U.S.C.G. Merchant Marine Exam
Mate Offshore Supply Vessels
Q209-Deck General
(Sample Examination)
Choose the best answer to the following Multiple Choice Questions.

1. You are anchoring your vessel. When should you release and payout the anchor?
   - (A) When the vessel is has minimal sternway
     - (B) When the vessel is going full ahead
     - (C) When the vessel is going full astern
     - (D) When the vessel is dead in the water

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

2. Your ship has loaded 6,000 barrels of gasoline, at a cargo temperature of 50°F, departing New Jersey bound for Florida. API gravity is 55°. The volume correction factor (VCF) is .0006. How many barrels would you expect to unload if the cargo temperature is 90°F at the discharge port?
   - (A) 5,856
   - (B) 5,982
   - (C) 6,018
   - (D) 6,144

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

3. The official logbook is filed with the Officer in Charge, Marine Inspection. When does this action take place?
   - (A) Within 30 days of the date of arrival of the first U.S. port
   - (B) At the next Certificate of Inspection
   - (C) At the end of the year with all other official logbooks
   - (D) Upon completion of the voyage

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

4. The flash point of vinyl chloride is __________.
   - (A) -20°F (-29°C)
   - (B) -108°F (-78°C)
   - (C) 32°F (0°C)
   - (D) 97°F (36°C)

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

5. How is the main underdeck pipeline on a tankship connected to individual tanks?
   - (A) By tank drops
   - (B) By crossovers
   - (C) By branch lines
   - (D) By line drops

   *If choice C is selected set score to 1.*
6. What is the mechanical advantage of tackle number 1 as shown in illustration D029DG below?
   - (A) 0.5
   - (B) 1.5
   - (C) 2.0
   - (D) 1.0

   If choice D is selected set score to 1.

7. Which international body is responsible for drafting the convention prohibiting marine pollution (MARPOL)?
   - (A) The International Maritime Organization
   - (B) The Association of Seafaring Nations
   - (C) The Maritime Advisory Council
   - (D) The International Association of Shipping

   If choice A is selected set score to 1.

8. Providing you are not in a special area, such as the Mediterranean or Red Sea, how many nautical miles from land must you be to throw packing materials that will float into the sea to be in compliance with MARPOL Regulations?
   - (A) 3 nm
   - (B) 6 nm
   - (C) 12 nm
   - (D) 25 nm

   If choice D is selected set score to 1.

9. Which document is NOT required by law to be posted aboard a vessel?
   - (A) Officer's licenses
   - (B) Certificate of Inspection
   - (C) Muster List
   - (D) Official Crew List

   If choice D is selected set score to 1.

10. 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

    If choice B is selected set score to 1.
11. Which is the BETTER holding ground, for a conventional anchor?
   - (A) A shale bottom
   - (B) A mixture of mud and clay
   - (C) A very soft mud
   - (D) A rocky bottom

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

12. Which type of line would have the LEAST resistance to mildew and rot?
   - (A) Nylon
   - (B) Polypropylene
   - (C) Manila
   - (D) Dacron

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

13. Which item is a journal kept by the officer of the watch in which day to day happenings are recorded regarding the deck department?
   - (A) The Official Logbook
   - (B) The bell book
   - (C) The deck log
   - (D) A cargo record book

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

14. What is the group of markings shown in illustration D003DG below is called?
   - (A) The water mark
   - (B) The test mark
   - (C) The load line mark
   - (D) The loft mark

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

15. Which cargo is suitable for carriage on Ro-Ro vessels?
   - (A) Containers
   - (B) Rolling vehicles
   - (C) Trailers
   - (D) All of the above

   *If choice D is selected set score to 1.*
16. You have determined the maneuvering characteristics of your vessel by taking the radar ranges and
bearings of an isolated light while making a turn. The results are shown in illustration D035DG
below. What is the transfer for a turn of 30°?

