

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. Where would you find a list of the lifesaving equipment onboard your supply boat?

- A. Muster List ("Station Bill")
- B. U.S. Coast Guard Regulations
- C. Certificate of Inspection
- D. Ship's Articles

Correct answer: C

2. The terminology "able to understand any order spoken by the officers" refers to all of the following situations EXCEPT _____.

- A. in response to a fire
- B. for deck department crew members to understand the terminology used in the engine room
- C. when in response to a man overboard
- D. when directing the use of lifesaving equipment

Correct answer: B

3. 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

4. As the propeller turns, voids are formed on the trailing and leading edges of the propeller blades causing a loss of propulsive efficiency, pitting of the blades, and vibration. Which term defines this effect?

- A. Cavitation
- B. Edging
- C. Advance
- D. Slip

Correct answer: A

5. You are bound from port A, governed by the summer load line mark, to port B, also governed by the summer mark. The great circle track will take you into a zone governed by the winter mark. Which statement is TRUE?

- A. You must be at the winter mark when you enter the winter zone and cannot exceed the summer mark upon departing port A.
- B. You can only load to the winter mark plus any fresh water allowance and burnout to sea at port A.
- C. You cannot load beyond the summer mark at port A and must be at the winter mark upon arrival at port B.
- D. You can load so that upon arrival at the pier at port B your freeboard is equal to the summer mark less any fresh water allowance.

Correct answer: A

6. What is the minimum number of bolts required in a permanently connected flange oil hose coupling?

- A. A bolt must be used in every hole.
- B. 6
- C. 4
- D. 3

Correct answer: A

7. 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. V-shaped ripple with the point of the V pointing upstream
- C. A small whirlpool occurs upstream of the bar
- D. V-shaped ripple with the point of the V pointing downstream

Correct answer: D

8. A credential for apprentice mate (steersman) of towing vessels shall be renewed within what time period before or after the expiration date?

- A. 90 days
- B. 30 days
- C. 12 months
- D. 6 months

Correct answer: C

9. When does the Master of a vessel tender a Notice of Readiness to the charterer?

- A. When the vessel is in all respects ready to load
- B. When the vessel is in all respects ready to sail
- C. When the vessel is safely moored or at a suitable anchorage
- D. When the vessel has completed the terms of the charter party

Correct answer: A

10. 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. Pitchpoled
- C. Yawed
- D. Broached

Correct answer: D

11. When picking up your mooring at the buoy, which is the correct method?

- A. Approach the buoy with the wind and current ahead
- B. Approach the buoy with the wind and current astern
- C. Approach the buoy with wind and sea abeam
- D. Stop upwind and up current and drift down on the buoy

Correct answer: A

12. If a hydraulic pump on a winch accidentally stops while hoisting, the load will stay suspended because _____.

- A. a check valve will close and prevent reverse circulation
- B. the control lever will move to the stop position
- C. the electric pump motor will cut out
- D. a centrifugal counterweight counteracts the force of gravity

Correct answer: A

13. In safety and risk assessment, what two factors are used to evaluate a hazard's risk?

- A. Improbability of being caught and forbearance of failing to file a report
- B. Forbearance of the possible consequences and improbability of occurrence
- C. Severity of the possible consequences and probability of occurrence
- D. Probability of getting disciplined and forbearance of failing to file a report

Correct answer: C

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

Correct answer: D

15. Your ship has loaded 20,000 barrels of crude oil, departing Valdez, Alaska for San Francisco. When loaded the cargo temperature was 96°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 56°F at the discharge port, how many barrels will be offloaded?

- A. 19,680
- B. 19,712
- C. 20,288
- D. 20,320

Correct answer: A

16. If you are bunkering and you close off one tank in the line of tanks being filled, what happens to the rate of flow to other open tanks on the same line?

- A. The rate of flow increases to the open tanks
- B. The rate of flow remains constant to the open tanks
- C. The rate of flow stops to the open tanks
- D. The rate of flow decreases to the open tanks

Correct answer: A

17. To determine the weight capacity of a deck in a cargo hold, which reference would you refer to?

- A. The deadweight scale
- B. The deck capacity plan
- C. The general arrangement plan
- D. The cubic capacity tables

Correct answer: B

18. U.S. regulations require any tankship making a voyage of over 48 hours duration to conduct certain tests not more than 12 hours prior to leaving port. Which of the following must be tested to meet this requirement?

