

U.S.C.G. Merchant Marine Exam

Master TV to Master Less than 500 Gross Registered Tons
Oceans or Near Coastal

Q132 Deck General - Deck Safety

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. Your containership has a container displaying a hazardous cargo placard. The placard has the number 2224 on it. This indicates that it is carrying what cargo?
- (A) Propadiene, inhibited
 - (B) Benzonitrile
 - (C) Acrylic acid
 - (D) Hexanol

If choice B is selected set score to 1.

2. When referring to quantity of barite in a P-tank, ullage is the _____.
- (A) percentage of barite in the tank
 - (B) distance of the barite surface above the tank bottom
 - (C) distance of the barite surface below the tank cover
 - (D) total weight of barite in UPC (ullages per centimeter)

If choice C is selected set score to 1.

3. When may a seaman on a vessel engaged in foreign trade be paid before earning the wages?
- (A) Wages equivalent to three days base wage may be advanced upon arrival in a foreign port.
 - (B) Wages up to fifty percent of the seaman's base wage maybe advanced upon proof of serious family illness.
 - (C) The advance of wages is at the discretion of the master; however, a seaman cannot be in an overpaid status at signoff.
 - (D) The seaman may only draw an advance on earned wages.

If choice D is selected set score to 1.

4. The Officers Competency Certificates Convention of 1936 applies to all of these vessels operating seaward of the boundary line EXCEPT a/an _____.
- (A) offshore supply vessel over 200 gross tons
 - (B) uninspected towing vessel of less than 200 gross tons
 - (C) inspected towing vessel of 305 gross tons
 - (D) passenger vessel of 295 gross tons

If choice B is selected set score to 1.

5. Rotation of the steering wheel on the navigation bridge initiates oil pressure being applied to the steering gear rams by _____.

- (A) moving the automatic differential valve
- (B) varying the angle of a tilting box or eccentricity of a floating ring
- (C) moving the follow up indicator which regulates the six-way valve
- (D) regulating the oil flow with the six-way valve

If choice B is selected set score to 1.

6. Which statement about the deck line is TRUE?

- (A) A vessel with wooden planks on a steel deck will have the deck line marked at the intersection of the upper line of the wood sheathing with the side shell.
- (B) The deck edge is marked at the intersection of the freeboard deck with the side shell, at the lowest point of sheer, with the vessel at even trim.
- (C) The top of the deck line is marked at the highest point of the freeboard deck, including camber, at the midships point.
- (D) On a vessel with a rounded stringer-sheer plate, the deck line is marked where the stringer plate turns down from the plane of the deck line.

If choice A is selected set score to 1.

7. Fire hose stations shall be marked in red letters and figures such as Fire Station No. "1", "2", "3", etc. The height of the letters and figures must be at least _____.

- (A) 1/2 inch
- (B) 1 inch
- (C) 1-1/2 inches
- (D) 2 inches

If choice D is selected set score to 1.

8. Reserve buoyancy is _____.

- (A) transverse watertight bulkheads
- (B) a measure of metacentric height
- (C) the watertight part of a vessel above the waterline
- (D) the void portion of the ship below the waterline which is enclosed and watertight

If choice C is selected set score to 1.

9. What condition must be met during a stability test on an inspected vessel?

- (A) all dunnage, tools, and extraneous items are secured
- (B) the vessel must be moored snugly
- (C) each tank must be partially full to show it does not leak
- (D) water under vessel must be deep enough to prevent grounding

If choice D is selected set score to 1.

10. In stopping distances of vessels, "head reach" can best be described as the _____.

- (A) speed at which a vessel should proceed to ensure that she will run a predetermined distance, once her engines have been stopped
- (B) difference between the vessel's speed through the water at any instant and the new speed ordered on the telegraph
- (C) distance the vessel has actually run through the water since a change of speed was ordered
- (D) distance the vessel will run between taking action to stop her and being stationary in the water

If choice D is selected set score to 1.

