

## 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. The agency which assigns load lines and issues Load Line Certificates is the \_\_\_\_\_.

- (A) American Bureau of Shipping
- (B) U.S. Coast Guard
- (C) Secretary of Commerce
- (D) U.S. Customs

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

2. When authorized to use chemical agents on an oil spill they would \_\_\_\_\_.

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

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

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

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

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

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

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

5. A clause in the charter party requires a vessel's owner to pay dispatch money when the vessel \_\_\_\_\_.

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

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

6. You are signing on a deck officer, who will be designated as one of the GMDSS operators, before sailing foreign. Which statement is TRUE?
- (A) His/her Merchant Mariners Credential must have an added endorsement as "Radio Electronics Officer".
  - (B) You must consult the "List of Qualifications" on the reverse of his/her FCC-issued license.
  - (C) He/she must have an STCW certificate endorsed as "Valid for Service on Vessels Operating in the GMDSS System".
  - (D) He/she must present either an FCC-issued license or a Coast Guard-issued license.

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

7. You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is true?
- (A) Pyridine must be separated from carbon disulfide by two barriers (cofferdams, voids, empty tanks, etc.).
  - (B) Pyridine and diisopropylamine may not be carried in tanks having a common header vent.
  - (C) A tank of diisopropylamine may be used to separate a tank of pyridine from a tank of carbon disulfide.
  - (D) Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks.

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

8. When bunkering at anchorage which of the following signals must be displayed?
- (A) A red flag by day ONLY
  - (B) A red flag by day, red light by night
  - (C) A red light by night ONLY
  - (D) No signal required at anchorage

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

9. Which statement about entry into a space that has been sealed for a long time is TRUE?
- (A) A tank that has been used to carry hazardous liquids should be tested for oxygen content, toxicity, and explosive gases.
  - (B) You can safely enter the space without a breathing apparatus if the oxygen content exceeds 14%.
  - (C) The natural ventilation through the installed vents is sufficient to provide the proper oxygen content.
  - (D) The heat of the sun on upper ballast tanks, such as in a bulk carrier, may generate carbon monoxide.

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

**10.** When the period of beam seas equals the natural rolling period of a vessel, what will most likely occur?

- (A) Excessive yawing
- (B) Excessive pitching
- (C) Excessive rolling
- (D) No change should be evident

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

**11.** What can be done to prevent small oil spills on deck from going overboard?

- (A) plugging the sounding pipes
- (B) plugging the scuppers
- (C) driving wooden plugs into the vents
- (D) closing the lids on the vents

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

**12.** You are on a containership. The cargo includes a container of small arms ammunition, a container of lead-acid storage batteries and a container of methyl acetylene bottles. Which statement is TRUE?

- (A) The storage batteries must be at least ten horizontal feet away from the methyl acetylene.
- (B) The storage batteries must be stowed on deck away from the ammunition.
- (C) The ammunition must be separated from the methyl acetylene by at least one hold.
- (D) No separation is required because freight containers are exempted.

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

**13.** A condition where two currents meet at the downstream end of a middle bar can be determined by a \_\_\_\_\_.

- (A) smooth patch of water
- (B) small whirlpool
- (C) V-shaped ripple with the point of the V pointing downstream
- (D) V-shaped ripple with the point of the V pointing upstream

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

**14.** "Cribbing" is \_\_\_\_\_.

- (A) the chains and shackles used to secure a deck cargo
- (B) a crate in which a deck cargo is packaged
- (C) wooden blocks or dunnage placed between a deck load and the deck
- (D) cardboard separation pieces placed between deck loads to prevent chafing

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

**15.** Your vessel must moor port side to a berth limited by vessels ahead and astern using a single tug. You are stemming a slight current and there is a light breeze of the dock. Your tug should be made up to the vessel's \_\_\_\_\_.

