

## Deck General

| ID # | Question                                       | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 1    | "Avast" means _____.                           | let go   | pull   | slack off  | <b>stop</b>  |              |
| 2    | "Block stowage" means _____.                   | having the cargo on pallets  | <b>stowing all the cargo for a port in the same area</b>   | using port marks on the cargo                                      | using separation cloths to separate different kinds of cargo             |              |
| 3    | "Cribbing" is _____.                           | <b>wooden blocks or dunnage placed between a deck load and the deck</b>                            | the chains and shackles used to secure a deck cargo  | a crate in which a deck cargo is packaged                          | cardboard separation pieces placed between deck loads to prevent chafing |              |
| 4    | "Ease the rudder" means to _____.              | move the rudder slowly in the direction of the most recent rudder command                          | bring the rudder amidships   | <b>decrease the rudder angle</b>                                   | steer the course which is your present heading                           |              |
| 5    | "Free pratique" means that _____.              | clearance requirements for all regulatory bodies have been met                                     | <b>health requirements have been met and no further quarantine formalities are required</b>                | shipment will be made at no cost                                   | tonnage taxes are not required to be paid                                |              |
| 6    | "Hanging a barge off" means to _____.          | <b>moor a barge to the bank and leave</b>  | remove and deliver a loaded barge from a multiple tow  | remove a barge while locking through                               | tow an empty barge astern  |              |
| 7    | "Hard right rudder" means _____.               | <b>put the rudder over to the right all the way</b>  | jam the rudder against the stops   | meet a swing to the right, then return to amidships                | put the rudder over quickly to 15° right rudder                          |              |
| 8    | "Herringbone" is a term associated with _____. | anchoring  | mooring  | <b>sewing</b>  | splicing   |              |
| 9    | "Ice blink" is _____.                          | the dark appearance of the underside of a cloud layer due to reflection of a surface of open water | the soft light appearance on the underside of a cloud layer due to reflection from a surface of open water | <b>the yellowish-white glare on the underside of a cloud layer</b> | "water sky"  |              |
| 10   | "Limber" is a term associated with _____.      | emergency gear   | <b>drainage</b>  | deck cargo storage   | securing gear  |              |

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| 11   | "Seiche" is defined as a(n) _____.   | unusually strong storm system which approaches the Great Lakes System generally from the Northeast | lake current which is predominant during the spring and fall navigation season on the Great Lakes | <b>oscillation caused by the diminishing of forces which cause lake level fluctuations</b> | higher than normal high water or lower than normal low water |              |
| 12   | "White Line" is made from _____.   | <b>cotton</b>  | hemp  | manila   | sisal  |              |
| 13   | A "barrel" is a unit of liquid measure equivalent to _____.  | 40 U.S. gallons at 50°F  | <b>42 U.S. gallons at 60°F</b>  | 43 U.S. gallons at 65°F  | 45 U.S. gallons at 75°F                                      |              |
| 14   | A "bowline" is used to _____.  | join lines of equal size   | <b>form a temporary eye (loop) at the end of a line</b>   | be a stopper   | keep a line from fraying                                     |              |
| 15   | A "check" line is _____.   | a safety line attached to a man working over the side  | used to measure water depth   | <b>used to slow the headway of a barge</b>   | used to measure the overhead height of a bridge              |              |
| 16   | A "chock" is a _____.  | deck fitting used to secure mooring lines  | <b>casting fitted at the side of a weather deck, used as a fairlead</b>                           | sharp block of wood used to support hygroscopic cargo                                      | smoke pipe for the galley stove                              |              |
| 17   | A "contra-guide" is a type of _____.   | bow thruster   | cargo gear  | steering engine  | <b>rudder</b>  |              |
| 18   | A "dangerous cargo manifest" is needed for you to carry a combustible cargo. You should obtain the shipping papers to make this "manifest" from the _____. | manufacturer   | ABS   | Coast Guard  | <b>shipper</b>   |              |
| 19   | A "figure eight" knot is used to _____.  | be a stopper   | shorten a line  | join lines of equal size   | <b>keep a line from passing through a sheave</b>             |              |
| 20   | A "gypsy" or "gypsyhead" is a _____.   | punt used for painting over the side   | small, reciprocating steam engine   | <b>spool-shaped drum fitted on a winch</b>   | swinging derrick   |              |
| 21   | A "liner" in riveted construction of a vessel is a(n) _____.   | <b>small plate which fills the aperture between riveted strakes and the vessel framing</b>         | backing plate which is used to level the strakes while riveting, and then removed                 | internal frame to which the side shell is riveted  | seam that is welded after riveting is completed              |              |
| 22   | A "loose" tow may cause all of the following EXCEPT _____.   | loss of maneuverability  | lines to part   | damage to the towing vessel and tow  | <b>a saving in the transit time</b>                          |              |
| 23   | A "Mediterranean moor" should be used when _____.  | when anchoring in the Mediterranean  | <b>when docking stern to a berth</b>  | when docking bow to a berth  | when anchoring in a strong current                           |              |
| 24   | A "sheepshank" is used to _____.   | keep a line from fraying   | join lines of unequal size  | stop off a line  | <b>shorten a line</b>  |              |

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| 25   | A "skiff hook" is a device used to _____   | shorten the length of catenary in the towline  | <b>attach a towline to the eye bolt to the bow of a trailer-able boat</b> | to create a temporary fairlead                                       | join a towline to a pair of towing bridles  |              |
| 26   | A "spring line" is a _____.  | mooring line made of spring lay wire rope  | <b>mooring line running diagonally to the keel</b>                        | mooring line parallel to the keel                                    | wire rope used for securing an anchor buoy  |              |
| 27   | A "stopper" is _____.  | <b>a short length of line used for temporarily holding another line</b>                                  | a snatch block for handling a topping lift                                | an engine order telegraph  | the brake on a cargo winch  |              |
| 28   | A "strongback" refers to a _____.  | <b>bar securing a cargo port</b>   | centerline vertical bulkhead  | deep beam  | spanner stay  |              |