11. Generally, you can best keep a vessel under steering control when the vessel has _____.

- (A) no way on, with engines full ahead
- (B) sternway
- (C) headway
- (D) no way on, with engines stopped

If choice C is selected set score to 1.

12. Which ending is NOT acceptable in a wire rope that is free to rotate when hoisting?

- (A) Liverpool eye splice
- (B) Eye formed with a pressure clamped sleeve
- (C) Poured socket
- (D) Eye formed by clips

If choice A is selected set score to 1.

13. On an inspected vessel, when may a stability test may be dispensed with?

- (A) projected cost is unreasonable
- (B) Coast Guard does not have a qualified inspector available
- (C) Coast Guard has the approved stability test results of a sister vessel
- (D) vessel is of a proven design

If choice C is selected set score to 1.

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

If choice A is selected set score to 1.

15. Which statement is TRUE?

- (A) Key letters or abbreviations may not be used in GMDSS radio logbooks under any circumstance.
- (B) Urgency communications do not need to be entered in the GMDSS radio log.
- (C) Both of the above
- (D) None of the above

If choice D is selected set score to 1.

16. Most liquified gas cargoes are flammable, and are carried at or close to their boiling point. What will happen if they are released into the atmosphere?

- (A) freeze and possibly cause structural damage
- (B) burn, if it's within its flammable range and has an ignition source
- (C) result in sloshing in the tank which could make the ship unstable
- (D) allow air to enter the system causing polymerization

If choice B is selected set score to 1.

17. The heel block is located _____.

- (A) at the cargo hook
- (B) near the midships guy
- (C) near the spider band
- (D) at the base of the boom

If choice D is selected set score to 1.

- 18.** You are loading at port A, governed by the summer load line mark, for a voyage to port B, governed by the winter mark. The fresh water allowance is 10", and the hydrometer reads 1.020. Which statement is TRUE?
- (A) You may load to the summer mark plus 2 inches if you will be at the winter mark when entering the winter zone.
 - (B) You may not load beyond the summer mark plus 8 inches brackish water allowance.
 - (C) You may not load beyond the winter mark except for 2 inches brackish water allowance.
 - (D) You may not load beyond the summer mark and must be at the winter mark upon arrival at port B.

If choice A is selected set score to 1.

- 19.** You are approaching the pilot station with the wind fine on the starboard bow and making about 3 knots. You can help to calm the seas by taking what action just before the pilot boat comes along on the port side?
- (A) Giving right full rudder
 - (B) Stopping the engines
 - (C) Backing full
 - (D) A short burst of ahead full with left full rudder

If choice D is selected set score to 1.

- 20.** The wire rope used for cargo handling on board your vessel has a safe working load of eight tons. It shall be able to withstand a breaking test load of _____.
- (A) 32 tons
 - (B) 40 tons
 - (C) 48 tons
 - (D) 64 tons

If choice B is selected set score to 1.

- 21.** The turning circle of a vessel making a turn over 360 degrees is the path followed by the _____.
- (A) center of gravity
 - (B) centerline
 - (C) bow
 - (D) bridge

If choice A is selected set score to 1.

22. Which of the following is an inherent advantage possessed by a twin-screw vessel in opposition to a single-screw vessel?

- (A) The drag effect will be cancelled out
- (B) The correct trim will be obtained more easily
- (C) The vessel's speed will be increased
- (D) The side forces will be cancelled out

If choice D is selected set score to 1.

23. When can a work vest be substituted for a lifejacket in the total count of the required lifesaving gear?

- (A) When it is approved by the Coast Guard
- (B) When stowed away from the ring buoys
- (C) When working near or over the water
- (D) A work vest may never be counted as a lifejacket.

If choice D is selected set score to 1.

24. Under normal operating conditions, the rudder is hydraulically locked unless _____.

- (A) an electric power system failure occurs at the steering gear
- (B) the manual trick wheel is engaged for steering
- (C) a rudder order is given by the control system
- (D) the variable stroke pump is off stroke

If choice C is selected set score to 1.

