

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q136 Deck General

(Sample Examination)

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

1. Which certificate is issued by the American Bureau of Shipping?

- A. Load Line Certificate
- B. Certificate of Inspection
- C. Safety Equipment Certificate
- D. Permit to Proceed for repairs

Correct answer: A

2. What is the primary purpose of a load line?

- A. To indicate the vessel's mean draft
- B. To establish transverse stability
- C. To establish maximum amidships draft
- D. To establish the vessel's GM

Correct answer: C

3. To what chemical family does ethylene oxide belong?

- A. Alkylene oxides
- B. Esters
- C. Alcohols
- D. Glycol ethers

Correct answer: A

4. 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

5. You are loading 465,000 barrels of cargo oil. At 0900 you find that you have loaded 207,000 barrels. At 1030 you find that you have loaded 223,000 barrels. If you continue loading at the same rate, you will finish at approximately _____.

- A. 2100 that night
- B. 0730 the next day
- C. 0910 the next day
- D. 1215 the next day

Correct answer: C

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

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

Correct answer: C

7. How should manila lines in which the strands are right-hand laid be coiled?
- A. Manila line should never be coiled
 - B. Manila line may be coiled either clockwise or counterclockwise
 - C. Manila line should be coiled in a counterclockwise direction
 - D. Manila line should be coiled in a clockwise direction

Correct answer: D

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

Correct answer: A

9. A marine chemist issues gas free certificates and is certified by which organization?
- A. National Fire Protection Association
 - B. Marine Chemists Association
 - C. American Chemical Society
 - D. Mine Safety Appliance Association

Correct answer: A

10. Which document lists all the lifesaving equipment required for a vessel?
- A. Certificate of Registry
 - B. International Convention for the Safety of Life at Sea Certificate
 - C. Certificate of Inspection
 - D. American Bureau of Shipping Classification Certificate

Correct answer: C

11. Which is the root cause of wake damage to a vessel or structure in a narrow channel?
- A. Improper steering of the vessel
 - B. Trim of the vessel
 - C. Slack mooring lines
 - D. Excessive speed

Correct answer: D

12. Your containership has a container displaying a hazardous cargo placard. The placard has the number 2206 on it. This indicates that it is carrying what cargo?
- A. Propadiene, inhibited
 - B. Hexanols
 - C. Isocyanates, n.o.s.
 - D. Xylenol

Correct answer: C

13. Annex V to MARPOL 73/78 contains requirements pertaining to the discharge into the marine environment of which item?

- A. Noxious liquid substances
- B. Garbage
- C. Oil
- D. Air pollutants

Correct answer: B

14. What is the mechanical advantage of a threefold purchase when rove to disadvantage and neglecting friction?

- A. 3
- B. 4
- C. 5
- D. 6

Correct answer: D

15. A flammable liquid having a Reid vapor pressure of $8\frac{1}{2}$ P.S.I.A. or less and a flash point of 80°F or below is grade _____.

- A. A
- B. B
- C. C
- D. D

Correct answer: C

16. All entries in the Official Logbook must be signed by the Master and if required, who else?

- A. The person about whom the entry concerns
- B. The Chief Engineer
- C. One other crew member
- D. No other signature is required.

Correct answer: C

17. Which agency must approve the safety equipment on board inspected vessels?

- A. The U.S. Coast Guard
- B. The Safety Standards Bureau
- C. The National Safety Council
- D. The Occupational Safety and Health Administration (OSHA)

Correct answer: A

18. Which term defines when a boat turns broadside to heavy seas and winds, thus exposing the boat to the danger of capsizing?