| 29   | A "wet cargo" refers to _____.   | a cargo that will be damaged if it gets wet  | bulk liquids  | cargoes that will cause condensation                                 | <b>liquids in containers</b>  |              |
| 30   | A "whipping" is _____.   | a messenger  | a stopper for nylon line  | a U-bolt for securing a cargo whip to the winch drum                 | <b>turns of twine around a rope end</b>   |              |
| 31   | A 150-meter vessel is proceeding down the course of a narrow channel in the Great Lakes System. A 60-meter vessel is starting to cross the channel. Which statement is TRUE? | <b>If the smaller vessel is engaged in fishing, he shall not impede the passage of the other vessel.</b> | The crossing vessel has the right of way.                                 | The vessel in the channel must slow to her steerageway.              | The larger vessel is considered to be a vessel restricted in her ability to maneuver. |              |
| 32   | A 30,000 DWT tankship is required to have an IOPP certificate when _____.  | engaged in the coastwise trade   | going foreign   | <b>calling at ports in another country signatory to MARPOL 73/78</b> | carrying cargoes listed in the MARPOL regulations                                     |              |
| 33   | A 6x12, two-inch wire rope has _____.  | 12 strands and a two-inch diameter   | 12 strands and a two-inch circumference                                   | <b>6 strands and a two-inch diameter</b>                             | 6 strands and a two-inch circumference  |              |
| 34   | A 6x19 wire rope would be _____.   | 6 inches in diameter and 19 fathoms long   | 6 inches in circumference with 19 strands                                 | <b>6 strands with 19 wires in each strand</b>                        | 19 strands with 6 wires in each strand  |              |
| 35   | A 750 foot passenger vessel operating on the Great Lakes, not subject to SOLAS regulations, is required to carry how many ring life buoys?                                   | <b>24</b>  | 18  | 12   | 6   |              |
| 36   | A ballasted vessel sinks enroute to a dry dock. Under these circumstances, the vessel's owner can claim _____.   | <b>actual total loss</b>   | constructive total loss   | general average  | particular average  |              |
| 37   | A band or collar on the top end of a boom to which the topping lift, midships guy, and outboard guys are secured, is called the _____.                                       | collar band  | guy band  | pad eye collar   | <b>spider band</b>  |              |
| 38   | A bench hook is used for _____.  | handling of cargo cases  | hanging oilskins  | <b>sewing canvas</b>   | splicing small stuff  |              |

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| 39   | A block and tackle is "rove to advantage". This means that the _____.   | blocks have been overhauled                                      | hauling parts of two tackles are attached                                    | <b>hauling part leads through the movable block</b>  | hauling part leads through the standing block                                    |               |
| 40   | A block that can be opened at the hook or shackle end to receive a bight of the line is a _____.  | bight block  | gin block  | heel block   | <b>snatch block</b>  |               |
| 41   | A bollard is found on the _____.  | beach  | deck   | <b>pier</b>  | towed vessel   |               |
| 42   | A breeches buoy is being rigged from the shore to a stranded vessel. The initial shot line passed to the vessel is normally made fast to a _____.   | hawser which is used to pass a tail-block and whip to the vessel | hawser with breeches buoy and harness attached                               | hawser which should be made fast to the vessel below the intended location of the tail-block | <b>tail-block and whip which may be used to pass a hawser to the vessel</b>      |               |
| 43   | A bridle for an ocean tow consists of _____.  | <b>two chains of equal length</b>                                | a single nylon pendant rove through a heavy ring free to move on the pendant | two long legs of wire rope shackled to a fishplate   | a single length of heavy chain with both ends secured on deck to welded pad eyes |               |
| 44   | A butt is indicated by which letter?  | J  | F  | E  | <b>D</b>   | <b>D033DG</b> |
| 45   | A cargo exception would appear on _____.  | <b>a Bill of Lading</b>  | the cargo manifest   | the Export Declaration   | a Letter of Indemnity  |               |
| 46   | A cargo of 10,000 barrels of gasoline is loaded at a temperature of 90°F, and a cargo temperature of 55°F, is expected on this voyage. It has a coefficient of expansion of .0006. How many barrels would you expect to discharge at your destination?              | <b>9790</b>  | 9994   | 10210  | 10410  |               |
| 47   | A cargo of canned foodstuff is packed in cartons. Each carton is 36 cubic feet and weighs 340 pounds. The stowage factor of the cargo is _____.   | 9.5  | 62   | 212  | <b>237</b>   |               |
| 48   | A cargo of canned foodstuffs is packed in cartons. Each carton is 36 cubic feet and weighs 380 pounds. What is the stowage factor of the cargo?   | 9.5  | 62   | <b>212</b>   | 237  |               |
| 49   | A cargo of fuel oil is loaded whose temperature is 66°F. API gravity is 36°. The volume correction factor (VCF) is .0005. A cargo temperature of 80°F is expected at the discharge port. If 9,000 barrels were loaded, how many gallons would you expect to unload? | 375,354  | <b>380,646</b>   | 491,535  | 498,465  |               |

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| 50   | A cargo of fuel oil is loaded whose temperature is 66°F. API gravity is 36°. The volume correction factor (VCF) is .0005. A cargo temperature of 80°F is expected at the discharge port. If 9,000 barrels were loaded, how many barrels would you expect to unload? | 8,910  | 8,937   | <b>9,063</b>  | 9,090  |               |
| 51   | A cargo of oil has a coefficient of expansion of .0005 per degree F. If this cargo is loaded at 70°F, and a cargo temperature of 90°F is expected at the discharge port, how many barrels would you expect to unload if you loaded 10,000 barrels?                  | 9,900  | 9,990   | 10,010  | <b>10,100</b>  |               |
| 52   | A cargo that has a stowage factor over 40 is known as a _____.  | hygroscopic cargo  | <b>measurement cargo</b>  | stowage cargo   | weight cargo   |               |
| 53   | A carling is used aboard ship _____.  | as a connecting strap between the butted ends of plating                   | <b>to stiffen areas under points of great stress between beams</b>        | to prevent the anchor from fouling when the brake is released | to provide an extra heavy fitting in a heavy lift cargo rig        |               |
| 54   | A case received for shipment has the markings shown. Each carton measures 13" X 15" X 23". What is the total cubic capacity the entire consignment will occupy? (Ignore broken stowage.)  | <b>779 cubic feet (22 cubic meters)</b>                                    | 992 cubic feet (28 cubic meters)  | 1,047 cubic feet (30 cubic meters)                            | 112,125 cubic feet (3173 cubic meters)                             | <b>D043DG</b> |
