

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q136 Deck General

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. 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.

2. Which portable fire extinguisher is classified as a type B-III extinguisher?

- (A) 12 gallon soda acid
- (B) 20 gallon foam
- (C) 30 pound carbon dioxide
- (D) 20 pound dry chemical

If choice D is selected set score to 1.

3. 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

If choice A is selected set score to 1.

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

If choice B is selected set score to 1.

5. When the period of beam seas equals the natural rolling period of a vessel, what will most likely occur?

- ☐ (A) Excessive yawing
- ☐ (B) Excessive pitching
- ☒ (C) Excessive rolling
- ☐ (D) No change should be evident

If choice C is selected set score to 1.

6. Which indicates the holding capability of an anchor?

- ☐ (A) The shape of the anchor
- ☐ (B) The size of the vessel and its draft
- ☐ (C) The stowage of the anchor on board
- ☒ (D) The anchor's ability to dig in

If choice D is selected set score to 1.

7. Which agency must approve the Safety equipment on board inspected vessels?

- ☐ (A) The Occupational Safety and Health Administration (OSHA)
- ☐ (B) The Safety Standards Bureau
- ☒ (C) The U.S. Coast Guard
- ☐ (D) The National Safety Council

If choice C is selected set score to 1.

8. Which of the signals listed is required to be displayed at night while bunkering at a dock?

- ☒ (A) One red light
- ☐ (B) Two red lights
- ☐ (C) One red light over a white light
- ☐ (D) One red light over a yellow light

If choice A is selected set score to 1.

9. Fuel oil tank vents are fitted with a screen which will stop _____.

- ☐ (A) air from entering the tank vent
- ☐ (B) oil from flowing out of the tank vent
- ☒ (C) flames on deck from entering the tank vent
- ☐ (D) vapors from leaving the tank vent

If choice C is selected set score to 1.

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

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

If choice A is selected set score to 1.

11. What does a whipping on a fiber line accomplish?

- (A) Becomes part of a splice
- (B) Protects your hands
- (C) Strengthens the line
- (D) Keeps the ends of the line from fraying

If choice D is selected set score to 1.

12. What is the name of the mark indicated by the letter F in illustration D003DG below?

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

If choice A is selected set score to 1.

13. Your vessel is running in a following sea. Which term defines the motion your vessel is experiencing?

- (A) Yawing
- (B) Heaving to
- (C) Pounding
- (D) Reduced speed

If choice A is selected set score to 1.

14. When stowing hazardous materials on deck, lashing of such cargo is permitted if _____.

- (A) a wooden bin is constructed of at least 2-inch dunnage and bolted together
- (B) the cargo is lashed to the adjacent guard rails
- (C) the lashings are secured to deck pad eyes
- (D) there is at least 3 inches of dunnage on deck

If choice C is selected set score to 1.

15. A tanker is loaded with 8,000 barrels of fuel oil. The temperature of the cargo is 50°F. API gravity is 37°. The volume correction factor (VCF) is .0005. What is the net amount in gallons of cargo loaded?

- ☐ (A) 334,320
- ☒ (B) 337,680
- ☐ (C) 437,800
- ☐ (D) 442,200

If choice B is selected set score to 1.

16. You are on watch at sea at night and a fire breaks out in #3 hold. What should be done IMMEDIATELY?

- ☐ (A) Cool the deck to contain the fire.
- ☐ (B) Flood the space with CO₂ from the fixed fire fighting system.
- ☒ (C) Shut down the cargo hold ventilation.
- ☐ (D) Proceed to the space and determine the extent of the fire.

If choice C is selected set score to 1.

17. Which international body is responsible for drafting the convention prohibiting marine pollution (MARPOL)?

- ☐ (A) Association of Seafaring Nations
- ☐ (B) International Association of Shipping
- ☒ (C) International Maritime Organization
- ☐ (D) Maritime Advisory Council

If choice C is selected set score to 1.

18. Which of the following statements is TRUE regarding crane operations?

- ☒ (A) The crane operators and signalman must be familiar with the correct hand signals.
- ☐ (B) The aft cranes can be operated from the aft steering station.
- ☐ (C) The forward cranes can be operated from the bridge.
- ☐ (D) Radio communications allow the crane operator to disregard the use of hand signals.

If choice A is selected set score to 1.