- A. means of communication between the bridge and engine room
- B. emergency lighting system
- C. watertight door to the shaft alley
- D. fire pump relief valve

Correct answer: A

19. Which describes how flanking rudders effect a vessel's heading when going astern?

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

Correct answer: C

20. Fire hose stations shall be marked in red letters and figures such as Fire Station No. "1", "2", "3", etc. Which is the minimum height of the letters and figures required by regulation?

- A. 1/2 inch
- B. 1 inch
- C. 1-1/2 inches
- D. 2 inches

Correct answer: D

21. A U.S. or foreign flag vessel that does not comply with the Officers Competency Certificates Convention of 1936 may be detained by certain designated officials. These officials include all of the following EXCEPT a/an _____.

- A. Coast Guard officer
- B. Coast Guard petty officer
- C. officer of the U.S. Customs Service
- D. State Police officer

Correct answer: D

22. A tug placed at which location would have MINIMAL effect steering a large vessel?

- A. Placed forward on either bow of the vessel
- B. Placed approximately amidships of the vessel
- C. Attached by a tow line ahead of the vessel
- D. Secured on the vessel's quarter

Correct answer: B

23. 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 seafarers?

- A. 50%
- B. 65%
- C. 75%
- D. 100%

Correct answer: A

24. Once a vessel has loaded packaged hazardous cargo, the cargo spaces shall be inspected. The spaces shall also be inspected at least once in every 24 hours. The only exception to daily inspection is when _____.

- A. the cargo hatches are of steel construction
- B. a vessel is equipped with an automatic smoke or fire detecting system
- C. the cargo is of a nonflammable type
- D. there is sufficient fire protection located on the main deck adjacent to the cargo hatch

Correct answer: B

25. The transfer procedures required to be followed on tankships shall contain which item?

- A. A list of each port of discharge
- B. A line diagram of the vessel's transfer piping
- C. The duties by name of each person in charge required for each transfer operation
- D. A current crew list

Correct answer: B

26. According to Pollution Prevention Regulations (33CFR), who is required to sign each completed page in the Oil Record Book?

- A. The person(s) in charge of the operation
- B. Coast Guard representative designated by COTP
- C. An oil terminal representative
- D. The master

Correct answer: D

- 27.** When several salvors are on-scene at the same time to assist a vessel that has not been abandoned, which principal governs the decision as to which one's services will be accepted?
- A. The first salvor on-scene has the absolute right to provide assistance; however, he is liable if the ship is lost due to his lack of experience, equipment, etc.
 - B. The first salvor on-scene has the prior claim providing he has adequate facilities to assist the vessel needing assistance.
 - C. The salvors must agree to a division of any salvage among themselves with the major share allotted to those doing the most work.
 - D. The Master of the ship needing assistance has the absolute right to decide.

Correct answer: D

- 28.** Which signal must you display at night on a docked tank barge to show that it is loading or discharging flammable liquid cargo?
- A. ICC yellow light.
 - B. Red light.
 - C. Flashing amber light.
 - D. Two orange lights.

Correct answer: B

- 29.** What is/are the advantage(s) of cranes over conventional cargo booms?
- A. Increased safety because the deck is clear of running and standing rigging
 - B. Cranes are able to pick up and drop loads over a greater spotting area
 - C. Simplicity of operation of the crane by its operator
 - D. All of the above

Correct answer: D

- 30.** The International Maritime Dangerous Goods Code assigns classes to dangerous goods. What is the proper nomenclature for class 9 substances?
- A. Gases
 - B. Miscellaneous dangerous substances and articles
 - C. Toxic and infectious substances
 - D. Oxidizing substances and organic peroxides

Correct answer: B

- 31.** A vessel has a deadweight carrying capacity of 10,500 tons. Fuel, water, and stores require 1500 tons. The cubic capacity is 500,000 cubic feet. Which cargo will put her full and down?
- A. Slabs of zinc, SF 7.1
 - B. Barrels of tallow, SF 66.8
 - C. Bundles of rubber, SF 140.2
 - D. Rolls of barbed wire, SF 55.5

Correct answer: D

32. Who is responsible for establishing watches aboard a U.S. vessel?

- A. The owner of the vessel
- B. The company that operates the vessel
- C. The Master of the vessel
- D. The company that charters the vessel

Correct answer: C

33. 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. Bow to the sea and no way on your vessel
- C. Sea on the lee quarter with ship moving ahead slowly
- D. Sea on the weather bow and ship moving ahead slowly

Correct answer: D

34. You are using the anchor to steady the bow while maneuvering. When do you know you have the proper scope of anchor cable out?