| 55   | A case received for shipment has the markings shown. Each carton measures 13" X 15" X 23". What is the total cubic capacity the entire consignment will occupy if you assume 10% broken stowage?  | 779 cubic feet (22 cubic meters)   | <b>857 cubic feet (24 cubic meters)</b>                                   | 1047 cubic feet (30 cubic meters)                             | 112,125 cubic feet (3173 cubic meters)                             | <b>D043DG</b> |
| 56   | A case received for shipment is marked as shown. The portion of the symbol indicated by the letter A is _____.  | <b>a stowage sequence marking</b>  | the consignee's marking   | a stowage mark, showing the top of the case                   | the symbol for toxic contents                                      | <b>D043DG</b> |
| 57   | A chain bridle is preferable to a wire rope towing bridle on a long ocean tow because chain _____.  | is more flexible and has the ability to absorb shock because of its weight | is less subject to wear and damage from abrasion                          | requires little maintenance                                   | <b>All of the above</b>  |               |
| 58   | A chain bridle is used when towing astern because it _____.   | is easy to connect   | <b>provides an effective catenary and absorbs shock due to its weight</b> | makes rigging a swivel unnecessary                            | prevents the tow from yawing by the drag of the chains in a seaway |               |
| 59   | A chain stripper is used to _____.  | <b>prevent chain from clinging to the wildcat</b>                          | clean the marine debris from the chain                                    | flake chain from a boat's chain locker                        | clean chain prior to an x-ray inspection                           |               |
| 60   | A change of a documented vessel's name can only be made by the _____.   | American Bureau of Shipping  | Commissioner of Customs   | Treasury Department   | <b>Coast Guard</b>   |               |

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| 61   | A channel is stated as having a controlling depth of 38 feet. Which statement is TRUE?   | At least 80% of the channel is cleared to the charted depth. | At least 50% of the channel is cleared to the charted depth.              | <b>100% of the channel width is clear to 38 feet.</b>                             | The sides of the channel conform to at least 50% of the controlling depth. |              |
| 62   | A charterer is unable to complete the loading of a vessel during the lay days specified in the charter party. Under these circumstances, the _____.                            | <b>vessel operator can collect demurrage</b>                 | ship is authorized extra time to discharge the cargo                      | charterer must pay dispatch money   | effective period of the charter is extended                                |              |
| 63   | A Chinese stopper (two lines) will hold best when you _____.   | fasten the bitter ends to the mooring line with half hitches | <b>twist the ends together and hold them in the direction of the pull</b> | twist the ends together and hold them in the direction opposite to the pull       | twist the ends together and hold them at right angles to the mooring line  |              |
| 64   | A chock _____.   | is a deck fitting used to shackle gear to the deck           | permits easy jettisoning of deck cargo in an emergency                    | prevents stress concentration in the bulwark                                      | <b>provides openings through the bulwark for mooring lines</b>             |              |
| 65   | A claim for cargo damages may be held against the ship owner if such damage is the result of failure of the ship's officers to _____.  | correct all defects in the ship's construction               | <b>ensure the fitness and safety of cargo spaces</b>                      | ensure adequate packaging of the cargo  | prevent delays due to quarantine restrictions                              |              |
| 66   | A clause in the charter party requires a vessel's owner to pay dispatch money when the vessel _____.   | changes berths to expedite loading or discharging            | does not load and discharge its cargo in the time specified               | is not ready to load or discharge cargo   | <b>loads and discharges its cargo in less time than specified</b>          |              |
| 67   | A combustible liquid with a flash point of 90°F would be grade _____.  | B  | C   | <b>D</b>  | E  |              |
| 68   | A common class of wire rope is the 6X37 class. What does the 37 represent?   | Number of wires in the inner core                            | Number of strands per wire rope   | Tensile strength of the wire  | <b>Number of wires per strand</b>  |              |
| 69   | A common occurrence when a vessel is running into shallow water is that _____.   | the wake is less pronounced                                  | the vessel is more responsive to the rudder                               | <b>"squat" will cause a decrease in bottom clearance and an increase in draft</b> | All of the above   |              |
| 70   | A complaint of unseaworthiness by a majority of crew members to the American Consul is found to be justified after a survey is completed. Who must pay the cost of the survey? | Crew members requesting the survey                           | American Consul   | <b>Master</b>   | Vessel's owners  |              |
| 71   | A condition where two currents meet at the downstream end of a middle bar can be determined by a _____.  | small whirlpool  | smooth patch of water   | <b>V-shaped ripple with the point of the V pointing downstream</b>                | V-shaped ripple with the point of the V pointing upstream                  |              |
| 72   | A continual worsening of the list or trim indicates _____.   | negative GM  | <b>progressive flooding</b>   | structural failure  | an immediate need to ballast   |              |

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| 73   | A Contract of Affreightment covering the movement of a particular cargo from one designated port to another at a specified rate for each ton of goods loaded is called a _____.  | bareboat charter party                                      | demise charter party                                   | time charter party                                  | <b>voyage charter party</b>  |              |
| 74   | A contract of affreightment is a _____.  | <b>Bill of Lading</b>                                       | Bottomry Bond  | manifest  | Portage Bill   |              |
| 75   | A copy of the Articles of Agreement, less the signatures, is required to be posted. This document is called the _____.   | <b>Forecastle Card</b>                                      | Articles Copy  | Voyage Agreement                                    | Shipping Articles  |              |
| 76   | A crack in the deck plating of a vessel may be temporarily prevented from increasing in length by _____.   | cutting a square notch at each end of the crack             | <b>drilling a hole at each end of the crack</b>        | slot-welding the crack                              | welding a doubler over the crack   |              |
| 77   | A crew has signed on for a 3-month voyage. Fourteen days into the voyage a seaman is improperly discharged at the first port of call. How much pay is he entitled to receive?  | 14 days   | 1 month's  | <b>14 days and one month's extra</b>                | double wages (28 days)   |              |
