## **National Maritime Center**

Keep 'em Safe, Keep 'em Sailing



# U.S.C.G. Merchant Marine Exam Master or Mate Less than 200 Gross Registered Tons Q340 Deck General (Sample Examination)

### Choose the best answer to the following Multiple-Choice Questions.

1.	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. There must be calm weather-wind 10 knots or less and a calm sea.
- B. There must be no current.
- C. The depth of the water must be at least one and one-half times the draft.D. The hull must be clean.

Correct answer: C

- 2. A survey of refrigerated cargo, to certify that proper methods of stowage were utilized, can be conducted by which organization?
  - A. Occupational Safety and Health Administration
  - B. National Cargo Bureau
  - C. U.S. Coast Guard
  - D. American Bureau of Shipping

Correct answer: B

- 3. When an azimuth of the Sun has been taken and the deviation of the standard magnetic compass computed, the watch officer should record the results .
  - A. in the vessel's Official Logbook
  - B. on the compass deviation card
  - C. on a Napier diagram
  - D. in the compass deviation log

Correct answer: D

- 4. After casting off moorings at a mooring buoy in calm weather, which action should you take?
  - A. Back away a few lengths to clear the buoy and then go ahead on the engines
  - B. Go half ahead on the engines and pass upstream of the buoy
  - C. Go half ahead on the engines and put the rudder hard right
  - D. Go full ahead on the engine(s)

Correct answer: A

- 5. What is the mechanical advantage of tackle number 10 as shown in illustration D029DG below?
  - A. 4.0
  - B. 4.5
  - C. 5.0
  - D. 5.5

Correct answer: C

- 6. Single hull vessels operating exclusively on the Great Lakes must be dry docked at intervals not to exceed what time period?
  - A. 48 months
  - B. 60 months
  - C. 12 months
  - D. 24 months

Correct answer: B

- 7. You are 15 feet off a pier and docking a vessel using only a bow breast line and stern breast line. Once the slack is out of both lines you begin to haul in on the bow breast line. What is the effect on the vessel?
  - A. The bow and stern come in equally closer toward the pier.
  - B. The bow will come in and the stern will go out.
  - C. The stern will come in and the bow will remain the same distance off the pier.
  - D. The bow will come in and the stern will remain the same distance off the pier.

Correct answer: D

- 8. Cargo vessels being navigated, and fitted with emergency lighting and power systems, shall have their emergency systems tested at which interval?
  - A. At least once in each week
  - B. Once in every 6 months
  - C. At least once in each month
  - D. Once in every 12 months

Correct answer: A

- 9. Which statement is TRUE when using the anchor to steady the bow while approaching a dock?
  - A. The anchor cable must never lead under the hull
  - B. Steering control is ineffective in trying to turn to the side opposite to that of the anchor being used
  - C. Using an offshore anchor decreases the chances of the anchor holding
  - D. The vessel will tend to take a large sheer towards the side where the anchor is down

Correct answer: C

- 10. What is a serving mallet used for?
  - A. To aid in covering wire or fiber rope with marline
  - B. To aid in the dogging the hatches
  - C. Forcing fids into a line by striking the small end
  - D. To cut the line clean before splicing the line

Correct answer: A

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

Correct answer: A

- 12. On an anchor windlass, which is the proper term for the sprocketed wheel over which the anchor chain passes?
  - A. The devil's claw
  - B. The wildcat
  - C. A winchhead
  - D. A brake compressor wheel

Correct answer: B

- 13. You are conducting trials to determine the maneuvering characteristics of your vessel. While making a turn, you take ranges and bearings of an isolated light with the results as shown. Based on this information, what is the advance for a turn of 45°? Illustration D034DG
  - A. 590 yards
  - B. 635 yards
  - C. 690 yards
  - D. 740 yards

Correct answer: C

- 14. 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

Correct answer: C

- 15. While transiting a channel your vessel's bow swings away from the bank. What is the term for this effect?
  - A. Bank suction
  - B. Yaw
  - C. Sheer force
  - D. Bank cushion

Correct answer: D

- 16. According to U.S. regulations, how many emergency outfits are required to be carried onboard all tankships over 1,000 gross tons?
  - A. One emergency outfit
  - B. Four emergency outfits
  - C. Three emergency outfits
  - D. Two emergency outfits