- (A) bow
- (B) quarter
- (C) waist
- (D) stern on a hawser

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

**16.** 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) LWL
- (D) LOA

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

**17.** Which wire rope purchases may be used with a 30-ton pedestal crane?

- (A) Luff
- (B) Rider block
- (C) Hoist
- (D) All of the above

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

**18.** You notice that your speed has decreased, the stern of your vessel has settled into the water, and your rudder is sluggish in responding. The MOST likely cause is \_\_\_\_\_.

- (A) shallow water
- (B) mechanical problems with the steering gear
- (C) loss of lubricating oil in the engine
- (D) current

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

**19.** Which measure should NOT be taken to reduce the pounding of a vessel in a head sea?

- (A) Reduce speed.
- (B) Add ballast forward.
- (C) Add ballast in the after peak.
- (D) Alter course.

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

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

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

- 21.** You are approaching a pier and intend to use the port anchor to assist in docking port side to. You would NOT use the anchor if \_\_\_\_\_.
- (A) another vessel is berthed ahead of your position
  - (B) the current was setting you on the pier
  - (C) the wind was blowing from the starboard side
  - (D) there is shallow water enroute to the berth

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

- 22.** Generally speaking, the most favorable bottom for anchoring is \_\_\_\_\_.
- (A) rocky
  - (B) a mixture of mud and clay
  - (C) very soft mud
  - (D) loose sand

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

- 23.** You are going astern (single-screw, right-handed propeller) with the anchor down at a scope of twice the depth of the water. As the anchor dredges, you should expect the \_\_\_\_\_.
- (A) stern to walk to port but at a reduced rate
  - (B) stern to walk to port at a faster rate than normal
  - (C) stern to walk to the same side as the anchor being used
  - (D) vessel to back in a straight line

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

- 24.** Using a scope of 6, determine how many feet of anchor cable you should put out to anchor in 12 feet (3.7 meters) of water.
- (A) 2 feet (0.6 meters)
  - (B) 18 feet (5.5 meters)
  - (C) 48 feet (14.6 meters)
  - (D) 72 feet (21.9 meters)

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

**25.** After casting off moorings at a mooring buoy in calm weather, you should \_\_\_\_\_.

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

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

**26.** What is the minimum temperature required in order for steam driven pumps to be considered a source of vapor ignition?

- (A) 100°C
- (B) 212°F
- (C) 500°F
- (D) 1200°F

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

**27.** Which is a grade B flammable liquid?

- (A) Carbon Disulfide
- (B) Carbon Tetrachloride
- (C) Ethyl Chloride
- (D) Butadiene

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

**28.** Which of the signals listed is required to be displayed at night while bunkering at a dock?

- (A) One red light over a yellow light
- (B) One red light
- (C) One red light over a white light
- (D) Two red lights

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

**29.** As a ship moves through the water, it drags with it a body of water called the wake. The ratio of the wake speed to the ship's speed is called \_\_\_\_\_.

- (A) speed of advance
- (B) propeller velocity
- (C) wake distribution
- (D) wake fraction

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

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

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

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

**31.** Using the available references determine the dew point when the dry bulb temperature is 74°F (23°C) and the wet bulb temperature is 60°F (16°C).

- (A) 14°F
- (B) 20°F
- (C) 28°F
- (D) 50°F

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

**32.** Which of the following statement(s) is/are TRUE regarding twin pedestal cranes?

- (A) Each single boom is of the partial-level luffing type and is capable of limited rotation.
- (B) An independent slew drive system rotates the turntable.
- (C) A slew drive system provides for rotation of each crane.
- (D) All of the above

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

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

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

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

**34.** Flanking rudders affect a vessel's heading because of the \_\_\_\_\_.

- (A) discharge current being channeled to impinge on the vessel's deadwood
- (B) water flow due to the vessel's movement through the water
- (C) tunnel affect of the water flow past opposing rudders
- (D) effect of the propeller flow on the rudders

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

**35.** A vessel which is being assisted by an icebreaker would display a flag hoist consisting of the code numeral "4" when the vessel \_\_\_\_\_.