| 78   | A crew member has just fallen overboard off your port side. Which action should you take?  | Immediately put the rudder over hard right.                 | <b>Immediately put the rudder over hard left.</b>      | Immediately put the engines astern.                 | Wait until the stern is well clear of the man and then put the rudder over hard right. |              |
| 79   | A Danforth lightweight anchor does NOT hold well in which type of bottom?  | Mud   | <b>Grass</b>   | Sand  | Clay   |              |
| 80   | A deck beam does NOT _____.  | act as a beam to support vertical deck loads                | <b>lessen the longitudinal stiffness of the vessel</b> | act as a tie to keep the sides of the ship in place | act as a web to prevent plate wrinkling due to twisting action on the vessel           |              |
| 81   | A deck fitting, used to secure line or wire rope, consisting of a single body with two protruding horns is called a _____.   | bitt  | bollard  | capstan   | <b>cleat</b>   |              |
| 82   | A declaration made by the Master before a U.S. Consul, giving particulars regarding heavy weather or other incidents which may have caused damage to the vessel or cargo, through no fault of the vessel, her officers, or crew is a(n) _____. | cargo addendum  | exception report                                       | Master's declaration                                | <b>note of protest</b>   |              |
| 83   | A deep draft VLCC (100,000 DWT+) navigating in a narrow channel or canal _____.  | <b>draws more water than when underway in deep water</b>    | draws less water with an increase in speed             | requires less power for a given speed               | steers better under full power   |              |
| 84   | A deepwell pump is a type of _____.  | screw pump  | <b>centrifugal pump</b>                                | eductor   | gear pump  |              |
| 85   | A Deratization Exemption Certificate is valid for a period of _____.   | no time limit so long as Certificate of Sanitation is valid | no time limit so long as no evidence of rodents aboard | 1 year  | <b>6 months</b>  |              |

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| 86   | A design modification of an anchor chain which prevents kinking is the _____.  | detachable link                          | <b>stud link</b>                               | Kenter link  | connecting link   |              |
| 87   | A device used to tighten up remaining slack in wire rope when you are making up to a tow in inland waters is a _____.  | tripping line                            | tripping bracket                               | norman pin   | <b>steamboat ratchet</b>                                |              |
| 88   | A disadvantage of using chain lashing on heavy vehicles aboard Ro-Ro vessels is that _____.  | it is easily damaged                     | it is affected by temperature                  | <b>the links lose strength if placed over corners</b>    | it has high initial cost                                |              |
| 89   | A disadvantage of using chain lashing on heavy vehicles aboard Ro-Ro vessels is that it _____.   | can wrap around cargo                    | is easily damaged                              | is affected by temperature                               | <b>does not absorb shock</b>                            |              |
| 90   | A disadvantage of using chain lashing on heavy vehicles aboard Ro-Ro vessels is that it is _____.  | <b>heavy</b>                             | easily damaged                                 | affected by temperature                                  | costly relative to the strength ratio                   |              |
| 91   | A disk with a horizontal line through its center, equivalent to the summer load line, is called the _____.   | deadrise mark                            | maximum allowable draft mark                   | <b>Plimsoll mark</b>                                     | tonnage mark  |              |
| 92   | A document used to indicate suspected cargo damage caused by rough weather would be the _____.   | cargo report                             | hull damage report                             | <b>Master's Note of Protest</b>                          | Unseaworthy Certificate                                 |              |
| 93   | A document which has a list of names, birthplaces, and residences of persons employed on a merchant vessel bound from a U.S. port on a foreign voyage and is required at every port is called the _____. | <b>Certified Crew List</b>               | Crew Manifest                                  | Shipping Articles  | Muster List ("Station Bill")                            |              |
| 94   | A drift lead indicates that the vessel is dragging anchor when the line is _____.  | <b>taut and leading forward</b>          | slack  | leading out perpendicular to the centerline              | leading under the hull                                  |              |
| 95   | A face line is used to _____.  | prevent barge movement in a lock         | secure two barges end-to-end                   | <b>secure barges to the towboat</b>                      | secure barges side-by-side                              |              |
| 96   | A fid is a _____.  | mallet used when splicing wire rope      | sharp pointed crow bar used to unlay wire rope | tapered steel pin used to separate wire rope             | <b>tapered wooden pin used when splicing heavy rope</b> |              |
| 97   | A fire has damaged 20 bales of cotton on a freighter loaded with general cargo. This claim would come under _____.   | constructive total loss                  | general average                                | <b>particular average</b>                                | total loss of a part                                    |              |
| 98   | A flammable liquid having a Reid vapor pressure of 8½ P.S.I.A. or less and a flash point of 80°F or below is grade _____.  | A  | B  | <b>C</b>   | D   |              |
| 99   | A grapnel is a _____.  | device for securing a chain topping lift | hook to prevent the anchor cable from slipping | <b>device used to drag for a submerged cable or line</b> | type of clam bucket used for discharging bulk cargo     |              |
| 100  | A Great Lakes bulk ore vessel would use an "Iron Deckhand" to assist in _____.   | unloading bulk cargo                     | steering the vessel                            | making the vessel fast to a dock                         | <b>removing hatch covers</b>                            |              |



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| 101  | A Great Lakes vessel bound for Anticosti Island is exempt from the IMO Grain Regulations if the vessel meets all of the following standards EXCEPT _____. | the metacentric height corrected for free surface must meet regulatory minimums throughout the voyage | <b>slack surfaces should be in a mound</b>             | the longitudinal strength of the vessel must not be imperiled | the Master must ascertain the expected weather conditions enroute |              |
