

U.S.C.G. Merchant Marine Exam
Master of Unlimited Tonnage
Q302 Deck General
(Sample Examination)

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

1. Which is the BEST holding ground for conventional anchors?

- A. Hard mud
- B. Very soft mud
- C. Shale
- D. Rock

Correct answer: A

2. In special cases, the Commandant of the Coast Guard may permit cargo piping to pass through machinery spaces, what are the type(s) of cargo permitted to be carried through such piping?

- A. grades D or E
- B. grades A or B
- C. LFG
- D. grade E

Correct answer: D

3. A seaman leaves a vessel before it sails from a foreign port. He informs the Chief Officer that he won't return. After the vessel sails, the Chief Officer finds the seaman's work clothes in his locker. How should the Master handle this matter?

- A. Log the seaman as a fail to join.
- B. Take no action.
- C. Log the seaman as a deserter.
- D. Log the seaman for misconduct.

Correct answer: C

4. When anchoring in a current, which statement is TRUE?

- A. Back your vessel into the current
- B. Drop the anchor with the bow headed downstream
- C. Anchor while stemming the current
- D. All of the above

Correct answer: C

5. Which lien against a vessel would be settled FIRST?

- A. Maintenance and cure
- B. Salvage lien
- C. Ship repairer's lien
- D. Vessel mortgage

Correct answer: B

6. 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 will come in and the stern will remain the same distance off the pier.
 - B. The bow and stern come in equally closer toward the pier.
 - C. The bow will come in and the stern will go out.
 - D. The stern will come in and the bow will remain the same distance off the pier.

Correct answer: A

7. Which is the proper term given to a stopper used in securing the ground tackle for sea that consists of a grab attached to a turnbuckle?
- A. A locking ring
 - B. The buckler
 - C. A riding pawl
 - D. A devil's claw

Correct answer: D

8. On a ship's crane, the load chart relates the allowable load to the combination of the boom length and _____.
- A. winch speed
 - B. boom strength
 - C. cable strength
 - D. load radius

Correct answer: D

9. Which agency issues a certificate of loading that is evidence that the rules and regulations concerning bulk grain cargoes have been observed?
- A. Department of Agriculture
 - B. National Cargo Bureau
 - C. Public Health Service
 - D. American Bureau of Shipping

Correct answer: B

10. Which data can NOT be found on a moisture equilibrium chart?
- A. Dry bulb temperature
 - B. Moisture content
 - C. Wet bulb temperature
 - D. Vapor pressure

Correct answer: C

11. What information is NOT required to be included in the oil transfer procedures aboard a tanker transferring oil?
- A. A line diagram of the vessel's oil transfer piping
 - B. The name of each person designated as the person in charge of transfer
 - C. Special procedures for topping off tanks
 - D. A description of the deck discharge containment system

Correct answer: B

12. Squat is a natural phenomenon as a ship moves through a restricted channel due to what basic principle?
- A. Decreased pressure on the hull resulting from decreased speed
 - B. Increased pressure on the hull resulting from increased speed
 - C. Decreased pressure on the hull resulting from increased speed
 - D. Increased pressure on the hull resulting from decreased speed

Correct answer: C

13. Which statement about the forecastle card is TRUE?
- A. Each crewmember is given a copy of the forecastle card
 - B. It contains copies of the crew's signatures from the articles
 - C. Is a copy of the shipping articles excluding crewmember signatures
 - D. The forecastle card is a blank sample of the articles

Correct answer: C

14. A seaman may not make an allotment to which relation?
- A. Minor children
 - B. Brother
 - C. Grandparents
 - D. Mother-in-law

Correct answer: D

15. 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 visual signal
 - C. By sound signal
 - D. All of the above

Correct answer: D

16. When observed, which item indicates a snag or other underwater obstruction in a river?
- A. V-shaped ripple with the point of the V pointing upstream
 - B. A smoothing out of the vessel's wake
 - C. A small patch of smooth water on a windy day
 - D. V-shaped ripple with the point of the V pointing downstream

