

U.S.C.G. Merchant Marine Exam
Master Less than 100 Gross Registered Tons
Q401 Deck General - Safety
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. Number 3 lifeboat would be _____.
- (A) the forward boat on the starboard side
 - (B) behind boat number 2 on the port side
 - (C) behind boat number 1 on the starboard side
 - (D) behind boat number 1 on the port side

If choice C is selected set score to 1.

2. In general, batteries aboard small passenger vessels should be _____.
- (A) stowed in well-ventilated spaces to allow dissipation of any gases generated
 - (B) accessible for maintenance and removal
 - (C) as high above the bilge as practicable
 - (D) All of the above

If choice D is selected set score to 1.

3. Providing you are not sailing in the Red Sea or another special area as listed in ANNEX V of MARPOL, how many miles from land must you be to throw garbage including bottles, rags, and glass that has not been ground up into the sea?
- (A) 3 nm
 - (B) 6 nm
 - (C) 12 nm
 - (D) 25 nm

If choice C is selected set score to 1.

4. Which type of rudder may lose its effectiveness at angles of 10 or more degrees?
- (A) Balanced spade
 - (B) Contra-guide
 - (C) Unbalanced
 - (D) Flat plate

If choice A is selected set score to 1.

5. You have carbon tetrachloride as part of the cargo. If a fire breaks out in the general area, what is the major danger from the carbon tetrachloride?
- (A) Phosgene gas may be formed if it comes in contact with hot metal.
 - (B) You cannot use water to fight the fire because it will react with the carbon tetrachloride.
 - (C) It will explode if exposed to a flame.
 - (D) It will burn rapidly once ignited.

If choice A is selected set score to 1.

6. 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.

7. If help has not arrived in 10-12 hours after abandoning a vessel in a rescue boat, you should _____.

- (A) go in one direction until the fuel runs out
- (B) shut down the engines if installed and put out the sea anchor
- (C) steer a course for the nearest land
- (D) steer a course for the nearest sea lane

If choice B is selected set score to 1.

8. The forward draft of your ship is 27'-11" and the after draft is 29'-03". The draft amidships is 28'-05". Your vessel is _____.

- (A) listed
- (B) hogged
- (C) sagged
- (D) trimmed by the head

If choice B is selected set score to 1.

9. Which letter shown in illustration D030DG below represents a clove hitch?

- (A) U
- (B) R
- (C) T
- (D) X

If choice D is selected set score to 1.

10. For the purpose of training and drills, if reasonable and practicable, how frequently should rescue boats be launched with their assigned crew?

- (A) once a year
- (B) once a week
- (C) once a month
- (D) twice a year

If choice C is selected set score to 1.

11. You are on a 30,000 DWT tankship engaged in trade to another country signatory to MARPOL 73/78. Which statement is TRUE?

- (A) The Certificate of Inspection is prima facie evidence of compliance with MARPOL 73/78.
- (B) AN IOPP Certificate is renewed at each inspection for certification.
- (C) The IOPP Certificate is valid for 5 years.
- (D) An IOPP Certificate is invalid if the ship carries cargoes outside the classes authorized thereon.

If choice C is selected set score to 1.

12. 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. The watch is officially transferred to you after _____.

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

If choice B is selected set score to 1.

13. Ventilation systems connected to a compartment in which a fire is burning are normally closed to prevent the rapid spread of the fire by _____.

- (A) spontaneous combustion
- (B) conduction
- (C) radiation
- (D) convection

If choice D is selected set score to 1.

14. Which will most likely occur when entering shallow water?

- (A) The vessel's trim will change.
- (B) An increase in speed will occur.
- (C) The vessel's list will change.
- (D) Rudder action will become more effective.

If choice A is selected set score to 1.

15. Fixed ballast, if used, may be _____. (small passenger vessel regulations)

- (A) moved under the supervision of the owner, Master or shipyard
- (B) discharged or moved at any time
- (C) moved under any condition except extreme emergency
- (D) moved temporarily for examination or repair of the vessel, when done under the supervision of an inspector

If choice D is selected set score to 1.

