

## 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. Before arriving at the first U.S. port from foreign, you must fill out a Crewman's Landing Permit. Which crewmember(s) require this permit?

- (A) Only unlicensed crewmembers
- (B) All crewmembers
- (C) Any nonresident alien crewmembers
- (D) All alien crewmembers

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

2. You are on an ice-reinforced vessel about to enter pack ice. Which action should you take?

- (A) Look for areas of rotten ice and enter perpendicular to the ice edge
- (B) Enter the pack on the windward side where there is a well defined ice edge
- (C) Trim to an even keel or slightly down by the bow to take maximum benefit of the ice reinforcement
- (D) Take maximum advantage of coastal leads caused by offshore winds

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

3. Which document establishes the facts of a casualty and is the prima facie relief from liability for the damage?

- (A) Adjuster's report
- (B) Invoice
- (C) Insurance policy
- (D) Master's protest

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

4. Which statement is TRUE when reviewing a Shipboard Oil Pollution Emergency Plan?

- (A) Shall be reviewed annually by the owner, with a letter submitted to the Coast Guard within one month of the anniversary date of the plan approval
- (B) Shall be reviewed annually by the owner, with a letter submitted six months before the anniversary of the expiration date
- (C) Shall be reviewed only once every five years, with a letter submitted six months before the anniversary date of the plan approval
- (D) Shall be reviewed and the entire plan resubmitted for approval once every five years, six months before the expiration date

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

5. Your vessel is being assisted by an icebreaker. How should you indicate that you are ready to cast off the towline?

- (A) Display code letter "Y" (Yankee)
- (B) Sound one prolonged blast on the whistle
- (C) Sound five short blasts on his whistle
- (D) Display code numeral "5"

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

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

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

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

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

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

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

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

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

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

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

**10.** Shipping articles are a contract of agreement between the members of the crew and who else?

- (A) The Master
- (B) The chandler
- (C) The vessel's mortgage holder
- (D) The Coast Guard

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

**11.** If you are guilty of failure to properly perform your duties as Master of Uninspected Towing Vessels, which of the following actions may NOT be taken?

- (A) Revocation of your Merchant Mariner Credential
- (B) Suspension of your Merchant Mariner Credential
- (C) Issuance of a letter of warning
- (D) A fine placed against your Merchant Mariner Credential

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

**12.** While proceeding up a narrow waterway you observe a vessel berthed in the river with slack mooring lines. Which is the most prudent action to take FIRST?

- (A) Reduce the speed of your vessel
- (B) Contact the moored vessel
- (C) Call the US Coast Guard
- (D) Give 5 short blasts on the whistle

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

**13.** Who must approve the vessel's trim and stability booklet?

- (A) International Maritime Organization
- (B) National Cargo Bureau
- (C) United States Coast Guard
- (D) Society of Naval Architects and Marine Engineers

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

**14.** 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 boom
- (B) raise the boom
- (C) hoist the load
- (D) lower the load

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

**15.** When are the conditions BEST for crossing a rough bar?

- (A) At high water ebb
- (B) At high water slack
- (C) During high water flood
- (D) At low water slack

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

**16.** Which best describes an anchor buoy?

- (A) A buoy attached to the anchor
- (B) A black ball that is hoisted when the ship anchors
- (C) A buoy attached to the scope of an anchor chain
- (D) A mark of the number of fathoms in an anchor chain

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

**17.** Considering the manning requirements for U.S. vessels, your three watch cargo vessel has a deck crew of 20 people, exclusive of the officers. How many of these people do the manning regulations require to be Able Seamen?