25. What is used to prevent accidental flooding of a double bottom or peak tanks in the event of a pipe rupture due to collision?

- (A) Separate lines are provided for filling and pumping these tanks.
- (B) All tanks must be served by the fewest possible number of pipes to reduce the possibility of rupture.
- (C) Suction lines are fitted with a non-return valve
- (D) Pipe lines must run vertically from the tank to a point above the margin line before turning fore or aft towards the pump.

If choice C is selected set score to 1.

- 26.** Your vessel is damaged with no list, but down by the stern. There is progressive flooding and trim by the stern is increasing. What is the effect on transverse stability after the deck edge at the stern is submerged?
- (A) KG increases due to the weight of the added water on deck
 - (B) KB increases, increasing BM and therefore GM
 - (C) There is no effect on transverse stability.
 - (D) BM decreases from loss of water plane and greater volume.

If choice D is selected set score to 1.

- 27.** In twin-screw engine installations while going ahead, maneuvering qualities are most effective when the tops of the propeller blades both turn _____.
- (A) outboard from the center
 - (B) inboard toward the center
 - (C) to starboard
 - (D) to port

If choice A is selected set score to 1.

- 28.** 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.

If choice C is selected set score to 1.

- 29.** Which statement is TRUE concerning radiotelephones on board towing vessels?
- (A) The officer in charge of the wheelhouse is considered to have the radiotelephone watch.
 - (B) Only the Master of the vessel is allowed to speak over the radiotelephone.
 - (C) There cannot be a radiotelephone located anywhere except in the wheelhouse.
 - (D) Only distress messages may be transmitted over channel 13.

If choice A is selected set score to 1.

- 30.** If the cause of a sudden severe list is negative initial stability, counterflooding into empty tanks may _____.
- (A) increase the righting moment
 - (B) cause an increase in the righting arm
 - (C) bring the vessel to an upright equilibrium position
 - (D) cause the vessel to flop to a greater angle

If choice D is selected set score to 1.

31. The national distress, safety, and calling frequency is channel _____.

- (A) 18
- (B) 22
- (C) 13
- (D) 16

If choice D is selected set score to 1.

32. In illustration D033DG below, which letter indicates a longitudinal?

- (A) L
- (B) C
- (C) E
- (D) M

If choice A is selected set score to 1.

33. What is the purpose of the freeing ports on a vessel with solid bulwarks?

- (A) Allow water which may be shipped on deck to flow off rapidly
- (B) Lighten the above deck weight caused by a solid bulwark
- (C) Prevent the formation of any unusual stress concentration points
- (D) Permit easy jettisoning of deck cargo in an emergency

If choice A is selected set score to 1.

34. You have berthed in a port area with other tank vessels. What signal is displayed by a vessel to indicate it is transferring flammable or combustible liquid cargo?

- (A) An illuminated red and yellow caution flag
- (B) A flashing yellow light
- (C) A green light visible all around the horizon
- (D) A red light visible all around the horizon

If choice D is selected set score to 1.

35. In an emergency, the electro-hydraulic steering units can be directly controlled by the _____.

- (A) trick wheel
- (B) follow-up gear
- (C) rapson slide
- (D) receiver unit

If choice A is selected set score to 1.

36. The load chart of a crane enables the operator to combine the load radius with boom length to determine the _____.

- (A) allowable load
- (B) maximum counter weight required
- (C) minimum horsepower required
- (D) hoist rope strength

If choice A is selected set score to 1.

37. What would NOT require that a detailed report of the release of hazardous cargo be made to the Department of Transportation?

- (A) Heavy weather causes damage to packages of a hazardous liquid that is subsequently pumped out at sea through the bilge pumping system.
- (B) The valve on an empty portable tank that contained acetone is accidentally opened and some of the residue escapes to the open sea.
- (C) Part of your deck cargo of five gallon cans of paint is damaged and leaking so you jettison them to eliminate the fire hazard.
- (D) A carboy of nitric acid is broken on deck while loading and is flushed overboard with no injury or damage.