| 102  | A half-height container is used _____.  | to carry cargoes of low density   | when stowage space is limited                          | <b>to carry cargoes such as steel products or drums</b>       | to double the stowage capacity of the vessel                      |              |
| 103  | A heated bulkhead has the effect on a hygroscopic commodity of _____.   | causing moisture to accumulate against the bulkhead   | lowering the vapor pressure of the commodity           | lowering the dew point of the air                             | <b>raising the vapor pressure of the commodity</b>                |              |
| 104  | A heavy steel curved arch constructed athwartships and above the after deck on a towing vessel is sometimes called a _____.                               | chafing bar   | <b>Dutch tow bar</b>                                   | carling   | None of the above   |              |
| 105  | A heavy steel curved arch constructed athwartships and above the after deck on a towing vessel is sometimes called a _____.                               | main brace  | <b>texas bar</b>                                       | jockey bar  | None of the above   |              |
| 106  | A high cube container is designed specifically to _____.  | <b>carry low density cargoes</b>  | protect fragile cargoes                                | stow cargoes with concentrated weights such as machinery      | carry cargoes of very low stowage factors                         |              |
| 107  | A high cube container would most likely be used to stow _____.  | dense bulk cargoes  | <b>household appliances</b>                            | fragile cargoes   | heavy industrial machinery  |              |
| 108  | A holder of a license as Master of towing vessels may work each 24 hours for a period not to exceed _____.  | 6 hours   | <b>12 hours</b>  | 18 hours  | 24 hours  |              |
| 109  | A holder of a license as Operator of Uninspected Towing Vessels may work each 24 hours for a period not to exceed _____.                                  | 24 hours  | 18 hours   | <b>12 hours</b>   | 6 hours   |              |
| 110  | A hook that will release quickly is a _____.  | longshore hook  | margin hook  | marginal hook   | <b>pelican hook</b>   |              |
| 111  | A hygroscopic cargo is defined as a cargo _____.  | <b>capable of absorbing moisture in the form of a gas</b>   | capable of giving off moisture in the form of a liquid | that is shipped in a liquid state                             | that will ignite in contact with water                            |              |
| 112  | A journal kept by the officer of the watch in which day to day happenings are recorded regarding the deck department is the _____.                        | cargo record book   | <b>deck rough log</b>                                  | bell book   | Official Logbook  |              |
| 113  | A Kort nozzle is a(n) _____.  | <b>hollow tube surrounding the propeller used to improve thrust</b>                                   | nozzle attached to a firefighting hose                 | intake valve on a diesel engine                               | piston cylinder on a diesel engine                                |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 114  | A large basin cut into the shore, closed off by a caisson, and used for dry docking of ships is known as a _____.                                     | slipway  | <b>graving dock</b>   | ground warp  | caisson dock   |              |
| 115  | A large vessel is equipped with a controllable pitch propeller. Which statement is TRUE?  | <b>When dead in the water, it is often difficult to find the neutral position and slight headway or sternway may result.</b> | When going directly from full ahead to full astern, there is complete steering control. | When the vessel has headway and the propeller is in neutral, there is no effect on rudder control. | When maneuvering in port, full ahead or astern power can usually be obtained without changing shaft RPM. |              |
| 116  | A lashing used to secure three or four barges at a common corner, lashed in an "X" fashion, is called a _____.  | <b>scissor wire</b>  | towing wire   | breast wire  | cross wire   |              |
| 117  | A license for apprentice mate (steersman) of uninspected towing vessels shall be renewed within what time period before or after the expiration date? | 30 days  | 90 days   | 6 months   | <b>12 months</b>   |              |
| 118  | A license issued by the U.S. Coast Guard for apprentice mate (steersman) of Uninspected Towing Vessels is valid for _____.                            | 2 years and must be renewed  | 3 years and must be renewed   | <b>5 years and must be renewed</b>   | None of the above  |              |
| 119  | A license issued by the U.S. Coast Guard for Master of Towing Vessels is valid for _____.   | 2 years and must be renewed  | 3 years and must be renewed   | <b>5 years and must be renewed</b>   | life and need not be renewed   |              |
| 120  | A licensed Master of Towing Vessels may NOT serve as the Captain of which towing vessel?  | 99 GRT towing vessel operating on Chesapeake Bay   | 199 GRT towing vessel operating in the Gulf of Alaska                                   | 400 GRT towboat operating on the Western Rivers  | <b>375 GRT towing vessel operating between Texas and Puerto Rico</b>                                     |              |
| 121  | A licensed Master of Towing Vessels may NOT serve as the person in charge of which towing vessel?   | 99 GRT towing vessel operating on Chesapeake Bay   | 199 GRT towing vessel operating in the Gulf of Alaska                                   | 500 GRT towboat operating on the Western Rivers  | <b>349 GRT towing vessel operating between Florida and Puerto Rico</b>                                   |              |
| 122  | A licensed Master of Towing Vessels may NOT serve as the person in charge of which towing vessel?   | 99 GRT towing vessel operating on Chesapeake Bay   | 199 GRT towing vessel operating in the Gulf of Alaska                                   | 480 GRT towboat operating on the Western Rivers  | <b>405 GRT towing vessel operating between Florida and the US Virgin Islands</b>                         |              |
| 123  | A list man would expect to see any of the following light signals EXCEPT _____.   | two red lights   | one green light   | one white light  | <b>one amber light</b>   |              |
| 124  | A list signal of one white light indicates that the vessel is _____.  | on an even keel  | <b>listing about 1° to the side the light is displayed on</b>                           | listing over 5° with the light displayed on the high side  | listing, and the chutes should be directed to the side where the light is displayed                      |              |
| 125  | A load line certificate is valid for how many years?  | 1  | 2   | 3  | <b>5</b>   |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration  |
|------|--|--|---|---|---|---------------|
| 126  | A load line is assigned by _____.  | the U.S. Customs   | the U.S. Department of Energy   | the U.S. Army Corps of Engineers  | <b>a recognized classification society approved by the U.S. Coast Guard</b> |               |
| 127  | A long pole with a hook at one end, used to reach for lines, is known as a _____.  | <b>pike pole</b>   | jack staff  | line rod  | hooker  |               |
| 128  | A long splice in a line _____.   | <b>is used in running rigging</b>  | doubles the size of the line  | is only used on fiber rope  | is very weak  |               |
