of the product is 80°F (27°C), and it has a coefficient of expansion of .0008. The net amount of cargo loaded is _____.

- (A) 9,072 barrels
- (B) 9,144 barrels
- (C) 8,944 barrels
- (D) 8,856 barrels

If choice D is selected set score to 1.

30. If, after examination by the Quarantine Officer, your vessel is found to have a specific deficiency, you may be issued which document?

- (A) Controlled Free Pratique
- (B) Bill of health
- (C) Notice to Comply
- (D) Free Pratique

If choice A is selected set score to 1.

31. What is the cause of most minor spills of oil products?

- (A) Major casualties
- (B) Human error
- (C) Unforeseeable circumstances
- (D) Equipment failure

If choice B is selected set score to 1.

32. Which term defines cargo that is highly susceptible to damage by tainting from odorous cargo?

- (A) Clean cargo
- (B) Immune cargo
- (C) Dry cargo
- (D) Delicate cargo

If choice D is selected set score to 1.

33. The force acting on a single cargo runner which is vertically lifting or lowering a load is greatest when _____.

- (A) lowering the load at constant speed
- (B) raising the load at constant speed
- (C) decelerating when lowering the load
- (D) decelerating when raising the load

If choice C is selected set score to 1.

34. You are Master of a vessel that is sold in a foreign country after discharge of cargo. What is your responsibility to the crew in regards to return to the United States?

- (A) There is no requirement for return to the United States provided the voyage has exceeded 4 weeks duration.
- (B) You must provide passage to the port of original engagement.
- (C) You must provide air transportation to the nearest port of entry in the United States.
- (D) The crew can be employed on another United States vessel, but only if it is returning to the port of original engagement.

If choice B is selected set score to 1.

35. Which term defines the process of dividing the total volume of the ship in cubic feet (after omission of exempted spaces) by 100?

- (A) Light displacement
- (B) Bale cubic
- (C) Net tonnage
- (D) Gross tonnage

If choice D is selected set score to 1.

36. Which will most likely occur when your vessel enters shallow water?

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

If choice C is selected set score to 1.

37. Your ship has loaded 22,000 barrels of crude oil, departing Valdez, Alaska for Panama. When loaded the cargo temperature was 90°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 100°F at the discharge port, how many gallons will be offloaded?

- (A) 1,214,840
- (B) 1,205,160
- (C) 927,696
- (D) 920,304

If choice C is selected set score to 1.

38. Who would normally certify that all preparations have been made and all regulations observed prior to loading a cargo of bulk grain?

- (A) U.S. Coast Guard
- (B) National Cargo Bureau
- (C) American Bureau of Shipping
- (D) Master of the vessel

If choice B is selected set score to 1.

39. Which of the following is required to have a Shipboard Oil Pollution Emergency Plan?

- (A) All vessels, regardless of size and commercial application
- (B) An oil tanker of 150 gross tons and above, or other ship of 400 gross tons and above
- (C) Any barge or ship constructed or operated in such a manner that no oil in any form can be carried aboard
- (D) An oil tanker of 400 gross tons and above, or other ships of 150 gross tons and above

If choice B is selected set score to 1.

40. Which statement is correct concerning the carriage of coal in bulk?

- (A) Dunnage should be placed against ship's sides and around stanchions.
- (B) Coal should be vented with surface ventilation only.
- (C) Through ventilation, as well as surface ventilation, should be provided whenever possible.
- (D) Because of its inherent vice, coal should not be loaded wet.

If choice B is selected set score to 1.

41. If you are operating on the Inland Waters of the United States, which of the following may you discharge overboard?

- (A) Bottles
- (B) Metal
- (C) Dunnage
- (D) None of the above

If choice D is selected set score to 1.

42. 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. When is the watch officially transferred to you?

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

If choice B is selected set score to 1.

43. You are transporting dangerous cargo on your vessel. Who is required to sign the Dangerous Cargo Manifest acknowledging the correctness of the document?

- (A) Only the Master
- (B) The Master or his authorized representative
- (C) The shipper
- (D) A U.S. Coast Guard Marine Inspector

If choice B is selected set score to 1.

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

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

If choice C is selected set score to 1.

45. The stowage factor for a cargo is based cubic feet and which other item?

- (A) One long ton
- (B) One short ton
- (C) One long metric ton
- (D) One short metric ton

If choice A is selected set score to 1.

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

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

If choice B is selected set score to 1.

47. Cargo pumprooms on tank vessels, constructed in 1965, handling grade C liquid cargo shall have power ventilation systems. What is time requirement for these ventilation systems to completely change the air?

- (A) 1 minute
- (B) 3 minutes
- (C) 5 minutes
- (D) 10 minutes

If choice B is selected set score to 1.

48. What is the purpose of a devil's claw?

- (A) It will prevent the chain from fouling on deck
- (B) It prevent the windlass from engaging
- (C) It controls the wildcat
- (D) It acts as a chain stopper

If choice D is selected set score to 1.

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

If choice D is selected set score to 1.

50. The number of able seamen required on board a vessel can be found in which document?

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

If choice D is selected set score to 1.

- 51.** A vessel has been surveyed in a foreign port and found unseaworthy as a result of neglect. A seaman on this vessel is entitled to discharge and which of the following?
- (A) One month's pay only
 - (B) One month's pay or transportation to the nearest U.S. port, whichever is the least amount
 - (C) Transportation to the port of engagement
 - (D) One month's pay or transportation to the nearest U.S. port, whichever is the greater amount

If choice D is selected set score to 1.