- (A) 5
- (B) 10
- (C) 7
- (D) 13

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

**18.** In the context of shiphandling, what would be the definition of shallow water?

- (A) Water depth of less than 4 times a vessel's draft
- (B) Water depth of less than 1½ times a vessel's draft
- (C) Under keel clearance of twice a vessel's draft
- (D) Under keel clearance of less than 10 feet

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

**19.** What is NOT true regarding a Lloyd's Open Form (LOF) Salvage Agreement?

- (A) The LOF is subject to the law of the country the two parties agree upon
- (B) There is a bonus to the salvage award if environmental casualty is averted
- (C) If salvage is not successful, vessel owes salvor nothing
- (D) The agreement between vessels can be made via VHF

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

**20.** The boom indicator tells the operator at what angle the boom is compared to the \_\_\_\_\_.

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

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

**21.** What provides little or no indication that a vessel is dragging anchor?

- (A) The cable alternates between slack and heavy tension
- (B) Drift lead with the line tending forward
- (C) Changing bearing to a fixed distant object abeam
- (D) Changing range to an object abeam

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

**22.** On a cargo vessels which fire extinguisher is considered semi-portable?

- (A) A-II
- (B) B-III
- (C) C-II
- (D) All of the above

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

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

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

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

**24.** A new crewman reports on board. He must be trained in the use of the ship's lifesaving appliances within what time period?

- (A) 2 months
- (B) 1 month
- (C) Before sailing
- (D) 2 weeks

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

**25.** How is the Master or operator of a vessel required to keep the crew informed of the regulations concerning the discharging of garbage overboard?

- (A) Give each crewmember a copy of ANNEX V of MARPOL.
- (B) Keep placards prominently posted.
- (C) Have each person read and sign a copy of the regulations.
- (D) Call an all hands meeting before sailing.

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

**26.** Which topic is NOT required to be discussed at the pre-transfer conference?

- (A) Estimated time of finishing cargo
- (B) Emergency shutdown procedures
- (C) Identity of the product to be transferred
- (D) Details of transferring and receiving systems

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

**27.** Each hose used for transferring vapors must be which of the following?

- (A) have a design burst pressure of at least 25 psig
- (B) be electrically continuous with a maximum resistance of 10,000 ohms
- (C) be capable of withstanding at least 2.0 psi vacuum without collapsing or constricting
- (D) All of the above

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

**28.** Your tank vessel is loading a hazardous cargo. The allowance for expansion is based on ambient temperatures of what maximum range?

- (A) 0°C to 100°C
- (B) -40°C to 50°C
- (C) -18°C to 46°C
- (D) -10°C to 90°C

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

**29.** You are a watchstanding mate and have come to the bridge to relieve the watch while underway at sea. Which event(s) will require the transfer of command to be detained until completed?

- (A) During a navigational course change
- (B) Any time the helm is in the "hand" mode
- (C) During an engine speed change as per night orders
- (D) All of the above

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

**30.** When bunkering is complete, which is the correct procedure concerning the bunker hoses?

- (A) The hose must be cleaned internally with a degreaser
- (B) The hose should be washed out with hot soapy water
- (C) The hose must be stowed vertically and allowed to drain
- (D) The hose must be drained, blanked off, and stored securely

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

**31.** You are on a multiple-product tankship and scheduled to load a cargo classed as an aromatic amine. This cargo is incompatible with cargoes classed as \_\_\_\_\_.

- (A) organic anhydrides
- (B) phenols
- (C) ketones
- (D) esters

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

**32.** Which data can NOT be found on a moisture equilibrium chart?

- (A) Vapor pressure
- (B) Dry bulb temperature
- (C) Moisture content
- (D) Wet bulb temperature

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

**33.** In accordance with U.S regulations, your cargo vessel must have which of the following?

- (A) Separate toilet facilities for engineers where their number exceeds six
- (B) A wash basin in each room
- (C) Sufficient facilities for the crew to wash their clothes
- (D) All of the above

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

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

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

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

**35.** What type of information is found in 33 CFR part 156?

- (A) Vessel construction and design
- (B) Oil and hazardous material transfer operations
- (C) Lifesaving and firefighting equipment
- (D) Operation of nautical school ships

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

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

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

**37.** What will NOT be found on the Certificate of Inspection of an oceangoing tankship?

- (A) Manning requirements
- (B) Waters upon which the vessel may be operated
- (C) Minimum freeboard permitted
- (D) Grade(s) of cargoes that the vessel may carry

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

**38.** Which is an example of an anchor which has a stock?

- (A) Danforth anchor
- (B) Bruce anchor
- (C) Hook anchor
- (D) Dunn anchor

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

**39.** A condition where two currents meet at the downstream end of a middle bar can be determined by observing which situation?