Correct answer: A

17. You are on a US vessel loading explosives for the military and will be sailing foreign. Who is required to supervise the loading and stowage of the cargo?
- A. a USCG credentialed officer designated by the Master
 - B. a USCG credentialed officer with a hazmat endorsement
 - C. a USCG credentialed officer or rating with a hazmat endorsement
 - D. an employee of the carrier designated by the Master

Correct answer: A

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

Correct answer: C

19. The number of able seamen required on board a vessel can be found in which document?
- A. Classification Certificate
 - B. American Bureau of Shipping code
 - C. SOLAS Certificate
 - D. Certificate of Inspection

Correct answer: D

20. Which organization would conduct a survey of the insulation in a reefer compartment prior to loading cargo?
- A. American Bureau of Shipping
 - B. OSHA
 - C. U.S. Customs Service
 - D. National Cargo Bureau

Correct answer: A

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

Correct answer: B

22. You are on a multiple-product chemical tanker and will carry cargoes of ethanolamine, methyl acrylate, and glycerine. Which statement is true?
- A. Glycerine is compatible with both of the other cargoes.
 - B. All of these cargoes are mutually incompatible.
 - C. Glycerine may be stowed adjacent to methyl acrylate but must be segregated from ethanolamine.
 - D. Methyl acrylate and ethanolamine are compatible but both must be segregated from glycerine.

Correct answer: A

23. In a tank vessel constructed in 1970, carrying grade A, B, C, or D liquid cargo, what is required to isolate cargo pumps from sources of vapor ignition?
- A. General cargo spaces
 - B. Passageways or living quarters
 - C. Cofferdams
 - D. Gastight bulkheads

Correct answer: D

24. Your vessel is in Charleston, S.C. Which situation does NOT require you to clear Customs?
- A. You did not discharge any cargo in Charleston and are bound for Panama
 - B. All the cargo on board is of U.S. origin and destined for New York
 - C. You took on no new cargo in Charleston, S.C. and are bound for a foreign port
 - D. You did not load any cargo in Charleston and are bound for Halifax

Correct answer: B

25. Each crewmember has an assigned firefighting station. Where is this assignment listed?
- A. On the muster list
 - B. In the shipping articles
 - C. On the Certificate of Inspection
 - D. On the firefighting plan

Correct answer: A

26. Which agency must approve the safety equipment on board inspected vessels?
- A. The National Safety Council
 - B. The Occupational Safety and Health Administration (OSHA)
 - C. The Safety Standards Bureau
 - D. The U.S. Coast Guard

Correct answer: D

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

Correct answer: A

28. Which product(s) is(are) compatible with the product ethylene cyanohydrin?

- A. Sulfuric acid
- B. Nitric acid
- C. Ammonia
- D. Isocyanates

Correct answer: C

29. 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. Miscibility
- C. Demurrage
- D. Late fee

Correct answer: C

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

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

Correct answer: B

31. A tanker is loaded with 5,000 barrels of petroleum. The cargo was loaded at a temperature of 70°F, and the coefficient of expansion is .0004. What is the net amount in barrels of cargo loaded?

- A. 4800
- B. 4980
- C. 5020
- D. 5200

Correct answer: B

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

Correct answer: A

33. Which term defines "An electronic or electric device that indicates the rate of turn of a vessel"?

- A. Gyrocompass
- B. Magnetic compass
- C. Odometer
- D. Swing meter

Correct answer: D

34. Which is the root cause of wake damage to a vessel or structure in a narrow channel?

- A. Improper steering of the vessel
- B. Slack mooring lines
- C. Excessive speed
- D. Trim of the vessel

Correct answer: C

35. Nonflammable gases should have what kind of label?

- A. Skull and crossbones
- B. Red
- C. Green
- D. White

Correct answer: C

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

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

Correct answer: B

37. Which is a precaution you should take before bunkering?

- A. Plug the scuppers
- B. Plug the vents
- C. Plug the sounding pipes
- D. Close the lids on the vents

Correct answer: A

38. Which signal must you display at night on a docked tank barge to show that it is loading or discharging flammable liquid cargo?