| 129  | A long ton is _____.   | 1,000 pounds   | 2,000 pounds  | <b>2,240 pounds</b>   | 2,400 pounds  |               |
| 130  | A look-out at the bow sights an object on your port side. How many bell strokes should he sound?   | One  | <b>Two</b>  | Three   | Four  |               |
| 131  | A lookout can leave his station _____.   | <b>only when properly relieved</b>   | at the end of the watch   | 15 minutes before the end of the watch  | at any time   |               |
| 132  | A lookout can leave his station _____.   | at the end of the watch  | at any time   | <b>ONLY when properly relieved</b>  | 15 minutes before the end of the watch                                      |               |
| 133  | A look-out should report objects sighted using _____.  | true bearings  | magnetic bearings   | gyro bearings   | <b>relative bearings</b>  |               |
| 134  | A lot of special cargo of similar cartons as shown is to be loaded. What is the total cubic capacity the consignment will occupy if you assume 10% broken stowage?   | 51 cubic feet (1.5 cubic meters)   | 58 cubic feet (1.7 cubic meters)  | <b>65 cubic feet (2.0 cubic meters)</b>   | 336 cubic feet (10 cubic meters)  | <b>D042DG</b> |
| 135  | A lot of special cargo of similar cartons is to be loaded aboard your vessel. You examine one of the cartons of the lot shown. What is the total cubic space the consignment will occupy? (Assume no broken stowage.)  | 51 cubic feet (1.5 cubic meters)   | <b>58 cubic feet (1.7 cubic meters)</b>   | 336 cubic feet (10 cubic meters)  | 700 cubic feet (21 cubic meters)  | <b>D042DG</b> |
| 136  | A lot of special cargo of similar cartons, as shown, is to be loaded. What is the weight of the consignment?   | 50 pounds  | 1100 pounds   | 1200 pounds   | <b>1250 pounds</b>  | <b>D042DG</b> |
| 137  | A majority of the crew requests a survey from the American Consul to determine a vessel's seaworthiness. The vessel is found unfit to continue her intended voyage. The Consul allows the vessel to sail to another port where deficiencies can be corrected. The crew must _____. | be discharged and given first class passage back to the original port of signing on in lieu of one month's wages | be discharged by the American Consul with additional one month's wages until repairs are made | be furnished employment on another vessel returning to the United States which is satisfactory to that crew | <b>comply with the judgment</b>   |               |
| 138  | A man was sighted as he fell overboard. After completing a Williamson turn, the man is not sighted. What type of search should be conducted?   | Expanding circle   | <b>Sector search</b>  | Parallel track pattern  | Datum-drift search  |               |
| 139  | A maritime lien may be placed against _____.   | any assets that a ship's owner may have  | <b>a vessel, cargo, or freight</b>  | objects that are fixed and immovable, such as wharves   | the vessel only   |               |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|---|---|---|--|--------------|
| 140  | A Master should file a marine note of protest if _____.  | cargo was received at ship side which was damaged in land transit | longshore labor went on strike in the port causing undue vessel delay | portions of his vessel's cargo were illegally impounded in a foreign port | <b>the vessel encountered heavy weather which might have caused cargo damage</b> |              |
| 141  | A mechanical davit is designed to automatically _____.   | position the boat at the embarkation station                      | <b>lift the boat off the inboard chocks</b>                           | energize the winch for the falls  | set the brake on the winch   |              |
| 142  | A metal eye spliced into a wire is called a _____.   | cyclops   | fish eye  | <b>thimble</b>  | chip   |              |
| 143  | A metal object on the pier resembling a tree stump and made to receive mooring lines is a _____.                           | bight   | <b>bollard</b>  | chock   | camel  |              |
| 144  | A metal ring on the bottom of a block, to which the standing part of a tackle is spliced, is known as a(n) _____.          | <b>becket</b>   | loop  | swivel  | eye  |              |
| 145  | A method used to make an eye in a bight of line where it cannot be spliced is known as _____.                              | braiding  | plaiting  | <b>seizing</b>  | servicing  |              |
| 146  | A monkey fist is found on a _____.   | <b>heaving line</b>   | lead line   | manrope   | mooring line   |              |
| 147  | A mooring line is described as being 6x24, 1-3/4 inch wire rope. What do the above numbers refer to?                       | Strands, yarns, circumference                                     | <b>Strands, wires, diameter</b>                                       | Wires, yarns, diameter  | Strands, circumference, wires  |              |
| 148  | A mooring line leading 45° to the keel, used to check forward or astern movement of a vessel, is called a _____.           | <b>spring line</b>  | warp line   | bow line  | breast line  |              |
| 149  | A mooring line leading at nearly right angles to the keel is a _____.  | bow line  | <b>breast line</b>  | spring line   | stern line   |              |
| 150  | A mooring line that checks forward motion of a vessel at a pier is a _____.  | bow line  | forward bow line  | <b>stern line</b>   | stern breast line  |              |
| 151  | A natural fiber rope can be ruined by dampness because it may _____.   | <b>rot</b>  | shrink  | stretch   | unlay  |              |
| 152  | A new coil of nylon line should be opened by _____.  | pulling the end up through the eye of the coil                    | uncoiling from the outside with the coil standing on end              | taking a strain on both ends  | <b>unreeling from a spool</b>  |              |
| 153  | A new coil of nylon line should be opened by _____.  | pulling the end up through the eye of the coil                    | taking a strain on both ends  | uncoiling from the outside with the coil standing on end                  | <b>unreeling from a spool</b>  |              |
| 154  | A new crewman reports on board. He must be trained in the use of the ship's lifesaving appliances within what time period? | 2 months  | 1 month   | <b>2 weeks</b>  | Before sailing   |              |
| 155  | A normal safe working load for used nylon rope in good condition is _____.   | 10% of its breaking strain  | <b>25% of its breaking strain</b>                                     | 33% of its breaking strain  | 50% of its breaking strain   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D                                 | Illustration |
|------|---|---|---|--|--|--------------|
| 156  | A Notice of Marine Casualty to a vessel must include _____.   | the estimated cost of damage                          | <b>the name of the owner or agent of the vessel</b> | an evaluation of who was at fault                      | the amount of ballast on board           |              |
| 157  | A nylon line is rated at 12,000 lbs. breaking strain. Using a safety factor of 5, what is the safe working load (SWL)?  | 2,000 lbs.  | <b>2,400 lbs.</b>                                   | 12,000 lbs.  | 60,000 lbs.                              |              |