16. Which effect does speed through the water have on a vessel which is underway in shallow water?

- (A) A decrease in the speed results in a decrease in steering response and maneuverability.
- (B) A decrease in speed results in the vessel sucking down on an even plane.
- (C) An increase in speed results in the stern sucking down lower than the bow.
- (D) An increase in speed results in the vessel rising on an even plane.

If choice C is selected set score to 1.

17. Under normal operating conditions aboard a ship, who has the overall responsibility in maintaining the Oil Record Book?

- (A) Chief Engineer
- (B) Master
- (C) First Assistant Engineer
- (D) Chief Mate

If choice B is selected set score to 1.

18. To coil a left-hand laid rope, you should coil the line in _____.

- (A) either a clockwise or a counterclockwise direction
- (B) a counterclockwise direction only
- (C) an alternating clockwise and counterclockwise direction
- (D) a clockwise direction only

If choice B is selected set score to 1.

19. A Chinese stopper (two lines) will hold best when you _____.

- (A) twist the ends together and hold them at right angles to the mooring line
- (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 in the direction of the pull

If choice D is selected set score to 1.

20. In order to reduce your wake in a narrow channel you should _____.

- (A) apply enough rudder to counter the effect of the current
- (B) reduce your speed
- (C) shift the weight to the stern
- (D) change your course to a zigzag course

If choice B is selected set score to 1.

21. A fire in a pile of canvas is classified as class _____.

- (A) A
- (B) B
- (C) C
- (D) D

If choice A is selected set score to 1.

22. Fuel for use on a vessel (300 GT or more constructed before July 1, 1974) may be carried in independent tanks forward of a collision bulkhead if the _____.

- (A) tanks were designated, installed, or constructed for fuel oil carrying before July 1, 1974
- (B) shell of the tank is of the same thickness or greater than that of the vessel's hull
- (C) fuel has a flash point above 180°F
- (D) tank is 18 inches inboard of the hull structure

If choice A is selected set score to 1.

23. The standing part of a tackle is _____.

- (A) the hook that engages the weight to be moved
- (B) that part to which power is applied
- (C) all the fall except the hauling part
- (D) that part of the falls made fast to one of the blocks

If choice D is selected set score to 1.

24. A journal kept by the officer of the watch in which day to day happenings are recorded regarding the deck department is the _____.

- (A) bell book
- (B) deck rough log
- (C) cargo record book
- (D) Official Logbook

If choice B is selected set score to 1.

25. When piloting a vessel, how are visual references used to establish a constant rate of turn?

- (A) Visual references cannot be used to maintain a constant rate of turn.
- (B) Begin the turn when the fixed object is on the beam.
- (C) Fixed objects that stay on the same relative bearing when the ship is turning indicate a constant rate of turn.
- (D) Keep the fixed object's relative bearing opening, for a constant rate of turn.

If choice C is selected set score to 1.

26. The distance that a vessel travels from the time that the order to put engines full astern until the vessel is dead in the water is known as _____.

- (A) head reach
- (B) advance
- (C) surge
- (D) transfer

If choice A is selected set score to 1.

27. Leeway is the _____.

- (A) difference between the true course and the compass course
- (B) lateral movement of a vessel downwind of her intended course
- (C) displacement of a vessel multiplied by her speed
- (D) momentum of a vessel after her engines have been stopped

If choice B is selected set score to 1.

28. As a rule, ships of most configurations, when drifting in calm water with negligible current, will lie _____.

- (A) stern to the wind
- (B) beam to the wind
- (C) with the wind on the quarter
- (D) bow to the wind

If choice B is selected set score to 1.

29. Which statement about tunnel bow thrusters fitted to large vessels is TRUE?

- (A) When going astern at slow speed, they provide effective steering control.
- (B) Because of their location, most modern installations have as much power as a tug.
- (C) They are fully effective at all drafts.
- (D) They are effective on most vessels at speeds up to 10 knots.