- A. Flashing amber light
- B. ICC yellow light
- C. Two orange lights
- D. Red light

Correct answer: D

39. Which statement(s) is/are TRUE concerning crane cargo operations?

- A. Cargo loaded into vehicles and/or containers prior to lifting needs to be properly secured so as to prevent shifting during transport.
- B. Never exceed crane manufacturer's limits concerning the safe working loads of cargo jibs.
- C. Lifting points on all equipment must be safely checked prior to commencing a lift.
- D. All the above

Correct answer: D

40. 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. Rig a fire hose to wash down the deck
- C. Remove the plugs from the scuppers
- D. Sound the general alarm

Correct answer: A

41. What speed do most bow thrusters generally become ineffective?

- A. At any speed astern
- B. Over 1 knot sternway
- C. At any speed ahead
- D. Over 3 knots headway

Correct answer: D

42. You are piloting your vessel in a narrow channel. How will the vessel react to a steep bank on your starboard side?

- A. The bow will swing toward the bank, and the stern will swing away from the bank
- B. The bow will swing away from the bank, and stern will swing into the bank
- C. The vessel will be bodily pushed away from the bank
- D. The vessel will be bodily drawn into the bank

Correct answer: B

43. Which statement is TRUE?

- A. You must keep a record of garbage discharged in port to a shore facility.
- B. You need not keep a record of garbage incinerated on the ship.
- C. You need not keep a record of ground garbage dumped into the sea more than 25 miles offshore.
- D. You must keep a record of the approximate weight of the garbage dumped

Correct answer: A

44. Which of the following statements is/are TRUE in regard to Ro-Ro vessels' spaces which are "specially suitable for vehicles"?

- A. The spaces shall be fitted with an approved fixed fire extinguishing system.
- B. The spaces shall be fitted with an approved fire or smoke detecting system.
- C. The Commandant may permit the installation of an approved water sprinkler extinguishing system.
- D. All of the above

Correct answer: D

45. Using a scope of 5, determine how many feet of cable you should put out to anchor in 5 fathoms of water.

- A. 100 feet
- B. 150 feet
- C. 200 feet
- D. 250 feet

Correct answer: B

46. 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. Call the US Coast Guard
- C. Give 5 short blasts on the whistle
- D. Contact the moored vessel

Correct answer: A

47. 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. State driver's license with photo ID
- C. Social Security card
- D. Merchant Mariner Credential

Correct answer: D

48. To determine the number of portable fire extinguishers required on an inspected vessel, you should check which document?

- A. The Certificate of Inspection
- B. The Safety of Life at Sea Certificate
- C. The Muster List ("Station Bill")
- D. The hot work permit

Correct answer: A

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

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

Correct answer: C

50. How should a vessel spotted at 45° relative be reported?

- A. On the starboard beam
- B. Broad on the starboard bow
- C. 4 points abaft the starboard beam
- D. 4 points forward of starboard bow

Correct answer: B

51. After casting off moorings at a mooring buoy in calm weather, which action should you take?

- A. Go full ahead on the engine(s)
- 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. Back away a few lengths to clear the buoy and then go ahead on the engines

Correct answer: D

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

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

Correct answer: B

53. Which factor is MOST important in preventing sweat damage within a cargo hold?

- A. Outside air temperature
- B. Dew point of the cargo hold
- C. Temperature of the cargo
- D. Dew point of the outside atmosphere

Correct answer: B

54. Before loading bulk grain, why should the bilge wells be covered with burlap?

- A. To prevent cargo sifting into the bilge wells
- B. To permit rapid flow of water to the bilge wells
- C. To add strength to the bilge well strainer
- D. To prevent oil, water, or other liquid from reaching the cargo

Correct answer: A

55. Which states the requirements for the access to a cargo pumproom in a tank vessel carrying grades C or D liquid cargo?

- A. The pumproom access shall only be from enclosed areas free from sources of vapor ignition
- B. The pumproom access shall be from within the vessel
- C. The pumproom access shall be from the open deck
- D. The pumproom access shall be from areas equipped with power ventilation

Correct answer: C

56. International Oil Pollution Prevention (IOPP) Certificates are required for each U.S. oil tanker at or above how many gross registered tons?