- (A) stops
- (B) receives ice damage
- (C) speed begins to drop
- (D) becomes icebound

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

**36.** Your ship is navigating independently in heavy ice when it becomes beset. Which statement is FALSE?

- (A) The vessel will most likely require an icebreaker to free her.
- (B) The vessel may be able to free herself by pumping ballast from side to side.
- (C) It is advisable to clear the rudder area of ice by using ahead turns before backing down.
- (D) The propeller is more susceptible to ice damage when turning slowly than when stopped.

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

**37.** The space containing the cylinders for the carbon dioxide (CO<sub>2</sub>) fire extinguishing system must be designed to preclude an anticipated ambient temperature over \_\_\_\_\_.

- (A) 80°F
- (B) 95°F
- (C) 130°F
- (D) 150°F

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

**38.** Fire hose stations shall be marked in red letters and figures such as Fire Station No. "1", "2", "3", etc. The height of the letters and figures must be at least \_\_\_\_\_.

- (A) 1/2 inch
- (B) 1 inch
- (C) 1-1/2 inches
- (D) 2 inches

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

**39.** Which is characteristic of a "special cargo"?

- (A) The cargo gives off toxic gases when heated.
- (B) It must be stowed on deck.
- (C) Periodic inspection is required while in transit to prevent spoilage.
- (D) It is of high value or easily pilferable.

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

**40.** What is a grade B flammable liquid?

- (A) Chlorallylene
- (B) Allyl alcohol
- (C) Paraldehyde
- (D) Ethylene oxide

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

**41.** On the fully containerized ship, approximately one-third or more of the cargo is on deck above the rolling center. Top stowed containers are subject to \_\_\_\_\_.

- (A) accelerations less than on conventional vessels
- (B) accelerations the same as on conventional vessels
- (C) accelerations greater than on conventional vessels
- (D) no accelerations

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

**42.** You are loading a cargo of cases into a hold which has a bale cubic of 44,000. The cargo consists of cases measuring 4 ft by 2 ft by 1.5 ft. Estimated broken stowage is 15%. What is the maximum number of cases which can be stowed in the hold?

- (A) 3096
- (B) 3116
- (C) 3136
- (D) 3156

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

**43.** The process of adding mercaptans to gas, is known as which of the following?

- (A) saturating
- (B) reeking
- (C) smelling
- (D) stenching

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

**44.** 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 21% of oxygen is present.
- (B) Where rusting of internal tank surfaces has taken place.
- (C) Where large quantities of inert gas is present.
- (D) When large quantities of cargo vapor is present

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

**45.** When planning the loading or discharging of a VLCC (100,000 DWT+) what is the most important consideration?

- (A) Draft and trim
- (B) Rate of discharging
- (C) Rate of loading
- (D) Limits of the bending moments

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

**46.** The primary purpose of a load line is to establish required \_\_\_\_\_.

- (A) minimum freeboard
- (B) GM
- (C) fresh water allowances
- (D) transverse stability

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

**47.** SOLAS requires a lifesaving training manual be provided in each crew cabin or in the \_\_\_\_\_.

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

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

**48.** What is the period of validity of a Cargo Ship Safety Equipment Certificate?

- (A) 72 months
- (B) 60 months
- (C) 48 months
- (D) 42 months

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

**49.** An International Tonnage Certificate will be issued to a vessel when it meets several requirements, one of which is that the vessel must \_\_\_\_\_.

- (A) be issued a Certificate of Inspection
- (B) engage in intercoastal or international trade
- (C) be 79 or more feet in length
- (D) admeasure over 100 GT

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

**50.** Which document shows the minimum required crew a vessel must have to navigate from one port in the United States to another?

- (A) Certificate of Inspection
- (B) Articles
- (C) Crew List
- (D) Register

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

**51.** 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.*

**52.** What is the FIRST action to take if you detect oil around your tank vessel while discharging?

- (A) have the pumpman check the discharge piping
- (B) call the Master
- (C) try to find out where the oil is coming from
- (D) shut down operations

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

**53.** The operator of a vessel subject to the pollution regulations shall keep a written record available for inspection by the COPT or OCMI. What will this record contain?