Correct answer: D

- 17. When rigging a stage, the standing part should be fastened to the horns of a stage with which of the following hitches?
  - A. Clove hitch
  - B. Timber hitch
  - C. Double blackwall hitch
  - D. Marlinespike hitch

Correct answer: D

- 18. Which commodity would be regulated by subchapter D, Rules and Regulations for Tank Vessels?
  - A. Asphalt
  - B. Benzene
  - C. Vinyl Chloride
  - D. All of the above

Correct answer: A

- 19. Fueling results in the collection of waste oil in drip pans and containers. Which is an approved method of disposing of the waste oil?
  - A. Draining it overboard when the vessel gets underway
  - B. Adding sinking agents and discharging it into the water
  - C. Discharge to a proper reception facility
  - D. Mixing it with dispersants before draining it overboard

Correct answer: C

- 20. When is the best time to work a boat into a slip?
  - A. When the wind is against you
  - B. When there is a cross current
  - C. When the current is setting against you
  - D. At slack water

Correct answer: D

- 21. Cargo tanks on barges fitted with goose neck vents and flame screens are limited to carrying which grade of cargo?
  - A. A and below
  - B. B and below
  - C. C and below
  - D. D and E only

Correct answer: D

- 22. What do pollution regulations require of each scupper and or drain that is located in an enclosed deck area?
  - A. The scuppers must be wooden plugs
  - B. The scuppers shall be a two-piece soft patch
  - C. The scuppers shall have a mechanical means of closing
  - D. The scuppers must be a soft rubber plug

Correct answer: C

- 23. Which vessel may be exempt from the load line and marking requirements for vessels operating on the Great Lakes System?
  - A. A 200 GT passenger vessel operating between Duluth, MN and Munising, MI
  - B. A 79-foot, 150 GT pleasure craft operating on the St. Lawrence River
  - C. A 500 GT dry cargo river barge operated continuously between Calumet Hbr Chicago, IL and Burns Hbr, IN
  - D. A 300 GT tank barge operating exclusively on Lake Michigan

Correct answer: C

- 24. Which is the proper way to correct a mistake in the logbook?
  - A. Erase the entry and rewrite
  - B. Draw a line through the entry, rewrite, and initial the correction
  - C. Completely black out the entry, rewrite, and initial the correction
  - D. Draw several lines through the entry, rewrite, and initial the correction

Correct answer: B

- 25. When anchoring, good practice requires 5 to 7 fathoms of chain for each fathom of depth. Which is TRUE when anchoring in deep water?
  - A. Use the same ratio
  - B. Use two anchors with the same ratio of chain
  - C. Use less chain for each fathom of depth
  - D. Veer more chain for each fathom of depth

Correct answer: C

- 26. You are in charge of a towing vessel that operates exclusively on inland waters. You regularly tow barges that provide services (cargo lighters, fuel barges, etc.) to foreign flag vessels in port. What will be accepted as proper credentials for you and your crew?
  - A. No credentials are required since you operate on inland waters only
  - B. Social Security card
  - C. Merchant Mariner Credential
  - D. State driver's license with photo ID

Correct answer: C

- 27. 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. Broaching
  - B. Fish tailing
  - C. Parallel sinkage
  - D. Squatting

Correct answer: D

- 28. Under which circumstance is a 30,000 DWT tankship required to have an IOPP certificate?
  - A. If calling at ports in another country signatory to MARPOL 73/78
  - B. Only when carrying cargoes listed in the MARPOL regulations
  - C. When engaged in the coastwise trade
  - D. Only if going foreign

Correct answer: A

- 29. You are loading in a port governed by the tropical load line mark for a voyage to a port governed by the winter mark. The fresh water allowance is 5 inches, and the hydrometer reads 1.005. Which statement is TRUE?
  - A. You may only load to the winter mark plus a brackish water allowance of 4 inches.
  - B. Your draft must not exceed the winter mark plus the fresh water allowance upon arrival off the discharge port.
  - C. You may load to the tropical mark plus 1 inch brackish water allowance.
  - D. You must load so that each zone mark will not be submerged upon entering the zone.