If choice C is selected set score to 1.

38. Which spaces are required to be segregated from cargo tanks carrying grades A, B, C, or D cargoes?

- (A) Enclosed deck spaces
- (B) Cofferdams
- (C) Navigation spaces
- (D) Pump rooms

If choice C is selected set score to 1.

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

If choice C is selected set score to 1.

40. If you are bunkering and you close off one tank in the line of tanks being filled, the rate of flow to other open tanks on the same line will _____.

- (A) remain constant
- (B) increase
- (C) decrease
- (D) stop

If choice B is selected set score to 1.

41. Which statement is FALSE concerning precautions during fueling operations?

- (A) Fuel tanks should be topped off with no room for expansion.
- (B) All windows, doors, hatches, etc. should be closed.
- (C) A fire extinguisher should be kept nearby.
- (D) All engines, motors, fans, etc. should be shut down when fueling.

If choice A is selected set score to 1.

42. 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

If choice B is selected set score to 1.

43. Your vessel has gone aground in waters where the tide is falling. The BEST action you can take is to _____.

- (A) shift the vessel's load forward and wait until the next high tide
- (B) set out a kedge anchor
- (C) shift the vessel's load aft and repeatedly surge the engine(s) astern
- (D) slowly bring the engine(s) to full speed astern

If choice B is selected set score to 1.

44. What can be caused by severe airway burns?

- (A) nosebleed
- (B) complete obstruction of respiratory passages
- (C) reddening of cheeks
- (D) nausea

If choice B is selected set score to 1.

45. Which is the most serious type of fracture?

- (A) Compound
- (B) Closed
- (C) Crack
- (D) Greenstick

If choice A is selected set score to 1.

46. What is MOST important when administering artificial respiration?

- (A) clear airways
- (B) use the rhythmic pressure method
- (C) monitor blood pressure
- (D) know all approved methods

If choice A is selected set score to 1.

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

If choice B is selected set score to 1.

48. How long must the GMDSS radio log be retained on board before sending it to the shoreside licensee?

- (A) At least 30 days after the last entry
- (B) At least two years after the last entry
- (C) At least 90 days after the last entry
- (D) At least one year after the last entry

If choice A is selected set score to 1.

49. What is the meaning of the signal VJ 8 when sent by the International Code of Signals?

- (A) You should stop hauling your warps.
- (B) Low clouds cover 8 octants of the sky.
- (C) Winds of force 8 are expected.
- (D) A gale is expected from the north.

If choice D is selected set score to 1.

50. What is the meaning of the signal "G1325"?

- (A) The longitude is 13°25'.
- (B) The latitude is 13°25'.
- (C) The zone time is 1325.
- (D) The GMT is 1325.

If choice A is selected set score to 1.

51. While communicating with a shore station concerning an injured female, your message should indicate the subject's age is 32. Which code would your message contain?

- (A) MAJ 32
- (B) MAK 32
- (C) MAL 32
- (D) MAO 32

If choice B is selected set score to 1.

52. On a small boat, if someone fell overboard and you did not know over which side the person fell, you should _____.

- (A) first put the rudder hard over in either direction
- (B) immediately reverse the engines
- (C) stop the propellers from turning and throw a ring buoy over the side
- (D) increase speed to full to get the vessel away from the person

If choice C is selected set score to 1.

53. How should latitude 54°18.9'N be written when preparing an AMVER report?

- (A) 54.3N
- (B) 0543N
- (C) 54°N
- (D) 5419N

If choice D is selected set score to 1.

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

If choice D is selected set score to 1.