- A. Trimmed
- B. Yawed
- C. Broached
- D. Pitchpoled

Correct answer: C

19. A flame screen _____.

- A. permits vapors to exit but not enter a tank
- B. prevents the passage of flammable vapors
- C. prevents inert gas from leaving a tank
- D. permits the passage of vapor but not of flame

Correct answer: D

20. 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 must be drained, blanked off, and stored securely
- C. The hose must be stowed vertically and allowed to drain
- D. The hose should be washed out with hot soapy water

Correct answer: B

21. Which document is NOT required by law to be posted aboard a vessel?

- A. Officer's licenses
- B. Muster List
- C. Certificate of Inspection
- D. Official Crew List

Correct answer: D

22. What is the period of validity of a Merchant Mariner Credential?

- A. 5 years
- B. 1 year
- C. 2 years
- D. 3 years

Correct answer: A

23. As a general rule, how will your vessel lie when it is drifting in a locale where there is no current?

- A. The bow to the wind
- B. The beam to the wind
- C. With the wind on the quarter
- D. The stern to the wind

Correct answer: B

24. What is required to be entered into the Official Logbook?

- A. The annual required stripping and cleaning of the lifeboats
- B. The drafts on entering port
- C. Opening a sideport at sea to renew a gasket
- D. The biennial weight test of the lifeboats and falls

Correct answer: C

25. You are in a tropical port. The refrigeration machinery on a container loaded with air-cooled fruit fails. It cannot be repaired for 18 to 24 hours. Which step should you take to reduce the temperature rise and spoilage of the fruit?
- A. Shade the container and periodically hose it down
 - B. Spread ice over the top layer and in any voids within the container
 - C. Seal any ventilation openings and add dry ice
 - D. Discharge a cylinder of nitrogen into the container

Correct answer: A

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

Correct answer: B

27. Corrosive liquids and acids should have what kind of label?
- A. White and Black
 - B. Yellow
 - C. Skull and crossbones
 - D. Red and White

Correct answer: A

28. Which term defines "An electronic or electric device that indicates the rate of turn of a vessel"?
- A. Odometer
 - B. Magnetic compass
 - C. Swing meter
 - D. Gyrocompass

Correct answer: C

29. You are underway in heavy weather and your bow is into the seas. Which action should you take to prevent pounding?
- A. Put the seas on a 85 degree angle from the bow
 - B. Increase the speed of the vessel
 - C. Decrease the speed of the vessel
 - D. Secure all loose gear on your vessel

Correct answer: C

30. Tank vessel inerting refers to _____.
- A. the introduction of inert gas into a gas free tank for the purpose of reducing the oxygen content to below 8% by volume
 - B. the introduction of inert gas into a tank with the object of reducing the oxygen content to below 8% by volume
 - C. the introduction of inert gas into a cargo tank during cargo discharge to replace the volume of discharged cargo
 - D. All of the above

Correct answer: D

31. Your vessel is taking on cargo oil when a small leak develops in the hose. You order the pumping stopped. Before you resume pumping, you should _____.
- A. notify the terminal superintendent
 - B. repair the hose with a patch
 - C. place a large drip pan under the leak and plug the scuppers
 - D. replace the hose

Correct answer: D

32. If you are operating on the Inland Waters of the United States, which of the following may you discharge overboard?
- A. Bottles
 - B. Dunnage
 - C. Metal
 - D. None of the above

Correct answer: D

33. You are ordering hazardous ships' stores. Which statement is TRUE?
- A. Stores certified for use on uninspected vessels may be identified by the certification number used by Underwriter's Laboratories.
 - B. A portable container of a flammable liquid used as fuel for portable auxiliary equipment must be stowed in a paint locker or at a designated open location.
 - C. Stores such as line, rags, mattresses, linens, etc. must be treated to be fire retardant.
 - D. Acetylene may be in a ship's storeroom in quantities not exceeding 6000 cubic feet.

Correct answer: B

34. While the Pilot is maneuvering the vessel to a dock, what is the primary responsibility of the watch officer?
- A. Judge the appropriateness of the Pilot's orders and countermand them if necessary
 - B. Record the bells and their times in the bell book
 - C. Ensure that helm and throttle orders given by the Pilot are correctly executed
 - D. Supervise the signaling and flag etiquette

Correct answer: C

35. Before entering an ice area, how should a ship be trimmed?

- A. On an even keel
- B. Either trimmed by the head or the stern
- C. Trimmed down by the head
- D. Trimmed down by the stern

Correct answer: D

36. You discharge food waste overboard at sea. You have recorded your vessel's position as required, what other items must be included in the report?