Correct answer: D

- 30. You are on a 120,000 DWT loaded bulk carrier. What is a safe docking speed when approaching a berth?
  - A. Any speed in a head current
  - B. Bare steerageway
  - C. Any speed in a following current
  - D. 5 knots

Correct answer: B

- 31. What is a sheave?
  - A. A line to hold a lifeboat next to the embarkation deck
  - B. A grooved wheel in a block
  - C. A seaman's knife
  - D. A partial load of grain

Correct answer: B

- 32. What is the FIRST action to take if you detect oil around your tank vessel while discharging petroleum products?
  - A. Shut down operations
  - B. Have the pumpman check the discharge piping
  - C. Call the Master
  - D. Try to find out where the oil is coming from

Correct answer: A

- 33. Which agency both assigns load lines, and issues Load Line Certificates?
  - A. The Secretary of Commerce
  - B. The American Bureau of Shipping
  - C. The U.S. Coast Guard
  - D. The U.S. Customs

Correct answer: B

- 34. The Certificate of Inspection for your tankship authorizes the carriage of grade A and lower products. Which chemical may NOT be carried unless it is specifically endorsed on the Certificate of Inspection?
  - A. Vinyl acetate
  - B. Diisobutyl Phthalate
  - C. Oleic acid
  - D. Amylene

Correct answer: A

- 35. You are the Master of a single-screw vessel. You are docking at a port which has no tugs available. You decide to drop the offshore anchor to help in docking. How much chain should you out?
  - A. 5 to 7 times the depth of the water
  - B. NEVER use the anchor to help in docking
  - C. Equal to the depth of the water
  - D. 1 1/2 times the depth of the water to the hawsepipe

Correct answer: D

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

Correct answer: C

- 37. The safe working load (SWL) of wire rope with a safety factor of 6 is what percent of its strength?
  - A. 10%
  - B. 17%
  - C. 50%
  - D. 80%

Correct answer: B

- 38. Each hose used for transferring vapors must be which of the following?
  - A. be electrically continuous with a maximum resistance of 10,000 ohms
  - B. be capable of withstanding at least 2.0 psi vacuum without collapsing or constricting
  - C. have a design burst pressure of at least 25 psig
  - D. All of the above

Correct answer: D

- 39. You are preparing to load fuel oil on a vessel of 300 gross tons constructed after June 30, 1974. Before loading, which statement is TRUE concerning fuel oil tank vents?
  - A. The vents are not obstructed by on-deck cargo in a ten foot radius
  - B. Each vent must have a fixed containment with a capacity for at least one half barrel
  - C. Each vent is required to have a fire extinguisher within the immediate area
  - D. All vents are opened and the flame screen removed for efficient flow

Correct answer: B

- 40. Which item is designed to be a safety stopper that prevents the anchor cable from running free if the cable jumps the wildcat?
  - A. The riding pawl
  - B. The buckler plate
  - C. The devil's claw
  - D. The spill pipe

Correct answer: A

- 41. Before welding in a tank barge that has carried petroleum products, who must certify the tank to be safe for hot work?
  - A. The shipyard fire department
  - B. A certified marine chemist
  - C. The Coast Guard
  - D. The American Bureau of Shipping

Correct answer: B

- 42. Which of the following is not an acceptable unit of measure to be used consistently throughout an Oil Record Book?
  - A. Gallons
  - B. Cubic meters
  - C. Barrels
  - D. Tons

Correct answer: D

- 43. When lowering manropes alongside a stage rigged over the side of a vessel, they should be allowed to trail in the water to serve which purpose?
  - A. It allows the seamen on the stage to know the direction and strength of the current
  - B. To easily remove the kinks that form in the lines
  - C. To provide the seaman something to hold onto if he or she falls from the stage into the water
  - D. This is done only for short periods of time since they will become waterlogged and be very heavy to pull up

Correct answer: C

- 44. In accordance with Coast Guard Regulations, which statement is TRUE with regards to Coast Guard approved buoyant work vests?
  - A. They should be stowed in engineering spaces in lieu of approved life jackets because they are less bulky and permit free movement in confined spaces
  - B. A work vest should not be stowed where they could be confused with life jackets in an emergency
  - C. The vests may be used as a substitute for approved life preservers during routine drills, but never during an emergency
  - D. All of the above