- (A) 40 yards
- (B) 140 yards
- (C) 190 yards
- (D) 230 yards

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

17. In relation to the turning circle of a ship, which defines the term "transfer"?

- (A) The distance gained in the direction of the original course
- (B) The distance around the circumference of the turning circle
- (C) The distance gained at right angles to the original course
- (D) The distance the ship moves sidewise from the original course away from the direction of the
  turn after the rudder is first put over

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

18. What is the period of validity of a Safety Management Certificate?

- (A) 60 months
- (B) 48 months
- (C) 42 months
- (D) 36 months

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

19. If your propeller is racing in rough weather, which action should you take?

- (A) Increase your engine speed
- (B) Stop your engine until the rough weather passes
- (C) Decrease your engine speed
- (D) Ignore it, this is acceptable in rough weather

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

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

*If choice B is selected set score to 1.*
21. 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

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

22. The weight of the container and its contents is supported on deck by what part(s)?

- (A) Bottom flooring, side, and end rails
- (B) Bottom, side, and end rails
- (C) Four lower corner castings
- (D) Bottom flooring only

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

23. To determine the number of inflatable liferafts required on a vessel, you should check which document?

- (A) SOLAS Certificate
- (B) Certificate of Inspection
- (C) Stability Letter
- (D) Load Line Certificate

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

24. Which method is used to supply inert gas from a flue gas system to the cargo tanks?

- (A) High capacity fan
- (B) Natural aspiration
- (C) Exhaust gas pressure from the stack
- (D) Inert gas compressor

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

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

- (A) Pitchpoled
- (B) Trimmed
- (C) Broached
- (D) Yawed

*If choice C is selected set score to 1.*
26. Which of the following statements is/are TRUE concerning cranes being installed on the centerline of vessels?

- (A) One crane is able to work both sides of the ship.
- (B) They are more economical and weigh less.
- (C) One crane is able to work one end of two adjacent hatches.
- (D) All of the above

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

27. To be in accordance with regulations for vessels carrying Liquefied Flammable Gases, what is the minimum requirement of locations for the cargo system remote controls of quick-closing shut off valves?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

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

28. What is the name of tackle number 12 as shown in illustration D029DG below?

- (A) Threefold purchase
- (B) Gin tackle
- (C) Davit tackle
- (D) Deck tackle

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

29. 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

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

30. 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) on a Napier diagram
- (B) in the compass deviation log
- (C) in the vessel's Official Logbook
- (D) on the compass deviation card

*If choice B is selected set score to 1.*
31. To serve as a person in charge of transfer operations on board a self-propelled tank vessel, an individual must hold/be which of the following?

- (A) A letter from the company stating his qualification
- (B) Be 30 years old
- (C) A tankerman-PIC endorsement
- (D) A valid officer credential for inspected vessels

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

32. Grade D liquids are those having flash points of __________.

- (A) 150°F or greater but less than 212°F
- (B) greater than 80°F and less than 150°F
- (C) 80°F or less
- (D) 212°F or greater

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

33. A tankship has 40 gallons of 6% foam concentrate aboard. Approximately how much foam solution can be produced from this supply?

- (A) 200 gallons
- (B) 420 gallons
- (C) 667 gallons
- (D) 986 gallons

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

34. Under which condition is a Container vessels required to maintain an Oil Record Book?

- (A) If the vessel is 150 gross tons
- (B) If the vessel is 200 gross tons
- (C) If the vessel is 300 gross tons
- (D) If the vessel is 400 gross tons

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

35. Which statement about entering into a tank which has been sealed for a long time is TRUE?

- (A) The tank need not be tested for oxygen content if it is ventilated for more than 24 hours.
- (B) If the oxygen content tests at less than 12% you should wear an approved gas mask.
- (C) The tank should be tested only once to ensure the oxygen content is at least 14% before entry.
- (D) The tank must be tested at frequent intervals to ensure that hazardous gasses have not regenerated.

*If choice D is selected set score to 1.*
36. When talking about wire rope, what does the lay of the wire refer to?

- (A) The direction wires and strands are twisted together
- (B) The direction the core is twisted
- (C) The material used in the core
- (D) The number of strands in the wire

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

37. The complete details of a crude oil washing system aboard your vessel, including the operating sequences and procedures, design characteristics, a description of the system, and required personnel will be found in the __________.