If choice A is selected set score to 1.

30. The force exerted by a propeller which tends to throw the stern right or left is called _____.

- (A) rotational force
- (B) sidewise force
- (C) thrust
- (D) slip

If choice B is selected set score to 1.

31. In weighing CO2 cylinders, they must be recharged if weight loss exceeds _____.

- (A) 15% of weight of full bottle
- (B) 10% of weight of charge
- (C) 10% of weight of full bottle
- (D) 20% of weight of charge

If choice B is selected set score to 1.

32. What is the MOST important consideration when determining how to fight an electrical fire?

- (A) Whether the fire is in machinery or passenger spaces
- (B) Maintaining electrical power
- (C) The amount of toxic fumes created by the extinguisher
- (D) Danger of shock to personnel

If choice D is selected set score to 1.

33. The spread of fire is prevented by _____.

- (A) removing combustibles from the endangered area
- (B) cooling surfaces adjacent to the fire
- (C) shutting off the oxygen supply
- (D) All of the above

If choice D is selected set score to 1.

34. Carbon dioxide as a fire fighting agent has which advantage over other agents?

- (A) It is cheaper.
- (B) It is safer for personnel.
- (C) It is most effective on a per unit basis.
- (D) It causes minimal damage.

If choice D is selected set score to 1.

35. You are at sea and have received a General Emergency message announcing the outbreak of war in Europe. You are directed to comply with the instructions in NGA (NIMA) PUB 117, Chapter Eight. Which statement is TRUE?

- (A) If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port.
- (B) You should only enter a port in the danger zone during hours of darkness.
- (C) You should attempt to submit an AMVER report to NSA.
- (D) When over 200 hundred miles from a port in the danger zone, you should not darken ship.

If choice C is selected set score to 1.

36. Fire in an engine compartment is best extinguished with carbon dioxide gas (CO₂) and by _____.

- (A) closing the compartment except for the ventilators
- (B) leaving the compartment open to the air
- (C) increasing the air flow to the compartment by blowers
- (D) completely closing the compartment

If choice D is selected set score to 1.

37. You have abandoned ship and are in charge of a liferaft. How much water per day should you permit each occupant to drink after the first 24 hours?

- (A) 1 pint
- (B) 1 can
- (C) 1 quart
- (D) 1 gallon

If choice A is selected set score to 1.

38. When approaching a fire from leeward you should shield fire fighters from the fire by using _____.

- (A) low-velocity fog
- (B) foam spray
- (C) a straight stream of water
- (D) high-velocity fog

If choice D is selected set score to 1.

39. A person has fallen overboard and is being picked up with a lifeboat. If the person appears in danger of drowning, the lifeboat should make _____.

- (A) an approach across the wind
- (B) an approach from windward
- (C) the most direct approach
- (D) an approach from leeward

If choice C is selected set score to 1.

40. When a man who is conscious has fallen overboard is being picked up by a lifeboat, the boat should approach with the wind _____.

- (A) ahead and the victim just off the bow
- (B) just off the bow and the victim to leeward
- (C) just off the bow and the victim to windward
- (D) astern and the victim just off the bow

If choice B is selected set score to 1.

41. While you are on watch, you learn that a crewman has not been seen on board for the past three hours. Which type of turn is best in this man-overboard situation?

- (A) Scharnow
- (B) Racetrack
- (C) Round
- (D) Single turn of 180°

If choice A is selected set score to 1.

42. You are on watch and see a man fall overboard. Which man overboard turn should NOT be used in this situation?

- (A) Racetrack
- (B) Scharnow
- (C) Single turn
- (D) Williamson

If choice B is selected set score to 1.

43. A situation has occurred in which your vessel must be towed. When the towing vessel passes the towing line to you, you should secure the line _____.

- (A) to the forward part of the deckhouse
- (B) to the forward-most bitts
- (C) to the base of the foremast
- (D) at the stern

If choice B is selected set score to 1.