- A. 100 gross registered tons
- B. 150 gross registered tons
- C. 300 gross registered tons
- D. 400 gross registered tons

Correct answer: B

57. Which is a predictable result of a vessel nearing a bank or edge of a steep banked channel?

- A. The vessel continues in a straight line, but with greatly reduced maneuverability
- B. The bow sheers toward the bank
- C. The stern is drawn to the bank as the bow sheers off
- D. The vessel will be drawn bodily into the bank unless the engines are stopped

Correct answer: C

58. You are on watch while your vessel is entering port with a pilot conning. The pilot gives a steering command to the helmsman who fails to acknowledge it by repeating the command. You should immediately take which action?

- A. Tell the helmsman to ask the Pilot to repeat any command that he fails to hear or understand
- B. Notify the Master
- C. Ask the Pilot to repeat the command since the helmsman failed to hear it
- D. Repeat the Pilot's command and ensure that the helmsman repeats it exactly

Correct answer: D

59. When is the best time to work a boat into a slip?

- A. When the current is setting against you
- B. When the wind is against you
- C. When there is a cross current
- D. At slack water

Correct answer: D

60. The Immigration and Naturalization Service is concerned with which document on a vessel making preliminary entry into a U.S. port from a foreign port?

- A. Curio List
- B. Crew List form I-418
- C. Shipping Articles
- D. Certified Cargo Manifest

Correct answer: B

61. The tankship Northland is loaded as shown in table BL-0014 below. Use the salmon-colored pages in the Stability Data Reference Book to determine the sagging numeral.

BL-0014

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	4659
7.	#2 CARGO TANK	5280
8.	#3 CARGO TANK	5489
9.	#4 CARGO TANK	0
10.	BRIDGE CREW	3
11.	BRIDGE STORES	12
12.	BRIDGE F.W.	10
13.	#5 CARGO TANK	5196
14.	#6 BALLAST TANK	2400
15.	#7 CARGO/BALLAST TANK	5319
16.	#8 CARGO/BALLAST TANK	5400
17.	#9 CARGO/BALLAST TANK	6000
18.	#10 CARGO TANK	5361
19.	#11 CARGO TANK	4952
20.	AFT COFFERDAM	0
21.	AFT BUNKERS	850
22.	AFT SETTLERS	360
23.	DISTILLED WATER	50
24.	AFT STORES	75
25.	AFT CREW	7
26.	F.W. AFT	57
27.	AFT PEAK	0

- A. 89.68 numeral
- B. 85.02 numeral
- C. 81.79 numeral
- D. 91.92 numeral

Correct answer: D

62. What are the health hazard ratings for a product of triethylbenzene?

- A. 0,1,1
- B. 2,2,2
- C. 1,1,1
- D. Unavailable

Correct answer: C

63. Multi-year ice is the hardest sea ice and should be avoided if possible. It is recognizable because of what tone to its surface color?

- A. Grey-white
- B. Greenish
- C. Grey
- D. Bluish

Correct answer: D

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

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

Correct answer: D

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

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

Correct answer: D

66. What is the maximum number of crew members that may be berthed in one room aboard your cargo vessel?

- A. Two
- B. Four
- C. Six
- D. Eight

Correct answer: B

67. Your vessel is carrying 24,000 barrels of oil for discharge. The cargo hoses have an inside diameter of eight inches. What is the minimum capacity of the container around the loading manifold?

- A. Three barrels
- B. Four barrels
- C. Six barrels
- D. Eight barrels

Correct answer: A

68. How should a vessel that is being assisted by an icebreaker indicate that it is ready to cast off the towline (if one is used)?

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

Correct answer: B

69. Why is a VLCC (100,000 DWT+) with a 30,000 Shaft Horsepower Steam Turbine slow to respond to engine movements, and has less stopping power than normal ships?

- A. They have smaller power to weight ratio
- B. They have a bigger propeller
- C. They possess smaller propellers
- D. They have larger power to weight ratio

Correct answer: A

70. The boom stops on a pedestal crane prevent the boom from _____.

- A. overloading when not in use
- B. being raised too high
- C. swinging at sea
- D. being lowered too low

Correct answer: B