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

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

**40.** Regulations concerning the stowage, lashing, and securing of timber deck cargoes aboard general cargo vessels may be found in the \_\_\_\_\_.

- (A) vessel's classification society rules and regulations
- (B) Load Line Regulations
- (C) International Cargo Bureau Regulations
- (D) Rules and Regulations for Cargo and Miscellaneous Vessels

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

**41.** Bulk cargo refers to which of the following statements?

- (A) A cargo which is very dense in relation to its volume
- (B) A cargo which requires refrigeration during the passage
- (C) A homogeneous cargo not enclosed in a container
- (D) A cargo which occupies a large volume of space on a vessel

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

**42.** Which space(s) is(are) deducted from gross tonnage to derive net tonnage?

- (A) Chart room
- (B) Spaces for the exclusive use of the officers or crew
- (C) Boatswain's stores
- (D) All of the above

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

**43.** A vessel reduces speed without backing. Which item is the primary factor that determines the rate that her speed through the water decreases?

- (A) The vessel's horsepower
- (B) The number of propellers
- (C) The vessel's displacement
- (D) The sea state

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

**44.** Which term defines a wedge of water that builds up between the head of the barge and the bank?

- (A) Bank cushion
- (B) A bow wave
- (C) Veering cushion
- (D) Bank suction

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

**45.** For the purpose of regulating tank vessels, which defines the term flammable liquids?

- (A) Liquids that give off flammable vapors at or below 80°F (27°C)
- (B) Liquids that have a Reid vapor pressure of 18 pounds or more
- (C) Liquids that give off flammable vapors only above 80°F (27°C)
- (D) Liquids that sustain combustion at a temperature at or below 100°F (38°C)

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

**46.** What is the Vapor pressure of ethylene oxide at 46° C?

- (A) 10.9 (psia)
- (B) 48.0 (psia)
- (C) 38.5 (psia)
- (D) 15.2 (psia)

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

**47.** When loading a cargo of taconite, proper sequencing of loading by hatch number is necessary to \_\_\_\_\_.

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

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

**48.** When being relieved of the helm, the new helmsman would find it handy to know which of the following?

- (A) Variation in the area
- (B) Deviation on that heading
- (C) Amount of helm carried for a steady course
- (D) Leeway

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

**49.** A cargo of 10,000 barrels of gasoline is loaded at a temperature of 90°F, and a cargo temperature of 55°F, is expected on this voyage. It has a coefficient of expansion of .0006. How many barrels would you expect to discharge at your destination?

- (A) 9790
- (B) 9994
- (C) 10210
- (D) 10410

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

**50.** Your vessel is port side to a pier with a spring line led aft from the bow. How will the vessel respond in calm weather, with the engines ahead and hard left rudder?

- (A) The bow will swing in and the stern out
- (B) Both the bow and stern will move in
- (C) The bow will slip out and the stern in
- (D) Both the bow and stern will move out

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

**51.** An icebreaker is displaying a flag hoist which consists of the code letters "WO" (Whiskey Oscar). What does this signal indicate?

- (A) The icebreaker is icebound
- (B) The icebreaker is beset
- (C) Icebreaker support is commencing
- (D) Icebreaker support is finished

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

**52.** Which statement about the forecastle card is TRUE?

- (A) Each crewmember is given a copy of the forecastle card
- (B) The forecastle card is a blank sample of the articles
- (C) Is a copy of the shipping articles excluding crewmember signatures
- (D) It contains copies of the crew's signatures from the articles

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

**53.** The American Consul has asked the Master of a vessel bound for a port in the U.S. to transport a destitute seaman back to the U.S. Which action may the Master take?