44. You are approaching a ship that is broken down and are preparing to take her in tow. BEFORE positioning your vessel to pass the towline, you must _____.

- (A) compare the rate of drift between the ships
- (B) install chafing gear on the towline
- (C) secure the bitter end of the towing hawser to prevent loss if the tow is slipped
- (D) have traveling lizards rigged to guide the towline while it is paid-out

If choice A is selected set score to 1.

45. You are at sea and not in a special area as defined in ANNEX V of MARPOL. How many nautical miles from land must you be to discharge ground garbage that will pass through a one-inch (25 mm) screen into the sea?

- (A) 3 nm
- (B) 25 nm
- (C) 6 nm
- (D) 12 nm

If choice A is selected set score to 1.

46. When are Operators of Uninspected Passenger Vessels are required to keep their Coast Guard credential aboard their vessel?

- (A) At all times
- (B) only when operating more than one mile from shore
- (C) only when operating at night
- (D) only when carrying passengers for hire

If choice D is selected set score to 1.

- 47.** You are the first vessel to arrive at the scene of a distress. Due to the volume of traffic on the radio, you are unable to communicate with the vessel in distress. Which action should you take?
- (A) Broadcast "Charlie Quebec-Mayday-Quiet".
 - (B) Switch to flag hoists.
 - (C) Key the microphone three times in quick succession.
 - (D) Broadcast "Seelonce Distress".

If choice D is selected set score to 1.

- 48.** You see an iceberg that has not been reported. What kind of radio message do you transmit to warn others?
- (A) Routine message
 - (B) Safety message
 - (C) Distress message
 - (D) Urgency message

If choice B is selected set score to 1.

- 49.** The color of rockets, shells, or rocket parachute flares used to indicate that the vessel is in distress and requires immediate assistance is _____.
- (A) white
 - (B) green
 - (C) yellow
 - (D) red

If choice D is selected set score to 1.

- 50.** You are using the anchor to steady the bow while maneuvering. You have the proper scope of anchor cable when the _____.
- (A) scope is not more than 5 times the depth of the water
 - (B) bow is held in position with the engines coming slowly ahead
 - (C) cable enters the water at an angle between 60° and 85° from the horizontal
 - (D) anchor is just touching the bottom

If choice B is selected set score to 1.

- 51.** 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. The amount of chain you should pay out is _____.
- (A) equal to the depth of the water
 - (B) 1 1/2 to 2 times the depth of the water
 - (C) 5 to 7 times the depth of the water
 - (D) you should NEVER use the anchor to help in docking

If choice B is selected set score to 1.

- 52.** The enclosed area defined as the intersection of the surface of the water and the hull of a vessel is the _____.
- (A) amidships plane
 - (B) longitudinal reference plane
 - (C) waterplane
 - (D) baseline

If choice C is selected set score to 1.

- 53.** The horizontal port or starboard movement of a vessel is called _____.
- (A) heave
 - (B) surge
 - (C) yaw
 - (D) sway

If choice D is selected set score to 1.

- 54.** Before starting any diesel or gasoline engine, which of the following must be checked?
- (A) Exhaust discharge
 - (B) Flow of cooling water
 - (C) Oil level
 - (D) All of the above

If choice C is selected set score to 1.

- 55.** To find the cause of a gasoline engine's failure to start, you should _____.
- (A) break the joint in the fuel line at the engine and let the gas run in the bilges
 - (B) ventilate the space, then check the battery, spark plugs, carburetor, and fuel line
 - (C) prime the engine with ether through spark plug openings
 - (D) disconnect the wires at the spark plugs and make the spark jump the gap

If choice B is selected set score to 1.

56. Unless otherwise stated, the term "approved" applied to a vessel's equipment, means approved by the _____ . (small passenger vessel regulations)

- (A) American Bureau of Shipping
- (B) Board of Fire Underwriters
- (C) Congress of the United States
- (D) Commandant of the Coast Guard

If choice D is selected set score to 1.