19. Static electricity may be built up by the _____.

- ☐ (A) spraying or splashing of petroleum
- ☐ (B) settling of solids or water in petroleum
- ☐ (C) flow of petroleum through pipes
- ☒ (D) All of the above

If choice D is selected set score to 1.

20. A seaman assaults the Second Mate and injures him with a beer bottle while the ship is at sea. The incident is logged in the Official Logbook. In subsequent suspension and revocation proceedings against the seaman, according to the regulations, which statement is TRUE?

- (A) The logbook entry is prima facie evidence of the facts if it complies with the law
- (B) The logbook is inadmissible if the logbook entries do not conform to the law
- (C) The case will be dismissed if the logbook entries are improperly made
- (D) The Second Mate and the Master must testify as to the facts of the assault

If choice A is selected set score to 1.

21. Which is the proper term used to describe a stream of water immediately surrounding a moving vessel's hull, flowing in the same direction as the vessel?

- (A) Forward current
- (B) Wake current
- (C) Directional current
- (D) Propeller current

If choice B is selected set score to 1.

22. Your vessel is taking on fuel when a small leak develops in the hose. You order the pumping stopped. Before you resume pumping, you should _____.

- (A) repair the hose with a patch
- (B) replace the hose
- (C) notify the terminal superintendent
- (D) place a large drip pan under the leak and plug the scuppers

If choice B is selected set score to 1.

23. Mooring with two bow anchors has which major advantage over anchoring with one bow anchor?

- (A) The vessel will not swing with a change in wind.
- (B) The radius of the vessel's swing will be shortened.
- (C) A mooring approach may be made from any direction.
- (D) The vessel will not reverse direction in a tidal current.

If choice B is selected set score to 1.

24. An icebreaker assisting a vessel through an ice field displays a visual signal consisting of the code letter "S" (Sierra). What does this signal indicate?

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

If choice C is selected set score to 1.

25. You are on a vessel carrying liquefied butadiene in bulk. Which document is NOT required to be either in the wheelhouse or easily accessible to the person on watch while underway?

- ☐ (A) Shipping document
- ☒ (B) Cargo manual
- ☐ (C) Cargo information card
- ☐ (D) Certificate of Inspection

If choice B is selected set score to 1.

26. What is the function of the "rudder adjustment" control on an autopilot steering stand?

- ☐ (A) To align the rudder angle indicator with the true rudder angle
- ☐ (B) To set the departure from base course before actuating the rudder
- ☐ (C) To set the rate at which the rudder responds
- ☒ (D) To set the number of degrees of rudder per degree of course error

If choice D is selected set score to 1.

27. When stripping a tank, what will excessive air in the suction line cause?

- ☒ (A) A loss of suction
- ☐ (B) An increase of suction
- ☐ (C) An over pressurized line
- ☐ (D) Back pressure

If choice A is selected set score to 1.

28. Which tensioning device is used with webbing to secure light vehicles aboard Ro-Ro vessels?

- ☐ (A) Adjust-a-matic tensioner
- ☐ (B) Chain lever
- ☒ (C) Ratchet tensioner
- ☐ (D) Turnbuckle

If choice C is selected set score to 1.

29. What form of ice is of land origin?

- ☐ (A) Spicule
- ☐ (B) Shuga
- ☒ (C) Bergy bit
- ☐ (D) Floe

If choice C is selected set score to 1.

30. All entries in the Official Logbook must be signed by the Master and which other person?

- ☐ (A) The Union Representative
- ☐ (B) Only the person about whom the entry concerns
- ☒ (C) One other crew member
- ☐ (D) No one else

If choice C is selected set score to 1.

31. Which is the nomenclature for the metal plates that cover the top of the hawsepipe on a vessel?

- ☐ (A) The stop waters
- ☐ (B) The footings
- ☐ (C) The plugs
- ☒ (D) The buckler plates

If choice D is selected set score to 1.

32. What best describes for how long a gas-free test is good?

- ☐ (A) For as long as is indicated on the gas-free certificate
- ☒ (B) For the instant that it is made
- ☐ (C) Until valves in line with the tank or compartment are reopened
- ☐ (D) Until changes in temperature or pressure affect the vapor content in the space

If choice B is selected set score to 1.

33. A flammable liquid having a Reid vapor pressure of $8\frac{1}{2}$ P.S.I.A. or less and a flash point of 80°F or below is grade _____.

- ☐ (A) A
- ☐ (B) B
- ☒ (C) C
- ☐ (D) D

If choice C is selected set score to 1.