- A. The vessel's latitude, longitude, course, speed, and a copy of that days noon position slip
- B. The vessel's latitude, longitude and approximate depth of water
- C. The vessel's latitude and longitude is all that is required
- D. The vessel's latitude, longitude, date and time of the discharge

Correct answer: D

37. What is the main advantage and chief characteristic of a Steulchen boom?

- A. It can be operated by one winchman
- B. It is collared to the mast
- C. It can be swung from one hatch to the adjacent hatch
- D. It is cradled on deck when secured for sea

Correct answer: C

38. 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

Correct answer: D

39. Which color is the next-to-last shot of an anchor cable usually painted?

- A. International orange
- B. Yellow
- C. White
- D. Red

Correct answer: B

40. Your vessel is being assisted through an ice field in Thunder Bay by the Canadian Coast Guard icebreaker Alexander Henry. The starboard lookout reports that the icebreaker has run up the code flag "N" (November). Which action should you take?

- A. Reduce speed
- B. Reverse your engines
- C. Stop your vessel instantly
- D. Stop your engines

Correct answer: D

41. What is the minimum number of bolts required in a temporarily connected standard ANSI (American National Standards Institute) 8-bolt flange for the transfer of cargo oil?
- A. 2
 - B. 4
 - C. 6
 - D. 8

Correct answer: B

42. Which product(s) is(are) compatible with the product ethylene cyanohydrin?
- A. Isocyanates
 - B. Sulfuric acid
 - C. Ammonia
 - D. Nitric acid

Correct answer: C

43. Which statement about entering into a tank which has been sealed for a long time is TRUE?
- A. If the oxygen content tests at less than 12% you should wear an approved gas mask.
 - B. The tank need not be tested for oxygen content if it is ventilated for more than 24 hours.
 - C. The tank must be tested at frequent intervals to ensure that hazardous gasses have not regenerated.
 - D. The tank should be tested only once to ensure the oxygen content is at least 14% before entry.

Correct answer: C

44. What is NOT required as special safety equipment on a tankship carrying hazardous cargoes in bulk?
- A. A safety locker adjacent to the emergency shutdown station
 - B. Shower and eyewash fountain
 - C. Two portable vapor detectors suitable for the cargoes carried
 - D. Equipment to lift an injured person from a pumproom

Correct answer: C

45. You have completed a Dangerous Cargo Manifest for dangerous cargoes loaded on board. It should be kept in a conspicuous location _____.
- A. in the ship's office
 - B. in the radio room
 - C. outside the Captain's stateroom
 - D. on or near the bridge

Correct answer: D

46. If two mooring lines are to be placed on the same bollard, which method is BEST?
- A. It makes no difference how the lines are placed.
 - B. Place the eye from the forward line on the bollard and then place the eye from the second line directly over the first.
 - C. Place the eye from either line on the bollard, and then bring the eye of the other line up through the eye of the first, and place it on the bollard.
 - D. Place both eyes on the bollard, in any manner, but lead both lines to the same winch head on the vessel and secure them on the winch.

Correct answer: C

47. Your vessel is at a dock taking bunkers. If oil begins to flow out of a tank vent, what should you do FIRST?
- A. Set out drip pans and sawdust and begin to mop up the spill.
 - B. Open the intake valve to an adjacent tank.
 - C. Signal the shore control point to shut down.
 - D. Close the valve on the tank vent line.

Correct answer: C

48. What is the stress on the hauling part when lifting a 4,200 lbs. weight using a threefold purchase rove to advantage? (Allow 10 percent of the weight per sheave for friction.)
- A. 571.4
 - B. 715.2
 - C. 960.0
 - D. 1066.7

Correct answer: C

49. When using the Code of Federal Regulations (CFR's) for Tank Vessels, you see T/O and B/C. What do the T and B tell you?
- A. Special construction limitations
 - B. Type of vessel to which the regulation applies
 - C. Grades of cargo which may be carried
 - D. The waters in which vessels may operate

Correct answer: B

50. Where would you find a list of the lifesaving equipment onboard your supply boat?
- A. Muster List ("Station Bill")
 - B. Ship's Articles
 - C. Certificate of Inspection
 - D. U.S. Coast Guard Regulations