- 52.** Asphyxia is generally limited to enclosed spaces, and the deficiency of breathable air in an enclosed space can occur with any of the following conditions. Indicate the condition that will NOT cause asphyxia.
- (A) When large quantities of cargo vapor is present
 - (B) Where rusting of internal tank surfaces has taken place.
 - (C) Where large quantities of inert gas is present.
 - (D) When 21% of oxygen is present.

If choice D is selected set score to 1.

- 53.** Which type of ice is a hazard to navigation?

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

If choice A is selected set score to 1.

- 54.** You are proceeding at a slow speed with your starboard side near the right bank of a channel. If your vessel suddenly sheers toward the opposite bank, which would be the BEST action to take?
- (A) Put engine full astern, hard left rudder
 - (B) Put engine full ahead, hard left rudder
 - (C) Put engine full ahead, hard right rudder
 - (D) Put engine full astern, hard right rudder

If choice C is selected set score to 1.

- 55.** The boom stops on a pedestal crane prevent the boom from _____.

- (A) being lowered too low
- (B) swinging at sea
- (C) being raised too high
- (D) overloading when not in use

If choice C is selected set score to 1.

56. On tank vessels, fully charged fire extinguishers are considered semi-portable when they have a gross weight of more than _____.

- (A) 55 pounds
- (B) 75 pounds
- (C) 95 pounds
- (D) 125 pounds

If choice A is selected set score to 1.

57. What does a Visaed Alien Crew List which is made and submitted to the U.S. Consul for visa show?

- (A) All aliens aboard
- (B) Registered aliens aboard
- (C) Nonresident aliens aboard
- (D) All crew members

If choice C is selected set score to 1.

58. For insurance purposes, which is a requirements for a general average act?

- (A) There are no losses
- (B) There must be no imminent peril
- (C) It must be a successful venture
- (D) All of the above

If choice C is selected set score to 1.

59. What is NOT a basic shiphandling rule for navigating in ice concentrations on the Great Lakes?

- (A) Transit ice along pressure ridges when possible.
- (B) Keep moving - even very slowly, but keep moving.
- (C) Excessive speed means ice damage.
- (D) Work with the ice movement, not against.

If choice A is selected set score to 1.

60. Which is a TRUE statement concerning the examining of cargo equipment at the time of a vessels Inspection for Certification?

- (A) Cargo booms must be weight tested at this time by the National Cargo Bureau.
- (B) Cargo booms must be weight tested at this time by the American Bureau of Shipping.
- (C) Cargo booms must be weight tested at this time by the U.S. Coast Guard.
- (D) No test at this time is required.

If choice D is selected set score to 1.

61. As a ship moves through the water, it drags with it a body of water called the wake. Which term defines the ratio of the wake speed to the ship's speed?

- (A) Wake fraction
- (B) Propeller velocity
- (C) Wake distribution
- (D) Speed of advance

If choice A is selected set score to 1.

62. When the vessel is on coastwise articles, what is done to the original certificate of the seaman's certificate of discharge?

- (A) It is given to the seaman
- (B) It is retained on board
- (C) It is sent to the shipping company
- (D) It is sent to Commandant, U.S. Coast Guard

If choice A is selected set score to 1.

63. As a ship moves through the water, it causes a wake, which is also moving forward relative to the sea. In addition to a fore and aft motion, which direction will the wake flow?

- (A) Upward and outward flow
- (B) Upward and inward flow
- (C) Downward and outward flow
- (D) Downward and inward flow

If choice B is selected set score to 1.

64. International Oil Pollution Prevention (IOPP) Certificates are required for each U.S. oil tanker at or above how many gross registered tons?

- (A) 100 gross registered tons
- (B) 150 gross registered tons
- (C) 300 gross registered tons
- (D) 400 gross registered tons

If choice B is selected set score to 1.

- 65.** You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is TRUE?
- (A) Pyridine and diisopropylamine may be carried in tanks having a common header vent.
 - (B) Diisopropylamine must be separated from carbon disulfide by two barriers (cofferdams, voids, empty tanks, etc.)
 - (C) Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks.
 - (D) A tank of carbon disulfide may be used to separate a tank of pyridine from a tank of diisopropylamine.

If choice B is selected set score to 1.

- 66.** Which term(s) are in the category of "oil" as used in the Oil Pollution Regulations?

- (A) Fuel oil
- (B) Sludge
- (C) Oil refuse
- (D) All of the above

If choice D is selected set score to 1.

- 67.** 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) Ventilate the cargo holds
- (B) Do not ventilate the cargo holds
- (C) Energize the exhaust blowers
- (D) Energize the intake blowers

If choice B is selected set score to 1.

- 68.** Which of the signals listed is required to be displayed during the day while bunkering?

- (A) A red light
- (B) A red flag
- (C) A yellow flag
- (D) A red and yellow flag

If choice B is selected set score to 1.

- 69.** If a cargo of kerosene were considered "too lean" to explode, then it must be _____.

- (A) above the "explosive range"
- (B) below the "explosive range"
- (C) within the "explosive range"
- (D) None of the above

If choice B is selected set score to 1.

- 70.** You are on a multiple-product chemical tanker with orders to load diethylamine. What is NOT a requirement for transporting this cargo?
- (A) Each crew member must be provided with an emergency escape breathing apparatus.
 - (B) You must have two toxic vapor detectors or the pumproom must meet special requirements.
 - (C) You must have a containment system made out of stainless steel other than types 416 and 422.
 - (D) If you are also carrying allyl alcohol, the venting systems don't have to be segregated.

If choice C is selected set score to 1.