- (A) He may refuse to take the seaman if the seaman has a contagious disease.
- (B) He may refuse to take the seaman if it will violate the Certificate of Inspection.
- (C) He is normally required to take the seaman.
- (D) All of the above

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

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

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

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

**55.** Which is NOT a part of an anchor?

- (A) The Palm
- (B) The devil's claw
- (C) The crown
- (D) The bill

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

**56.** You are to load styrene in bulk, which is subject to self-polymerization. In accordance with 46 CFR Table 153 what are you required to do?

- (A) Use heating coils to maintain the styrene within the temperatures specified by the shipper
- (B) Be furnished with a Certificate of Inhibition to be maintained on the bridge
- (C) Inject nitrogen to pad any ullage above the styrene to prevent contact with oxygen
- (D) Not carry any cargo in the tanks surrounding the tank loaded with styrene

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

**57.** For any given pedestal crane, when the boom is lengthened, the lifting capacity is \_\_\_\_\_.

- (A) eliminated
- (B) decreased
- (C) increased
- (D) unchanged

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

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

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

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

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

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

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

**60.** Your ship is in shallow water and the bow rides up on its bow wave while the stern sinks into a depression of its transverse wave system. What is this called?

- (A) Squatting
- (B) Parallel sinkage
- (C) Broaching
- (D) Fish tailing

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

**61.** 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) Enclosed deck spaces
- (D) Cofferdams

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

**62.** The dangerous cargo manifest does NOT include which item of information?

- (A) The net weight of each hazardous cargo
- (B) UN identification numbers
- (C) A description of the packaging (drums, boxes, etc.)
- (D) The stowage location of hazardous material aboard the vessel

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

**63.** You are loading benzyl chloride and a small quantity spills on deck. According to the Chemical Data Guide, which of the following may be used as a substitute for water for the cleanup procedure?

- (A) Soda ash solution
- (B) Sodium bisulfite
- (C) Alcohol
- (D) Sodium carbonate

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

**64.** What does it mean to "shore up" the main deck for the stowage of deck cargo?

- (A) Distribute the weight of the cargo by placing fore-and-aft planks on the main deck
- (B) Package the cargo in wooden crates so it will not damage the deck
- (C) Strengthen the main deck by placing pillars underneath it in the tween decks
- (D) Weld pad eyes on deck in proper position to secure the cargo

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

**65.** Which flash point would indicate a grade D combustible liquid?

- (A) 40°F
- (B) 95°F
- (C) 79°F
- (D) 155°F

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

**66.** Which term defines the payment of penalty for a ship's delay after the expiration of lay days due to some fault of the charterer or his agent?

- (A) Volatility
- (B) Late fee
- (C) Demurrage
- (D) Miscibility

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

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

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

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

**68.** In the event of an oil spill a report must be made to which of the following entities?

- (A) U.S. Corps of Engineers
- (B) The local fire department
- (C) The local police
- (D) U.S. Coast Guard

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

**69.** What do the York-Antwerp Rules relate to?

- (A) The navigation regulations that apply in the English Channel
- (B) The ship owner's responsibilities to provide a well-found vessel in a charter party
- (C) The settlement of general average claims
- (D) Clearly state the minimum required number of officers and crew

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

70. The tankship Northland is loaded as shown in table BL-0001 below. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging 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	2956
14. #6 BALLAST TANK	1628
15. #7 CARGO/BALLAST TANK	0
16. #8 CARGO/BALLAST TANK	0
17. #9 CARGO/BALLAST TANK	6012
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) 86.72 numeral
- (B) 89.98 numeral
- (C) 91.40 numeral
- (D) 93.18 numeral

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