- (A) Oil Transfer Procedures Manual
- (B) Code of Federal Regulations
- (C) Crude Oil Washing Operations and Equipment Manual
- (D) Crude Oil Washing addendum to the Certificate of Inspection

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

38. On tank vessels, fully charged fire extinguishers are considered semi-portable when they have a gross weight of more than ________.

- (A) 55 pounds
- (B) 75 pounds
- (C) 95 pounds
- (D) 125 pounds

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

39. To allow for the rise or fall in tide and for change in draft of a tankship during cargo transfer, how must the cargo hoses be secured?

- (A) Using slings or saddles placed at 25-foot (8 meter) intervals
- (B) With topping lifts and runners tied off to winches
- (C) With enough slack to allow vessel to move to it's mooring limits
- (D) All of the above

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

40. Cargo pumprooms on tank vessels, constructed in 1965, handling grade C liquid cargo shall have power ventilation systems. What is time requirement for these ventilation systems to completely change the air?

- (A) 1 minute
- (B) 3 minutes
- (C) 5 minutes
- (D) 10 minutes

*If choice B is selected set score to 1.*
41. 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

*If choice B is selected set score to 1.

42. What is the name of tackle number 5 as shown in illustration D029DG below?

- (A) Double luff tackle
- (B) Four-fold whip
- (C) Two-fold purchase
- (D) 3-2 purchase

*If choice A is selected set score to 1.

43. You are loading propanolamine and spill a small quantity on deck. According to the Chemical Data Guide, you would expect its odor to be __________.

- (A) sweet
- (B) similar to ammonia
- (C) similar to turpentine
- (D) fishy

*If choice D is selected set score to 1.

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

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

*If choice D is selected set score to 1.

45. What is the MOST irritating to the skin?

- (A) Carbon disulfide
- (B) Oleum
- (C) Ethyl alcohol
- (D) Isoprene

*If choice B is selected set score to 1.
46. Before being certified by the American Bureau of Shipping, anchor chain must undergo which process?

- (A) A breaking test of the chain
- (B) A spectroanalysis of the chain
- (C) A x-ray inspection of the chain
- (D) A USCG inspection of the chain

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

47. The most likely location for a liquid cargo fire to occur on a tanker would be __________.

- (A) in the midships house
- (B) at the vent header
- (C) in the pump room
- (D) at the main deck manifold

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

48. One shot of anchor chain is equal to how many feet (meters)?

- (A) 6 (1.8 meters)
- (B) 15 (4.6 meters)
- (C) 45 (13.7 meters)
- (D) 90 (27.4 meters)

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

49. The number of certificated able seamen and lifeboatmen required on a vessel is determined by which organization?

- (A) Corps of Engineers
- (B) Coast Guard
- (C) American Bureau of Shipping
- (D) International Maritime Organization

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

50. Which agency assigns Load lines for U.S. vessels?

- (A) The National Cargo Bureau
- (B) The U.S. Coast Guard
- (C) The Lloyd's Register of Shipping
- (D) The American Bureau of Shipping

*If choice D is selected set score to 1.*
51. Which statement is TRUE?

- (A) You must keep a record of garbage discharged in port to a shore facility.
- (B) It is not required to keep a record of dumping ground garbage into the sea more than 25 miles offshore.
- (C) You are not required to keep a record of garbage incinerated on the vessel.
- (D) You must keep a record of the approximate weight of the garbage dumped into the sea.

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

52. Your tank barge requires repairs that include welding. Who normally would issue a gas-free certificate?

- (A) Any Coast Guard marine inspector
- (B) The port engineer
- (C) The ABS marine surveyor
- (D) A certified marine chemist

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

53. When more than one vessel is being assisted by an icebreaker, distances between vessels should be constant. Which signal should be given by a vessel which is ahead of another and whose speed suddenly begins to drop?