| 158  | A nylon line is rated at 15,000 lbs. breaking strain. Using a safety factor of 5, what is the safe working load (SWL)?  | <b>3,000 lbs</b>                                      | 5,000 lbs   | 15,000 lbs   | 65,000 lbs                               |              |
| 159  | A package contains nitric acid solution and is radioactive. The radiation level at the package surface is .36 millirems per hour. How should this package be labeled? | Radioactive II and oxidizer                           | Radioactive II and poison                           | <b>Radioactive I and corrosive</b>                     | Fissile class I                          |              |
| 160  | A partial deck in a hold is called a(n) _____.  | weather deck  | <b>orlop deck</b>                                   | shelter deck   | main deck                                |              |
| 161  | A pelican hook _____.   | <b>can be released while under strain</b>             | is used for boat falls                              | is used for extra heavy loads                          | is used for light loads only             |              |
| 162  | A periodic thorough examination of the cargo gear proves satisfactory. What percentage of the total gear must be dismantled to determine actual internal condition?   | <b>None</b>   | 10%   | 25%  | 100%                                     |              |
| 163  | A Permit to Proceed is issued by the _____.   | American Bureau of Shipping                           | National Cargo Bureau                               | <b>U.S. Coast Guard</b>                                | U.S. Department of Labor                 |              |
| 164  | 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 _____.                    | an approach from leeward                              | an approach from windward                           | <b>the most direct approach</b>                        | an approach across the wind              |              |
| 165  | A person is found operating a vessel while under the influence of alcohol. He/she is liable for _____.  | imprisonment for up to three years                    | <b>a civil penalty of not more than \$5,000</b>     | a fine of not more than \$3,000                        | a fine of not more than \$10,000         |              |
| 166  | A person who sees someone fall overboard should _____.  | <b>call for help and keep the individual in sight</b> | run to the radio room to send an emergency message  | immediately jump in the water to assist the individual | go to the bridge for the distress flares |              |
| 167  | A petroleum liquid has a flash point of 135°Fahrenheit. This liquid is classed as a grade _____.  | B flammable liquid                                    | C flammable liquid                                  | <b>D combustible liquid</b>                            | E combustible liquid                     |              |
| 168  | A petroleum liquid has a flash point of 85°F. This is a grade _____.  | B flammable liquid                                    | C flammable liquid                                  | <b>D combustible liquid</b>                            | E combustible liquid                     |              |
| 169  | A piece of small stuff (small line) secured to an object to prevent it from going adrift is a _____.  | <b>lanyard</b>  | keeper  | noose  | stopper                                  |              |
| 170  | A post on a dock or wharf used to secure mooring lines or hawsers is called a _____.  | bitt  | <b>bollard</b>                                      | cleat  | capstan                                  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration  |
|------|---|--|---|--|--|---------------|
| 171  | A precaution you should take before bunkering is to _____.  | plug the vents   | plug the sounding pipes   | <b>plug the scuppers</b>   | close the lids on the vents  |               |
| 172  | A predictable result of a vessel nearing a bank or edge of a channel is that the _____.   | <b>stern is drawn to the bank as the bow sheers off</b>                    | bow sheers toward the bank  | vessel continues in a straight line, but with greatly reduced maneuverability                        | vessel will be drawn bodily into the bank unless the engines are stopped     |               |
| 173  | A proper look-out must be kept _____.   | only in fog  | only between the hours of sunset and sunrise  | only when entering and leaving port  | <b>at all times</b>  |               |
| 174  | A racetrack turn would be better than a Williamson turn in recovering a man overboard if _____.   | the man has been missing for a period of time                              | <b>the sea water is very cold and the man is visible</b>                                      | there is thick fog   | the wind was from astern on the original course                              |               |
| 175  | A relief valve for a cargo pump is generally installed _____.   | after the discharge valve  | <b>between the pump and discharge valve</b>   | after the suction valve  | between the pump and suction valve   |               |
| 176  | A report of casualty to a vessel must include _____.  | the estimated cost of damage   | an evaluation of who was at fault   | the amount of ballast on board   | <b>the name of the owner or agent of the vessel</b>                          |               |
| 177  | A rescue helicopter's hoist area should have a radius of at least _____.  | 6 feet of clear deck   | 10 feet of clear deck   | 25 feet of clear deck  | <b>50 feet of clear deck</b>   |               |
| 178  | A rolling hitch can be used to _____.   | make a temporary eye   | mouse a hook  | <b>secure a line around a spar</b>   | shorten a line   |               |
| 179  | A rope ladder with wooden rungs is a _____.   | drop ladder  | life ladder   | <b>Jacob's ladder</b>  | jury ladder  |               |
| 180  | A rope made of a combination of wire and fiber is known as _____.   | independent  | lang lay  | preformed  | <b>spring lay</b>  |               |
| 181  | A safety shackle is identified by its _____.  | shape  | <b>pin</b>  | certification stamp  | color code   |               |
| 182  | A sail hook is used for _____.  | hoisting a windsail  | parceling   | <b>sewing canvas</b>   | testing canvas   |               |
| 183  | A seam is indicated by which letter in illustration D033DG?   | <b>E</b>   | H   | L  | M  | <b>D033DG</b> |
| 184  | A seaman about to be discharged has a Continuous Discharge Book. Which statement is TRUE?   | A Certificate of Discharge Form should be attached to the book.            | An entry should be made in the book and a Certificate of Discharge Form issued to the seaman. | If a vessel was on coastwise articles, the record of discharge will be made in the Official Logbook. | <b>The record of entry in the book must be submitted to the Coast Guard.</b> |               |
| 185  | 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, _____. | the Second Mate and the Master must testify as to the facts of the assault | the case will be dismissed if the logbook entries are improperly made                         | <b>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 |               |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 186  | 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?  | Sell them at auction and deposit the money in the ship's morale or welfare fund.      | Donate them to a local charity upon return to the United States.                        | <b>Transfer them to the appropriate district court of the U.S. at the end of the voyage.</b> | Inventory them, make an appropriate entry in the Official Logbook and dispose of them at sea. |              |