- A. When the cable enters the water at an angle between 60° and 85° from the horizontal
- B. When the bow is held in position with the engines coming slowly ahead
- C. If the scope is not more than 5 times the depth of the water
- D. When the anchor is just touching the bottom

Correct answer: B

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

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

Correct answer: C

36. A vessel arrives in the port of Los Angeles from a foreign port and discharges some of its inward foreign cargo. What additional manifest is required?

- A. Pro Forma Manifest
- B. Inward Foreign Manifest
- C. Traveling Manifest
- D. Discharge Manifest

Correct answer: C

37. You are on a large merchant vessel entering a U.S. port. There is a Pilot on board and he has the conn. Which statement is TRUE?

- A. The Pilot is solely responsible for the internal working of the ship.
- B. The Pilot becomes solely responsible for the safe navigation of the vessel only if the Master relinquishes the conn.
- C. The Pilot is solely responsible for the safe maneuvering of the ship only if he is required to be on board by law.
- D. The Master is responsible for the safe navigation of the ship and the Pilot is employed for his local knowledge.

Correct answer: D

38. What can be used to prevent a flammable atmosphere from occurring in a tank container?

- A. inert gas
- B. a vortex eliminator
- C. a combustion stabilizer
- D. an oxidizer

Correct answer: A

39. The securing systems for containers were developed to prevent container movement during which ship motion?

- A. Roll
- B. Surge
- C. Yaw
- D. Sway

Correct answer: A

40. Your vessel is loaded with nonhygroscopic cargoes and is going from a cold to a warm climate. Which action should you take to avoid sweat damage while on the voyage?

- A. Start the exhaust blowers
- B. Do not ventilate the cargo holds
- C. Ventilate the cargo holds
- D. Start the intake blowers

Correct answer: B

41. Which statement is TRUE when an anchor is used to assist in turning the vessel in restricted waters?

- A. Having to use the aid of an anchor is the sign of a novice shiphandler
- B. Turning on the anchor is to be used only with a single-screw vessel
- C. Deploying the anchor underfoot shifts the pivot point forward
- D. This technique should only be used as a last resort

Correct answer: C

42. For insurance purposes, which is a requirement for a general average act?

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

Correct answer: A

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

- A. Cargo gear register
- B. Rough Logbook
- C. Form CG-706
- D. Bell book

Correct answer: C

44. Your vessel is anchored in an open roadstead with three shots of chain out on the port anchor. The wind freshens considerably and the anchor begins to drag. Which action should you take FIRST?

- A. Put the engines slow ahead to help the anchor.
- B. Drop the starboard anchor short with about one shot of chain.
- C. Sheer out to starboard using the rudder, then drop the starboard anchor with about four shots of chain.
- D. Veer out more chain on the port anchor.

Correct answer: D

45. Your vessel is broken down and rolling in heavy seas. How can you reduce the danger of capsizing?

- A. Move all passengers to the stern
- B. Constantly shifting the rudder
- C. Rigging a sea anchor
- D. Move all passengers to one side of the boat

Correct answer: C

46. 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

Correct answer: B

47. Muster Lists and emergency instructions are required for all SOLAS vessels. The muster list shall show the duties assigned to different members of the crew including which of the following?

- A. the person responsible for emergency repairs to life saving equipment
- B. the person responsible for bringing water to the survival craft
- C. the person responsible for the instruction on the donning of lifejackets
- D. the person responsible for the muster of passengers

Correct answer: D

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

- A. 10%
- B. 15%
- C. 20%
- D. 50%

Correct answer: B

49. Your vessel is issued a load line certificate dated 27 May 1992. Which is an acceptable date for one of the surveys for endorsements?

- A. 28 November 1993
- B. 28 September 1993
- C. 28 February 1993
- D. 27 December 1992

Correct answer: C

50. When a vessel violates the oil pollution laws, who may be held responsible?

- A. Any individual connected with the vessel involved in the operation
- B. Owners only
- C. Master only
- D. Credentialed officers only

Correct answer: A

51. An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "E" (Echo). What does this signal indicate?

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

Correct answer: B

52. 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. I am altering my course to starboard
- D. My vessel is stopped and making no way through the water

Correct answer: B

53. Each crewmember has an assigned firefighting station. Where is this assignment listed?

- A. On the Certificate of Inspection
- B. On the muster list
- C. In the shipping articles
- D. On the firefighting plan

Correct answer: B

- 54.** You are berthed at a cargo facility where you have just completed discharging a dangerous cargo. You must complete topside repairs involving hot-work before sailing. Which of the following statements is TRUE?
- A. Hot-work repairs at such a facility are prohibited.
 - B. The Captain of the Port may give specific approval to make hot-work repairs.
 - C. You can make repairs with permission of the facility owner since you are empty and the cargo is on the facility.
 - D. The repair area must be inspected by a marine surveyor to ensure that it can be done safely.