Correct answer: C

51. Which is the best method of protecting that portion of a fiber anchor line nearest the anchor from chafing on the bottom?
- A. Using a small scope ratio
 - B. Using a hockle to keep that portion of the anchor line off the bottom
 - C. Using a synthetic line
 - D. Replacing that portion with a short length of chain

Correct answer: D

52. What is the name of the mark indicated by the letter E in illustration D003DG below?
- A. Summer water line
 - B. Winter water line
 - C. Fresh water line
 - D. Tropical water line

Correct answer: A

53. 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. The results are shown in illustration D034DG below. What is the transfer for a turn of 90°?
- A. 355 yards
 - B. 400 yards
 - C. 475 yards
 - D. 510 yards

Correct answer: B

54. A Chinese stopper (two lines) will hold best when you take which action?
- A. Twist the ends together and hold them in the direction of the pull
 - B. Twist the ends together and hold them in the direction opposite to the pull
 - C. Fasten the bitter ends to the mooring line with half hitches
 - D. Twist the ends together and hold them at right angles to the mooring line

Correct answer: A

55. Your vessel is taking on fuel when a small leak develops in the hose. You order the pumping stopped. Before you resume pumping, you should _____.
- A. Place a large drip pan under the leak and plug the scuppers
 - B. Replace the hose
 - C. Repair the hose with a patch
 - D. Notify the terminal superintendent

Correct answer: B

56. 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

Correct answer: D

57. Sulfuric acid is a _____.

- A. colorless liquid with a pleasant fruity odor
- B. colorless-to-brown liquid with a choking odor when hot
- C. whitish liquid with a faint, pleasant odor
- D. clear syrupy liquid with no odor

Correct answer: B

58. 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

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

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

Correct answer: B

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

Correct answer: A

61. According to Coast Guard Regulations (46 CFR), when loading, or discharging oil in bulk at a dock, which of the following signals must be displayed?

- A. A signal is not required for discharging oil, only gasoline
- B. A yellow flag (day), red light (night)
- C. A red flag (day), red light (night)
- D. A green flag (day), green light (night)

Correct answer: C

62. How should cargo tank hatches be protected when the ullage opening is open and the tank NOT gas free?
- A. With flame screens
 - B. With gooseneck vents
 - C. With warning signs
 - D. With pressure-vacuum relief valves

Correct answer: A

63. While taking on fuel oil from an offshore supply vessel, the transfer hose leaks, causing a sheen in the water. Which action should you take FIRST?
- A. Immediately shut down operations
 - B. Repair the leak with duct tape
 - C. Reduce the rate of transfer
 - D. Continue transfer operations

Correct answer: A

64. Which statement about the pressure in a tank being inerted by an inert gas system is TRUE?
- A. A positive pressure should be maintained at all times.
 - B. The maximum pressure permitted is 8 psi.
 - C. The pressure must remain within the limits of +5 psi to -1 psi.
 - D. None of the above

Correct answer: A

65. Flammable liquid means any liquid which gives off flammable vapors at or below _____.
- A. 40°F (4.4°C)
 - B. 80°F (26.7°C)
 - C. 110°F (43.3°C)
 - D. 150°F (65.6°C)

Correct answer: B

66. Which of the signals listed is required to be displayed at night while bunkering at a dock?
- A. One red light over a white light
 - B. One red light over a yellow light
 - C. Two red lights
 - D. One red light

Correct answer: D

67. Grade E combustible liquids have a flash point of _____.
- A. 150°F or above
 - B. 60°F to 100°F
 - C. 80°F to 150°F
 - D. 90°F to 120°F

Correct answer: A

68. Which term describes the opening in the deck that leads the anchor cable outside the hull?

- A. Drop-pipe
- B. Spill pipe
- C. Hawsepiper
- D. Fall pipe

Correct answer: C

69. Which document will describe lifesaving equipment located aboard your vessel?

- A. Muster List ("Station Bill")
- B. Certificate of Inspection
- C. Clearance Papers
- D. Forecastle Card