- (A) the date and result of the most recent test on the system relief valves
- (B) the name of each person currently designated as a person in charge
- (C) hose information including the minimum design burst pressure for each hose
- (D) All of the above

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

**54.** Which area is designated a special area by Annex V to MARPOL 73/78?

- (A) Sargasso Sea
- (B) Red Sea
- (C) Great Lakes
- (D) Gulf of Saint Lawrence

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

**55.** 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.*

**56.** You operate a harbor craft on inland waters exclusively. If you regularly service or contact foreign flag vessels in the course of business, which statement is TRUE?

- (A) All contacts with a foreign flag vessel must be reported to the U.S. Coast Guard.
- (B) Your crew must have identification credentials.
- (C) A customs official must be on board when contacting a foreign flag vessel.
- (D) Your vessel must be inspected.

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

**57.** A seaman you have just discharged has a Continuous Discharge Book. Which statement is TRUE?

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

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

**58.** You are the Master of an uninspected diesel towing vessel of 190 GT operating on a regular run from New York to the Gulf of Mexico. Which statement is TRUE?

- (A) A credentialed Chief Engineer is required.
- (B) All crew members must have a Merchant Mariner Credential
- (C) Sailors may stand watch for 6 hours on and 6 hours off.
- (D) Able Seamen are not required in the deck crew.

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

**59.** For towing vessels over 100 gross tons that are permitted to maintain a two-watch system, what percentage of the deck crew must be able seamen?

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

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

**60.** A seaman may have all or part of his wages deposited by allotment to a bank or savings institution. Which of the following is NOT a requirement for this type of allotment?

- (A) The institution must be insured by the FSLIC or FDIC.
- (B) The account must be opened by the seaman and maintained in the seaman's name.
- (C) The account must be either a checking or savings account.
- (D) All of the above are requirements.

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

**61.** Your vessel (185 GT) is on a voyage between New York and San Francisco. Which statement is TRUE?

- (A) This is considered a coastwise voyage.
- (B) The maintenance of an Official Logbook is optional.
- (C) The vessel must be on foreign articles.
- (D) An Official Logbook must be maintained.

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

**62.** A seaman dies during a voyage. What is NOT required to be entered into the Official Log?

- (A) An inventory of the money and property
- (B) Statement as to the total deductions to be made from the wages
- (C) Statement of the wages due
- (D) Statement that the Master has taken custody of the deceased's MMD and passport

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

**63.** Which is supplied to the vessel by the U.S. Coast Guard?

- (A) Bell book
- (B) Cargo gear register
- (C) Official Logbook
- (D) Rough Logbook

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

**64.** Preparation of muster lists and signing of same is the responsibility of the \_\_\_\_\_.

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

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

**65.** What is NOT a requirement for a salvage claim?

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

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

**66.** Your vessel is in Charleston, S.C. You need not clear Customs if \_\_\_\_\_.

- (A) you did not discharge any cargo in Charleston and are bound for Panama
- (B) you did not load any cargo in Charleston and are bound for Halifax
- (C) you took on no new cargo in Charleston, S.C. and are bound for Puerto Rico and thence foreign
- (D) all the cargo on board is of U.S. origin and destined for New York

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

**67.** Particular average is \_\_\_\_\_.

- (A) loss sustained by only one party
- (B) charges against all parties in a marine venture to pay for damages
- (C) the average distance steamed per day over the duration of the voyage
- (D) claimed after all liens against the vessel are settled

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

**68.** What action should the helmsman take when hearing the command "ease the rudder"?

- (A) steer the course which is your present heading
- (B) decrease the rudder angle
- (C) bring the rudder amidships
- (D) move the rudder slowly in the direction of the most recent rudder command

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

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

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

**70.** When taking a Pilot from a pilot vessel in a seaway, which way should you head your vessel if the ladder is on the leeward side?

- (A) Sea on the quarter with sternway on the ship
- (B) Sea on the weather bow and ship moving ahead slowly
- (C) Bow to the sea and no way on your vessel
- (D) Sea on the lee quarter with ship moving ahead slowly

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