Correct answer: B

- 55.** An icebreaker may use the code letter "K" to remind ships of their obligation to listen continuously on their radio. How can this signal be communicated to other vessels?
- A. By light signal
 - B. By sound signal
 - C. By visual signal
 - D. All of the above

Correct answer: D

- 56.** In areas where CO₂ piping is installed, such piping may not be used for any other purpose EXCEPT when used as described in which choice?
- A. Only when in connection with the fire-detecting system
 - B. Only when used to ventilate the space
 - C. Only when used to run the emergency wiring to the space
 - D. Only when in connection with the water sprinkler system

Correct answer: A

- 57.** According to Pollution Prevention Regulations (33CFR), who is required to sign the entry in the Oil Record Book after every designated operation?
- A. The person(s) in charge of the operation and a credentialed officer present at the operation
 - B. The master
 - C. The person(s) in charge of the operation
 - D. Any credentialed officer present at the operation designated by the master

Correct answer: C

- 58.** You are at sea and not in a special area as defined in ANNEX V of MARPOL. What is the minimum distance in nautical miles from land must you be to discharge ground food garbage that will pass through a one-inch (25 mm) screen into the sea?
- A. Outside of 3nm
 - B. Outside of 6nm
 - C. Outside of 12nm
 - D. Outside of 25nm

Correct answer: A

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

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

Correct answer: C

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

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

Correct answer: A

61. You have arrived at your anchorage location. You have put the engines astern prior to letting go the anchor. How will you know when the vessel has stopped making way?

- A. The ship's Doppler log reads zero
- B. An azimuth bearing on the beam remains steady
- C. The backwash of the propeller reaches amidships
- D. All of the above

Correct answer: C

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

Correct answer: B

63. What effect does bank cushion have on the hull of a vessel in shallow water?

- A. The hull has a greater pressure on the land side of the stern
- B. The hull has a lesser pressure on the land side of the bow
- C. The hull has a greater pressure on the land side of the bow
- D. The hull has a lesser pressure on the land side of the stern

Correct answer: C

- 64.** Which action must be taken for uncleared crew curios remaining on board during a domestic coastwise voyage after returning from foreign?
- A. Items must be cleared prior to the next foreign voyage
 - B. Items must be noted in the Traveling Crews Effects Declaration
 - C. Items must be listed in the Official Logbook and signed by crewmember
 - D. Items must be retained under locked security by the owner

Correct answer: B

- 65.** U.S. regulations require all tankships of 150 GT and above and all other ships of 400 GT and above, to prepare and maintain which of the following?
- A. A USCG approved synthetic plastic discharge plan
 - B. A USCG approved oil discharge plan
 - C. A USCG approved shipboard oil pollution emergency plan
 - D. A USCG approved vapor recovery procedures plan

Correct answer: C

- 66.** Under normal weather and sea conditions when securing a stack of containers with non-locking fittings, lashings are required when the tier exceeds what height?
- A. Lashings are always required
 - B. One container
 - C. Two containers
 - D. Three containers

Correct answer: A

- 67.** 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

Correct answer: B

- 68.** Regulations concerning the stowage, lashing, and securing of timber deck cargoes aboard general cargo vessels may be found in the _____.
- A. CFR Load Line Regulations
 - B. vessel's classification society rules and regulations
 - C. International Cargo Bureau Regulations
 - D. Rules and Regulations for Cargo and Miscellaneous Vessels

Correct answer: A

69. What is the penalty for desertion?

- A. Fine of not more than \$2000 dollars and forfeiture of wages
- B. Revocation of Merchant Mariner Credential and forfeiture of wages due
- C. Imprisonment for not more than 2 years and/or a fine of not more than \$2000 dollars
- D. Forfeiture of money and property left on the vessel, and wages due

Correct answer: D

70. How should a look-out, in the merchant service, report sightings?

- A. Magnetic bearings
- B. True bearings
- C. Relative bearings
- D. Gyro bearings

Correct answer: C