55. When making a Scharnow turn, the _____.

- (A) rudder must be put over towards the side the man went over
- (B) man overboard must be not more than 300 feet astern when starting the turn
- (C) rudder is put hard over and the initial turn is maintained until about 240° from the original course
- (D) initial turn direction is away from the side the man went over

If choice C is selected set score to 1.

56. What is the name of the mark indicated by the letter E in illustration D003DG below?

- (A) Fresh water line
- (B) Winter water line
- (C) Summer water line
- (D) Tropical water line

If choice C is selected set score to 1.

57. SOLAS requires a lifesaving training manual be provided in each crew cabin or in the _____.

- (A) engineering control station
- (B) recreation and messrooms
- (C) fire control room
- (D) bridge

If choice B is selected set score to 1.

58. Due to the nature of a vessel's construction for a particular trade, it does not fully comply with the provisions of SOLAS. Where will this be indicated?

- (A) On the Exemption Certificate
- (B) Nowhere; the vessel must comply to engage in international trade.
- (C) On the face of the Certificate of Inspection
- (D) On the reverse of the particular SOLAS certificate affected

If choice A is selected set score to 1.

59. What is the period of validity of the SOLAS required Cargo Ship Safety Construction Certificate?

- (A) 12 months
- (B) 24 months
- (C) 48 months
- (D) 60 months

If choice D is selected set score to 1.

60. The Safety of Life at Sea Convention was developed by the _____.

- (A) American Institute of Maritime Shipping
- (B) American Bureau of Shipping
- (C) U.S. Coast Guard
- (D) International Maritime Organization

If choice D is selected set score to 1.

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

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

If choice A is selected set score to 1.

62. A seaman deserts the vessel in a foreign port. What should the Master do with any of the deserter's personal effects remaining on board?

- (A) Transfer them to the appropriate district court of the U.S. at the end of the voyage.
- (B) Donate them to a local charity upon return to the United States.
- (C) Sell them at auction and deposit the money in the ship's morale or welfare fund.
- (D) Inventory them, make an appropriate entry in the Official Logbook and dispose of them at sea.

If choice A is selected set score to 1.

63. What is the penalty for desertion?

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

If choice D is selected set score to 1.

64. Wages due a seaman may be attached by the court for the _____.

- (A) payment of monthly bills
- (B) support of a minor child
- (C) payment of creditors
- (D) All of the above

If choice B is selected set score to 1.

65. On a sea going towing vessel of 150 gross tons, there are six (6) seamen in the deck crew. How many certificated able seamen are required if the voyage is over 600 miles?

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

If choice D is selected set score to 1.

66. The Articles of Agreement _____.

- (A) is also known as a Merchant Mariner's Document
- (B) advises the crew of the conditions of employment
- (C) designates the quarters a seaman will occupy during a voyage
- (D) are signed by each crewmember at the end of the voyage

If choice B is selected set score to 1.

67. On an oceangoing vessel, for each person a lifeboat (without desalting kits) is certified to carry, the boat must be supplied with _____.

- (A) 3 liters of water
- (B) a signaling whistle
- (C) a life preserver
- (D) 2 pounds of condensed milk

If choice A is selected set score to 1.

68. Where, due to the arrangement of the vessel, lifejackets may become inaccessible, additional lifejackets shall be carried _____.

- (A) for 50% of the crew of the vessel, not including those assigned to engineering duties
- (B) for the people on bridge watch
- (C) as determined by the OCMI
- (D) for the forward lifeboats

If choice C is selected set score to 1.

69. The breaking strength of the service lines of the rockets used with an impulse-projected, rocket type line throwing appliances is _____.

- (A) 300 lbs
- (B) 500 lbs
- (C) 1000 lbs
- (D) 1500 lbs

If choice B is selected set score to 1.