57. A Certificate of Inspection issued to a small passenger vessel describes _____.

- (A) any special conditions or restrictions on her operation
- (B) the name of the managing operator
- (C) the minimum fire extinguishing equipment, lifejackets, survival and rescue craft she must carry
- (D) All the above

If choice D is selected set score to 1.

58. On small passenger vessels bunks installed in overnight passenger accommodation spaces _____.

- (A) must not be located more than 3 high, fitted with a suitable aid to access bunks more than 5' above deck with suitable aids to access bunks more than 5' above deck
- (B) must be no less than 74" long and 24" wide with 24" of clear space above
- (C) must be immediately adjacent to an aisle leading to a means of escape
- (D) All of the above

If choice D is selected set score to 1.

59. Penetrations and openings in watertight bulkheads in a small passenger vessel less than 100 gross tons must _____.

- (A) be kept as high and as far inboard as possible
- (B) not contain sluice valves that allow water to flow freely from one watertight compartment to another
- (C) have some means to make them watertight
- (D) All of the above

If choice D is selected set score to 1.

60. Small passenger vessels on rivers routes in cold water must be provided with life floats of an aggregate capacity to accommodate _____.

- (A) not less than 50% of all passengers on board at the time
- (B) 25% of the crew and 50% of all passengers allowed to be carried
- (C) at least 50% of all persons on board or meet certain construction standards
- (D) All persons on board (100% of all passengers and crew)

If choice C is selected set score to 1.

61. Regulations require that approved buoyant work vests _____. (small passenger vessel regulations)

- (A) shall be stowed in a place inaccessible to passengers
- (B) shall be stowed separately from the required life jackets
- (C) may not be carried on inspected vessels
- (D) may be substituted for 10% of the required life jackets

If choice B is selected set score to 1.

62. Fixed carbon dioxide fire extinguishing systems shall be installed to protect enclosed machinery and fuel tank spaces of all vessels using gasoline or other fuel having a flash point of _____. (small passenger vessel regulations)

- (A) 0°F or lower
- (B) 75°F or lower
- (C) 90°F or lower
- (D) 110°F or lower

If choice D is selected set score to 1.

63. What would be an example of a B-I extinguisher? (small passenger vessel regulations)

- (A) 2 pound dry chemical
- (B) 2.5 gallon foam
- (C) 10 pound carbon dioxide
- (D) 5 pound foam

If choice A is selected set score to 1.

64. On small passenger vessels how many supply and exhaust ducts are required in each enclosed space containing gasoline powered machinery or gasoline fuel tanks?

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

If choice C is selected set score to 1.

65. On small passenger vessels cooking and heating equipment _____.

- (A) cannot use gasoline
- (B) may use liquefied petroleum gas
- (C) shall be suitable for marine use
- (D) All of the above

If choice D is selected set score to 1.

66. Who shall test every small passenger vessel's steering gear prior to getting underway for the day's operations?

- (A) a Mate or Designated Duty Engineer
- (B) the Master
- (C) a credential Engineer
- (D) the Mate on watch

If choice B is selected set score to 1.

67. The Master of a small passenger vessel fitted with loading doors must ensure that the doors are closed, watertight and secured _____.

- (A) when loading cargo
- (B) at all times, at the dock or underway when the loading door is not actually being used for passage
- (C) when leaving the dock
- (D) at all times when underway unless operating on protected or partially protected waters

If choice D is selected set score to 1.

68. What is placed on the underside of an inflatable liferaft to help prevent it from being skidded by the wind or overturned?

- (A) Strikes
- (B) Sea anchor
- (C) A keel
- (D) Ballast bags

If choice D is selected set score to 1.