34. A B-II fire extinguisher has a minimum capacity of _____.

- ☒ (A) 10 pounds of dry chemical
- ☐ (B) 20 pounds of CO₂
- ☐ (C) 3 gallons of foam
- ☐ (D) All of the above

If choice A is selected set score to 1.

35. To facilitate passing the end of a large rope through a block, you could use which line?

- ☐ (A) A head line
- ☐ (B) A sail line
- ☒ (C) A reeving line
- ☐ (D) A gantline

If choice C is selected set score to 1.

36. Which document shows a vessel's nationality, ownership, and tonnage?

- ☒ (A) Certificate of Documentation
- ☐ (B) Bill of Lading Certificate
- ☐ (C) Manifest Certificate
- ☐ (D) Official Logbook

If choice A is selected set score to 1.

37. You will load class 1.2 commercial explosives and need to construct a portable magazine. Which is a requirement of the magazine?

- ☒ (A) It must be elevated with skids 10cm (3.9 inches) above the deck
- ☐ (B) It must be constructed of metal
- ☐ (C) The unit shall be fastened with nails or screws
- ☐ (D) The construction must include a hinged cover

If choice A is selected set score to 1.

38. You are on a course of 000°T and put the rudder right 30°. In which direction will the transfer be measured?

- ☐ (A) 000°T
- ☒ (B) 090°T
- ☐ (C) 180°T
- ☐ (D) 270°T

If choice B is selected set score to 1.

39. An icebreaker is displaying a flag hoist which consists of the code letters "WO" (Whiskey Oscar). What does this signal indicate?

- ☒ (A) Icebreaker support is finished
- ☐ (B) The icebreaker is beset
- ☐ (C) The icebreaker is icebound
- ☐ (D) Icebreaker support is commencing

If choice A is selected set score to 1.

40. Your vessel is at a dock taking bunkers. If oil begins to flow out of a tank vent, what should you do FIRST?

- (A) Signal the shore control point to shut down.
- (B) Open the intake valve to an adjacent tank.
- (C) Close the valve on the tank vent line.
- (D) Set out drip pans and sawdust and begin to mop up the spill.

If choice A is selected set score to 1.

41. During oil transfer operations, who is responsible for ensuring that the posted transfer procedures are followed?

- (A) The designated person in charge
- (B) The tankerman
- (C) The senior able seaman
- (D) The oiler

If choice A is selected set score to 1.

42. Because of the arrangement of the cell guides, which is the MOST important factor while loading containers?

- (A) The list of the vessel
- (B) The weight of the container
- (C) The contents of the container
- (D) The size of the shoreside crane

If choice A is selected set score to 1.

43. Grade E combustible liquids have a flash point of _____.

- (A) 80°F to 150°F
- (B) 60°F to 100°F
- (C) 150°F or above
- (D) 90°F to 120°F

If choice C is selected set score to 1.

44. Regulations require that cargo pumprooms handling grades D and/or E liquid cargo only shall be fitted with at LEAST how many ducts extended to the weather deck?

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

If choice B is selected set score to 1.

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

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

If choice B is selected set score to 1.

46. What does item "K" refer to in illustration D045DG of a 30-ton pedestal crane?

- ☒ (A) Rider block taglines
- ☐ (B) Cargo snaking cables
- ☐ (C) Jib luffing cables
- ☐ (D) Manual slewing cables

If choice A is selected set score to 1.

47. Annex V to MARPOL 73/78 contains requirements pertaining to the discharge into the marine environment of which item?

- ☒ (A) Garbage
- ☐ (B) Oil
- ☐ (C) Noxious liquid substances
- ☐ (D) Air pollutants

If choice A is selected set score to 1.

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

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

If choice D is selected set score to 1.

49. As soon as the officer in charge of the vessel has taken steps to stop the discharge of oil or oily mixture into a U.S. harbor, what must he/she do FIRST?

- ☐ (A) Rig a boom on deck
- ☒ (B) Contact the Coast Guard
- ☐ (C) Alert the fire department
- ☐ (D) Inform the Environmental Protection Agency

If choice B is selected set score to 1.

50. Which statement about entry into a water ballast tank that has been sealed for a long time is TRUE?

- (A) After ventilation and testing, and the tank is found safe for entry, someone should standby at the tank entrance while you are inside.
- (B) Sea water acts on the ship's metal and generates chlorine gas which may accumulate in poisonous quantities.
- (C) You should always wear a gas mask.
- (D) A "buddy system" should be used where someone enters the tank with you.