70. The lights on the outside of the canopy on an inflatable liferaft operate _____.

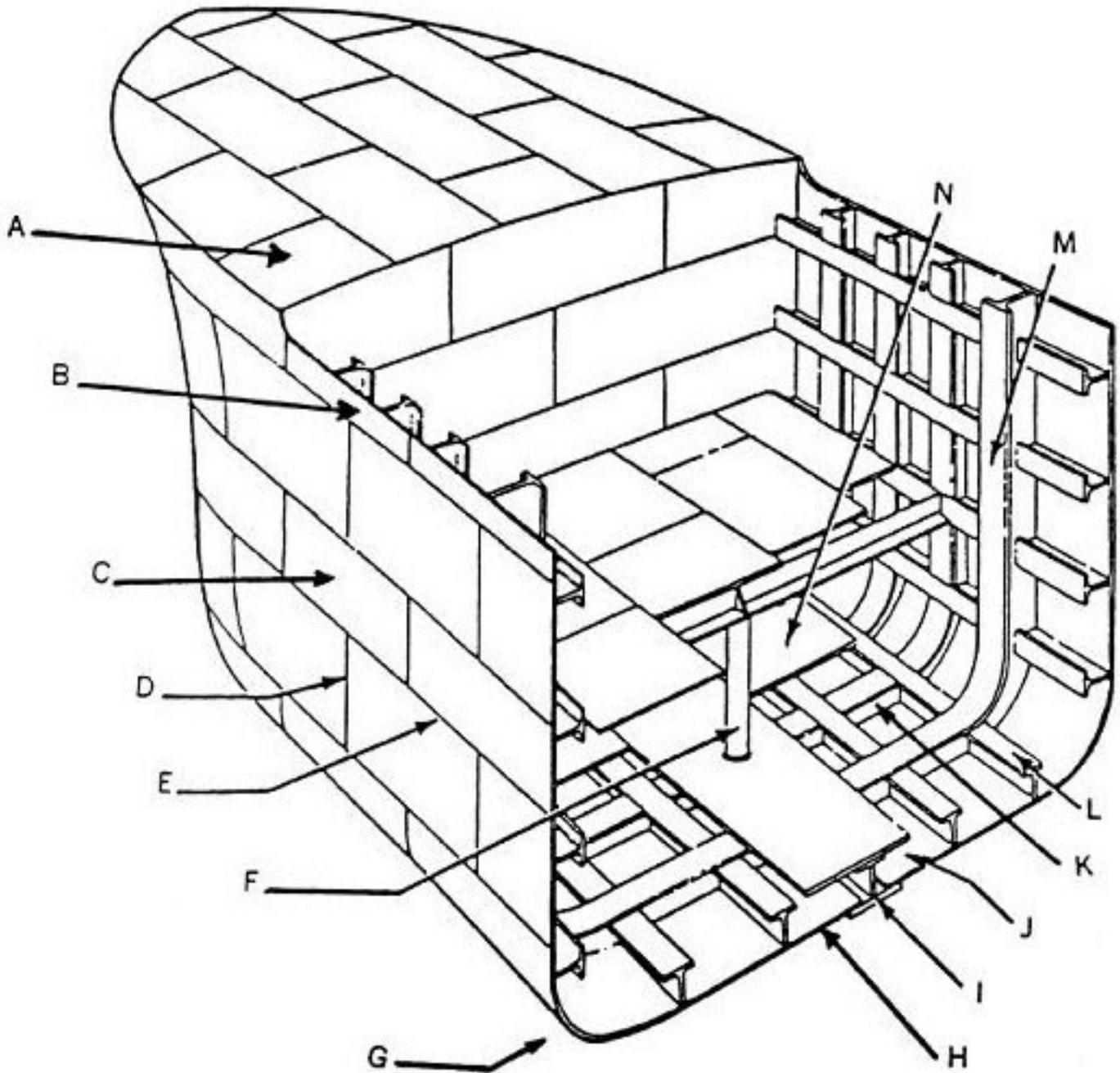
- (A) by a light sensor
- (B) by a switch at each light
- (C) by turning the globe clockwise
- (D) automatically when the raft is inflated

If choice D is selected set score to 1.

D003DG



D033DG



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