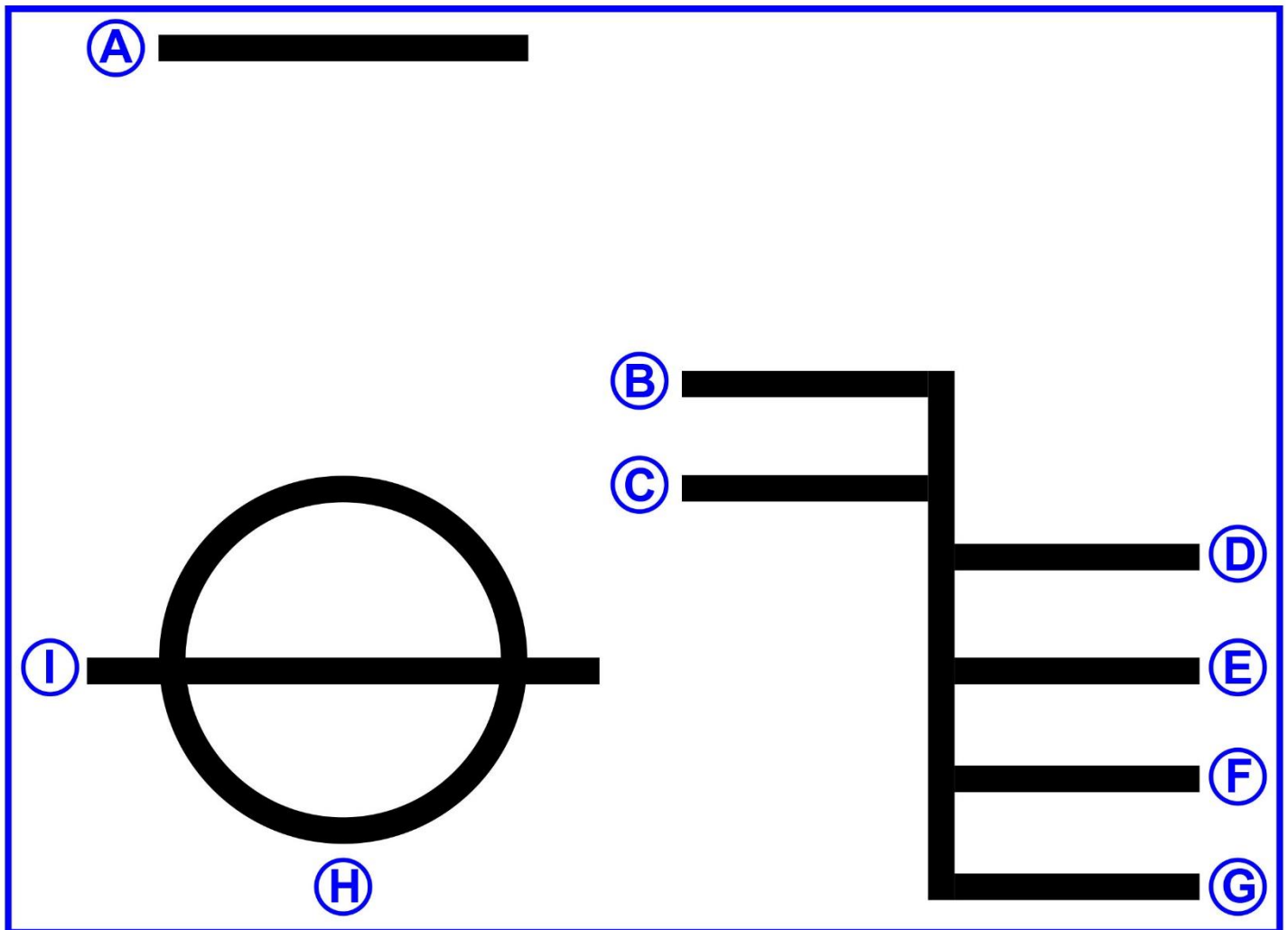
Correct answer: B

70. What can cargo hold bilge soundings indicate?

- A. If the cargo is leaking into the cargo hold
- B. If the vessel is taking on water
- C. The amount of condensation in the hold
- D. All of the above

Correct answer: D

D003DG



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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°