If choice A is selected set score to 1.

51. What minimum size manila line is required to hold a weight of 932 pounds, if you use a safety factor of six?

- (A) 2.0"
- (B) 2.5"
- (C) 3.0"
- (D) 3.5"

If choice B is selected set score to 1.

52. Which vessel is most likely to be loaded full but not down?

- (A) A bulk carrier loaded with steel
- (B) A bulk carrier loaded with heavy ore
- (C) A tanker loaded with heavy grain
- (D) A break bulk vessel loaded with palletized cargo

If choice D is selected set score to 1.

53. When bunkering is complete, which is the correct procedure concerning the bunker hoses?

- (A) The hose must be drained, blanked off, and stored securely
- (B) The hose must be cleaned internally with a degreaser
- (C) The hose must be stowed vertically and allowed to drain
- (D) The hose should be washed out with hot soapy water

If choice A is selected set score to 1.

54. Which space(s) is(are) NOT exempt when measuring gross tonnage?

- (A) Auxiliary machinery spaces above the deck
- (B) Cargo holds
- (C) Galley in a deckhouse
- (D) Steering gear room

If choice B is selected set score to 1.

55. Which of the flash points would indicate a grade D combustible liquid?

- ☐ (A) 155°F
- ☒ (B) 87°F
- ☐ (C) 160°F
- ☐ (D) 65°F

If choice B is selected set score to 1.

56. 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.

57. 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.

58. What can be done to prevent small oil spills on deck from going overboard?

- ☐ (A) Plugging the sounding pipes
- ☒ (B) Plugging the drains and scuppers
- ☐ (C) Closing the lids on the vents
- ☐ (D) Driving wooden plugs into the vents

If choice B is selected set score to 1.

59. Stress on the topping lift of a swinging boom can be reduced by _____.

- ☐ (A) Rigging a back stay
- ☒ (B) Raising the boom
- ☐ (C) Taking all slack out of the preventer
- ☐ (D) Increasing the mechanical advantage of the cargo purchase

If choice B is selected set score to 1.

60. Which should you check before letting the anchor go?

- ☐ (A) The anchor is clear of obstructions
- ☐ (B) The wildcat is disengaged
- ☐ (C) The chain is clear
- ☒ (D) All of the above

If choice D is selected set score to 1.

61. What is the major function of the deck water seal in an inert gas system?

- ☐ (A) Prevents the flow of inert gas into closed or isolated tanks.
- ☐ (B) Relieves excessive pressures from the system.
- ☐ (C) Removes any leftover water or soot after the gas has been scrubbed.
- ☒ (D) Isolates hazardous areas from nonhazardous areas.

If choice D is selected set score to 1.

62. When is the effect of wind on exposed areas of the vessel most noticeable?

- ☐ (A) When turning
- ☐ (B) When going slow ahead
- ☒ (C) When backing
- ☐ (D) When going full ahead

If choice C is selected set score to 1.

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

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

If choice A is selected set score to 1.

64. In the United States, which organization sets the load line markings?

- ☒ (A) American Bureau of Shipping
- ☐ (B) Coast Guard
- ☐ (C) Federal Maritime Board
- ☐ (D) IMO

If choice A is selected set score to 1.

65. Which bend or knot is used to tie a small line to a larger one?

- ☐ (A) Lark's head
- ☐ (B) Bowline
- ☒ (C) Becket bend
- ☐ (D) Clove hitch

If choice C is selected set score to 1.

66. Which certificate is issued by the American Bureau of Shipping?

- ☐ (A) Permit to Proceed for repairs
- ☐ (B) Certificate of Inspection
- ☐ (C) Safety Equipment Certificate
- ☒ (D) Load Line Certificate

If choice D is selected set score to 1.

67. To what chemical family does ethylene oxide belong?

- ☐ (A) Esters
- ☐ (B) Glycol ethers
- ☐ (C) Alcohols
- ☒ (D) Alkylene oxides

If choice D is selected set score to 1.

68. 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.