69. To disengage a survival craft suspended from the cable above the water, you must pull the safety pin and _____.

- (A) pull the hook release handle and use the ratchet bar
- (B) pull the hook release handle
- (C) use the ratchet bar and depress the retainer
- (D) pull the hook release handle and depress the retainer

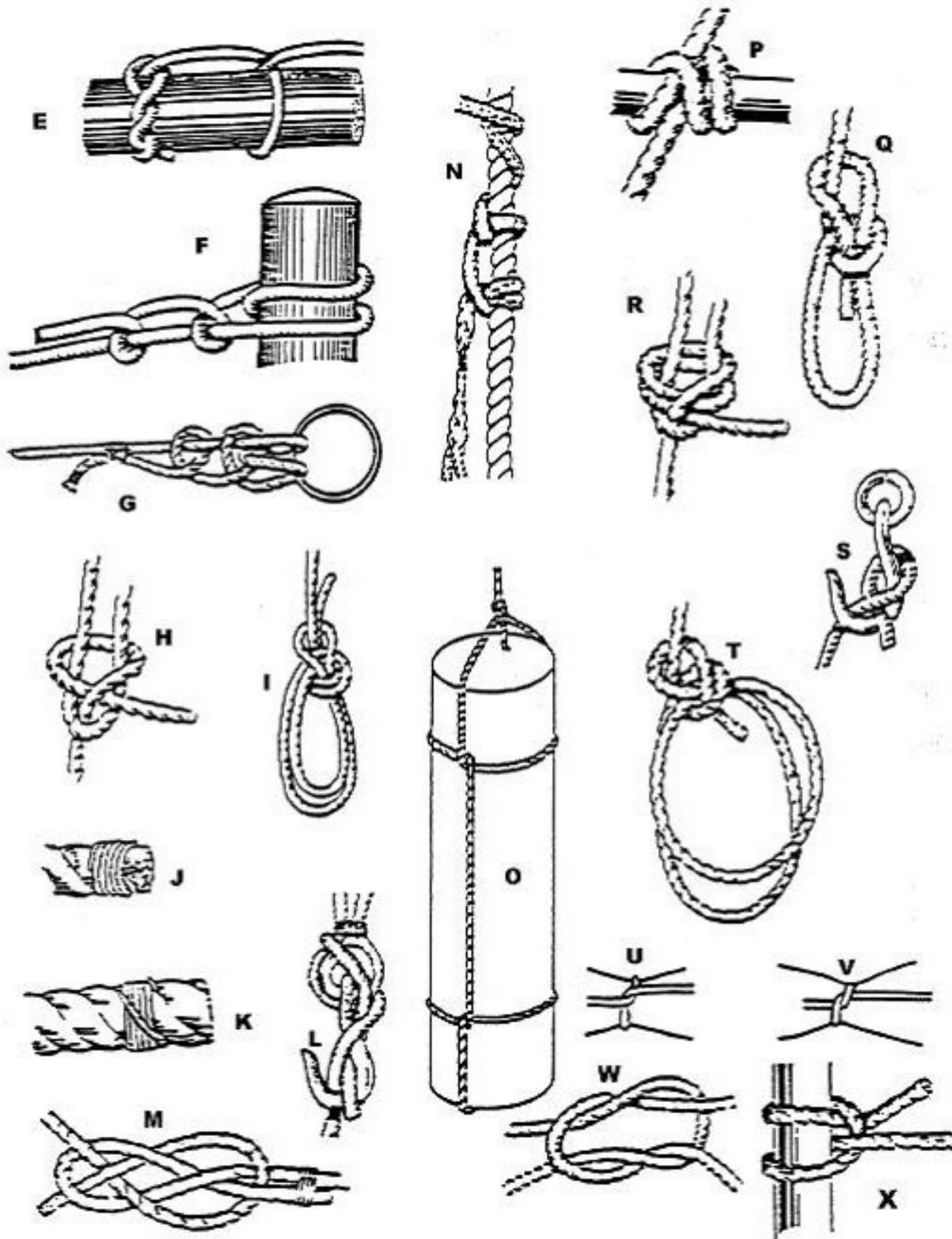
If choice A is selected set score to 1.

70. Normally It is desirable to have screens on the vents of potable water tanks to _____.

- (A) prevent backups
- (B) prevent explosions
- (C) filter the incoming air
- (D) stop insects from entering

If choice D is selected set score to 1.

D030DG



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