- (A) A flag hoist consisting of the code figure "4"
- (B) A flag hoist consisting of the code figure "5"
- (C) A flag hoist consisting of the code letters "FE" (Foxtrot-Echo)
- (D) Four short blast on the whistle

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

54. While on watch at sea you must maintain a proper lookout at all times. On a 700-foot cargo vessel being hand-steered during daylight hours in good visibility and clear of any navigational hazards, who may be the lookout?

- (A) The helmsman
- (B) The mate on watch
- (C) Either A or B
- (D) Neither A nor B

*If choice B is selected set score to 1.*
55. 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 stops to the open tanks
- (B) The rate of flow decreases to the open tanks
- (C) The rate of flow remains constant to the open tanks
- (D) The rate of flow increases to the open tanks

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

56. A tank vessel transferring non-flammable hazardous cargo in bulk must display warning signs. These signs must __________.

- (A) be visible from both sides and from forward and aft
- (B) indicate "NO SMOKING"
- (C) be displayed only while transferring cargo and fast to a dock
- (D) use black lettering on a white background

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

57. Which term defines the process of dividing the total volume of the ship in cubic feet (after omission of exempted spaces) by 100?

- (A) Light displacement
- (B) Bale cubic
- (C) Net tonnage
- (D) Gross tonnage

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

58. To determine the number of able seamen required on an inspected vessel, you should check which document?

- (A) Load Line Certificate
- (B) Certificate of Inspection
- (C) operations manual
- (D) Safety of Life at Sea Certificate

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

59. Which type of ice is a hazard to navigation?

- (A) Growlers
- (B) Ice rind
- (C) Pancake ice
- (D) Frazil ice

*If choice A is selected set score to 1.*
60. When bunkering is complete, which is the correct procedure concerning the bunker hoses?
   
   - (A) The hose must be stowed vertically and allowed to drain
   - (B) The hose must be drained, blanked off, and stored securely
   - (C) The hose should be washed out with hot soapy water
   - (D) The hose must be cleaned internally with a degreaser

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

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

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

62. 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

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

63. As a ship moves through the water, it causes a wake, which is also moving forward relative to the sea. In addition to a fore and aft motion, which direction will the wake flow?

   - (A) Upward and outward flow
   - (B) Upward and inward flow
   - (C) Downward and outward flow
   - (D) Downward and inward flow

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

64. Under the Pollution Regulations, which action is required when you dump food wastes into the sea?

   - (A) Make an entry in the Official Logbook
   - (B) Keep a record for two years
   - (C) You must notify the U.S. Coast Guard
   - (D) No action is required if you are more than 25 miles from land and no plastic materials are dumped.

   *If choice B is selected set score to 1.*
65. According to the Chemical Data Guide, which reactive group(s) is/are not compatible with the products polybutene and o-xylene?
   - (A) Amides
   - (B) Alcohols, glycols
   - (C) Phenols, cresols
   - (D) Nitric acid

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

66. During oil transfer operations, who is responsible for ensuring that the posted transfer procedures are followed?
   - (A) The senior able seaman
   - (B) The oiler
   - (C) The designated person in charge
   - (D) The tankerman

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

67. Which is a precaution you should take before bunkering?
   - (A) Plug the vents
   - (B) Plug the scuppers
   - (C) Close the lids on the vents
   - (D) Plug the sounding pipes

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

68. 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 pressure-vacuum relief valves
   - (C) With warning signs
   - (D) With gooseneck vents

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

69. What is the minimum standard for making an eye splice in a wire to be used as cargo gear?
   - (A) Make four tucks with each full strand.
   - (B) Make four tucks in each strand, cut away every other strand, and make two more tucks with each remaining strand.
   - (C) Make six tucks with each strand, removing a few wires from each strand as each additional tuck is made.
   - (D) Make three tucks with full strands, remove half the wires from each strand, and make two more tucks.

   *If choice D is selected set score to 1.*
70. Which of the following would be a good extinguishing agent for a grade B product of 1,3-Pentadiene?

- (A) Water
- (B) High Velocity Fog
- (C) Foam
- (D) Low Velocity Fog

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