69. What is the period of validity of a Merchant Mariner Credential?

- ☐ (A) 3 years
- ☐ (B) 1 year
- ☐ (C) 2 years
- ☒ (D) 5 years

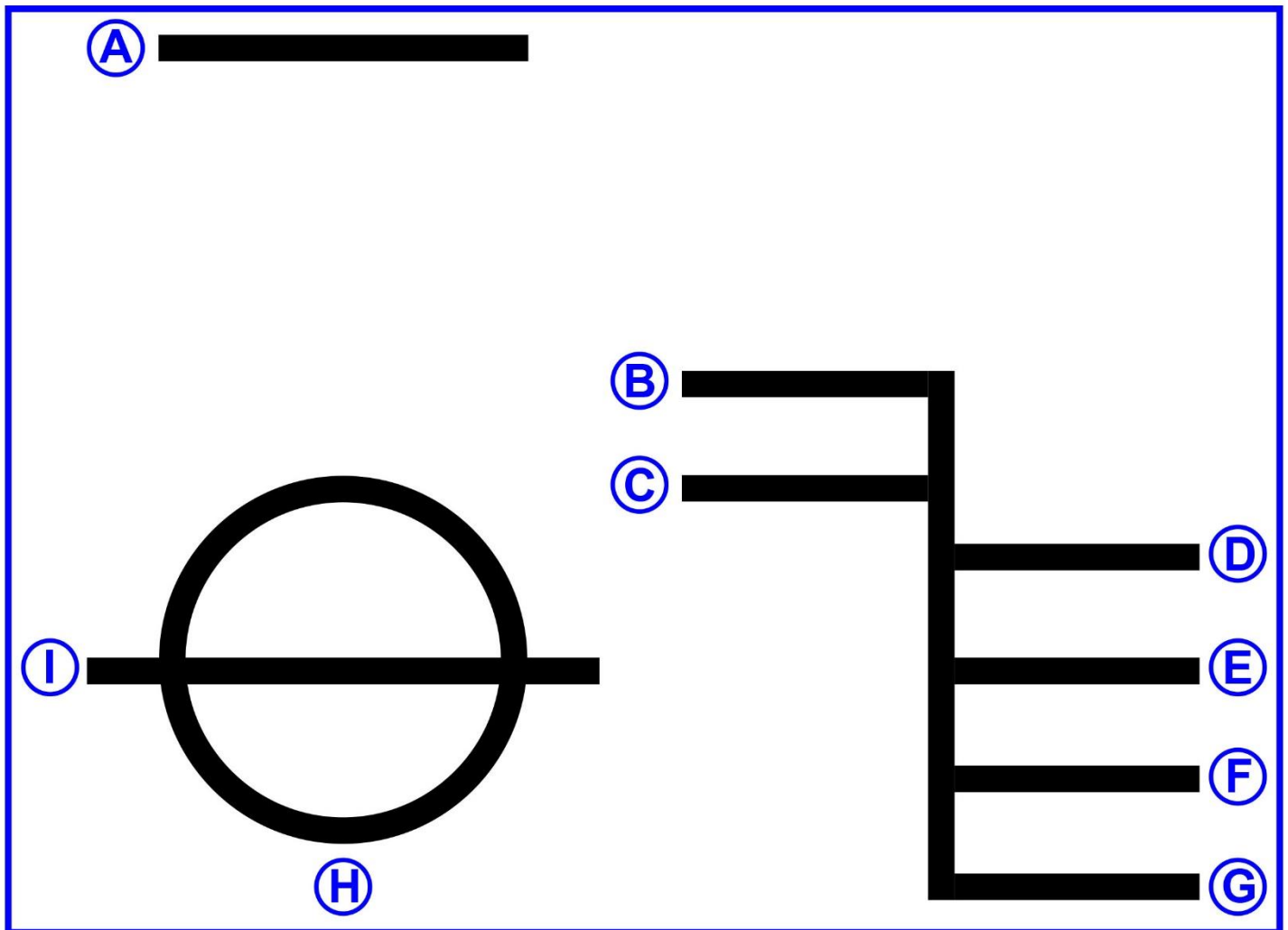
If choice D is selected set score to 1.

70. How much force would be required to lift a weight of 200 lbs. using a gun tackle rigged to disadvantage (do not consider friction)?

- ☐ (A) 50 lbs.
- ☒ (B) 100 lbs.
- ☐ (C) 150 lbs.
- ☐ (D) 200 lbs.

If choice B is selected set score to 1.