Correct answer: B

- 45. What best describes for how long a gas-free test is good?
  - A. For as long as is indicated on the gas-free certificate
  - B. Until changes in temperature or pressure affect the vapor content in the space
  - C. For the instant that it is made
  - D. Until valves in line with the tank or compartment are reopened

Correct answer: C

- 46. You are preparing to load a heavy cargo with abnormal physical dimensions onboard your vessel. Which of the following is of primary importance when planning the load?
  - A. Ensuring the maintenance of adequate stability throughout the voyage
  - B. Comparing how much cargo can be loaded on top of the abnormal units
  - C. Comparing the broken stowage factor of the unit to other cargo in the hold
  - D. Ensuring the proper customs forms and labels are on the units

Correct answer: A

- 47. Who is responsible for any wake damage caused by a passing vessel?
  - A. The person deemed competent to steer the vessel
  - B. The person in charge of the passing vessel
  - C. No one is responsible for wake damage
  - D. The owner of the damaged vessel

Correct answer: B

- 48. Safety shackles are fitted with which items?
  - A. A round pin, with a cotter pin
  - B. Round pins and locknuts
  - C. A threaded bolt
  - D. A threaded bolt, locknuts, and cotter pins

Correct answer: D

- 49. 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

Correct answer: C

- 50. How long must the operator of each vessel engaged in a vessel-to-vessel oil transfer operation keep a signed copy of the declaration of inspection for?

  - A. 10 days B. 1 month
  - C. 6 months
  - D. 1 year

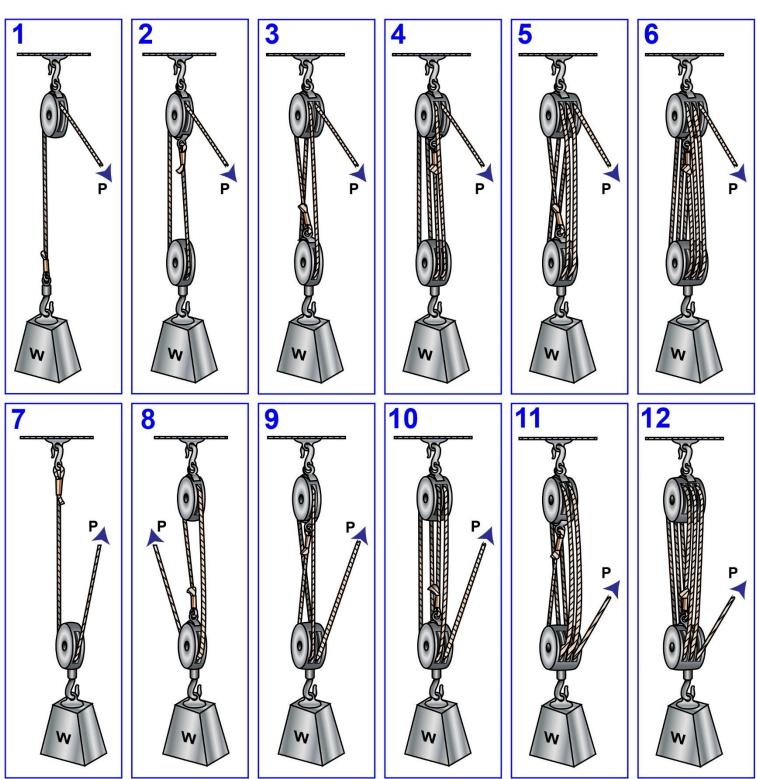
Correct answer: B

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## **D034DG**

HEADING (TRUE)	BEARING (TRUE)	RANGE (YDS)	REMARKS
228°			INITIAL HEADING
228°	232°	2260	ON INITIAL COURSE
228°	234°	1700	RIGHT FULL RUDDER ORDERED
230°	236°	1490	
252°	235°	1275	
275°	231°	1000	
316°	214°	850	
352°	198°	975	
022°	194°	1210	
053°	197°	1430	
087°	202°	1600	
115°	209°	1690	
151°	217°	1700	
183°	225°	1600	
218°	232°	1350	RUDDER AMIDSHIPS
228°	235°	1125	STEADY ON 228°