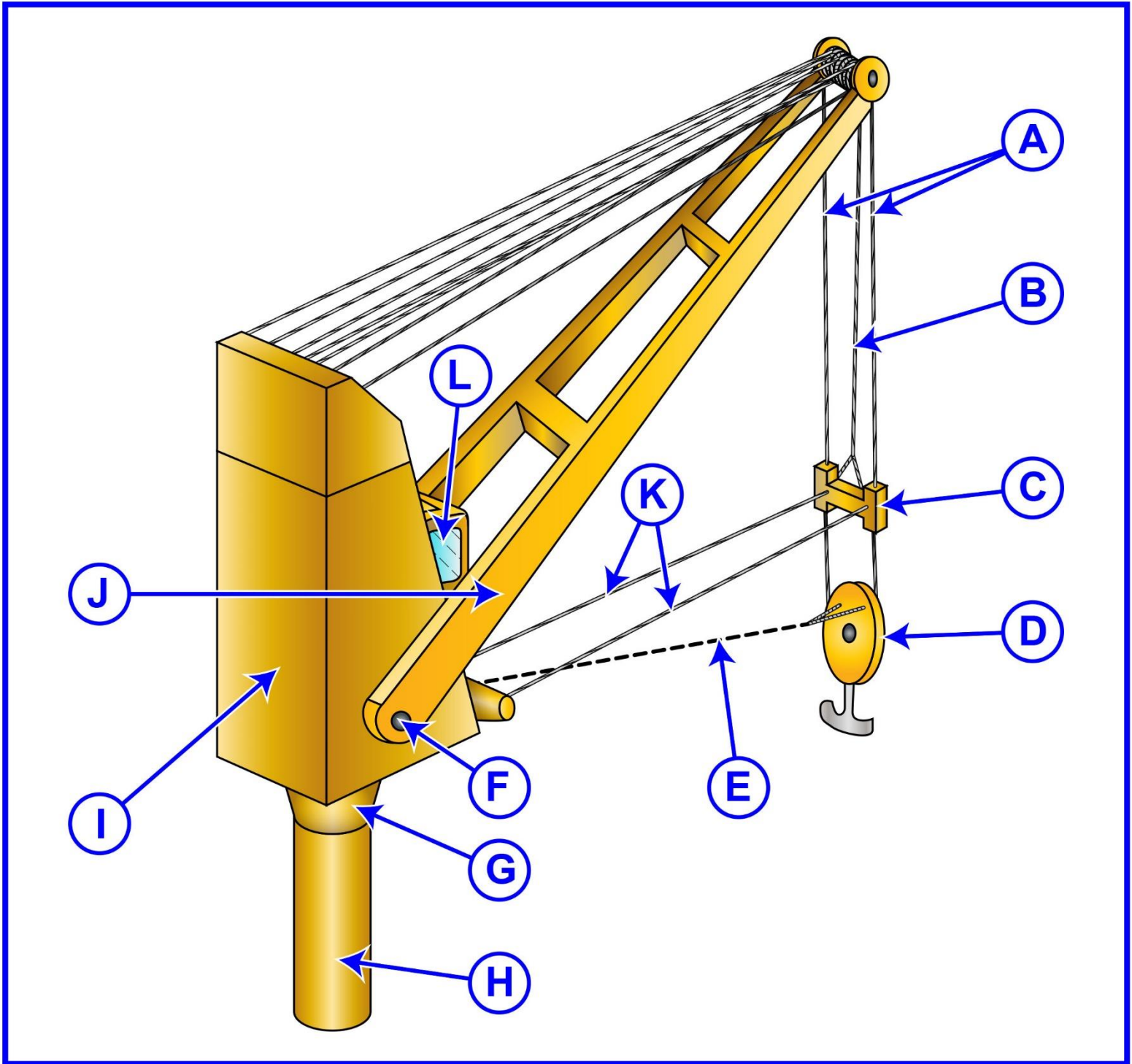
D003DG



D034DG

HEADING (TRUE)	BEARING (TRUE)	RANGE (YDS)	REMARKS
228°			INITIAL HEADING
228°	232°	2260	ON INITIAL COURSE
228°	234°	1700	RIGHT FULL RUDDER ORDERED
230°	236°	1490	
252°	235°	1275	
275°	231°	1000	
316°	214°	850	
352°	198°	975	
022°	194°	1210	
053°	197°	1430	
087°	202°	1600	
115°	209°	1690	
151°	217°	1700	
183°	225°	1600	
218°	232°	1350	RUDDER AMIDSHIPS
228°	235°	1125	STEADY ON 228°

D045DG



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