| 187  | A seaman dies during a voyage. What is NOT required to be entered into the Official Log?  | <b>Statement that the Master has taken custody of the deceased's MMD and passport</b> | An inventory of the money and property  | Statement of the wages due   | Statement as to the total deductions to be made from the wages                                |              |
| 188  | A seaman is entitled by law to a release from Foreign Articles when _____.  | intoxicated   | <b>the vessel is overloaded</b>   | there is a change of home port   | there is a change of Master   |              |
| 189  | A seaman is entitled by law to a release from Foreign Articles when _____.  | intoxicated   | deductions are made from wages  | injured  | <b>the vessel is overloaded</b>   |              |
| 190  | A seaman is reported missing in the morning and was last seen after coming off the mid-watch. Which type of turn would you use to return to the track-line steamed during the night?  | <b>Williamson</b>   | Racetrack   | 180° turn  | Anderson  |              |
| 191  | 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? | <b>Log the seaman as a deserter.</b>  | Log the seaman as a fail to join.   | Log the seaman for misconduct.   | Take no action.   |              |
| 192  | A seaman lost his continuous discharge book during the voyage. Upon discharge from Articles, he should be issued a _____.   | letter of service on company letterhead signed and sealed by the master               | Record of Entry in a Continuous Discharge Book for use in applying for a duplicate book | <b>Certificate of Discharge with the white copy forwarded to the Commandant</b>              | Mutual Release (CG-2119), and the articles should be annotated as to the loss                 |              |
| 193  | A seaman may have all or part of his wages deposited by allotment to a bank or savings institution. Which of the following is NOT a requirement for this type of allotment?   | <b>The account must be either a checking or savings account.</b>                      | The institution must be insured by the FSLIC or FDIC.                                   | The account must be opened by the seaman and maintained in the seaman's name.                | All of the above are requirements.  |              |
| 194  | A seaman may not make an allotment to his _____.  | minor children  | grandparents  | brother  | <b>mother-in-law</b>  |              |
| 195  | A seaman signed on articles on 16 January 1987 and signed off on 2 March 1987. How should you enter this under the Time of Service column in the articles?  | 1 Month 18 Days   | 1 Month 16 Days   | 2 Months   | <b>46 Days</b>  |              |



| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|---|--|--|---|--------------|
| 196  | A seaman you have just discharged has a Continuous Discharge Book. Which statement is TRUE?  | <b>The record of entry in the continuous discharge book shall agree with the entry made in the Ship's Articles.</b> | If the vessel was on coastwise articles, the record of discharge will be made in the Official Logbook. | An entry should be made in the book and a Certificate of Discharge issued to the seaman. | A Certificate of Discharge form should be attached to the book. |              |
| 197  | A serving mallet is used in _____.   | <b>covering wire or fiber rope</b>  | forcing fids into a line   | dogging hatches  | splicing lines  |              |
| 198  | A set of interior steps on a ship leading up to a deck from below is know as _____.  | <b>a companion way</b>  | 'tween-decks   | stairs   | All of the above are acceptable                                 |              |
| 199  | A sheave is a _____.   | <b>grooved wheel in a block</b>   | line to hold a lifeboat next to the embarkation deck   | partial load of grain  | seaman's knife  |              |
| 200  | A shipper of cargo aboard your vessel offers a letter of indemnity for the cargo. This is done in order to obtain a(n) _____.                                  | <b>Clean Bill of Lading</b>   | Order Bill of Lading   | Straight Bill of Lading  | Through Bill of Lading  |              |
| 201  | A shore is a piece of securing dunnage that _____.   | <b>runs from a low supporting level up to the cargo at an angle</b>   | is also known as a "distance piece"  | is placed on the deck under the cargo to distribute its weight evenly                    | is run horizontally from a support to the cargo                 |              |
| 202  | A short splice in a line _____.  | decreases the size of the line  | should be used if the line is going through a block  | should only be used in wire rope   | <b>doubles the size of the line</b>                             |              |
| 203  | A short ton is a unit of weight consisting of _____.   | 1,000 pounds  | <b>2,000 pounds</b>  | 2,205 pounds   | 2,240 pounds  |              |
| 204  | A single fitting installed in a pipeline that either blanks off the pipe or allows a full flow passage of a liquid through the pipe is referred to as a _____. | blind flange  | pivot coupling   | quick-release coupling   | <b>spectacle flange</b>   |              |
| 205  | A single-screw vessel going ahead tends to turn more rapidly to port because of propeller _____.   | discharge current   | suction current  | <b>sidewise force</b>  | thrust  |              |
| 206  | 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 _____.           | to the base of the foremast   | <b>to the forward-most bitts</b>   | to the forward part of the deckhouse   | at the stern  |              |
| 207  | A situation has occurred where it becomes necessary for you to be towed. What action should be taken to prevent your vessel from yawing?                       | Shift weight to the bow   | Shift weight to the center of the boat   | <b>Shift weight to the stern</b>   | Throw excess weight overboard                                   |              |
| 208  | A six-strand composite rope made up of alternate fiber and wire strands around a fiber core is called _____.   | <b>spring lay</b>   | lang lay   | cable lay  | alternate lay   |              |



| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|--|---|---|---|--------------|
| 209  | A sling is a device used in _____.   | <b>hoisting cargo aboard a vessel</b>                            | hoisting personnel aboard a vessel                          | securing a small boat to a large vessel                               | hoisting the anchor                                       |              |
| 210  | A sling is rigged on a piece of pipe weighing 1000 lbs. The angle between the sling legs is 140° and the legs are of equal length. What stress is exerted on each sling leg when the pipe is lifted? | 1318 lbs.  | 1366 lbs.   | 1414 lbs.   | <b>1462 lbs.</b>  |              |
| 211  | A small light tackle with blocks of steel or wood that is used for miscellaneous small jobs is called a _____.   | snatch block   | threefold purchase  | <b>handy-billy</b>  | chockablock   |              |
| 212  | A smooth, tapered pin, usually of wood, used to open up the strands of a rope for splicing is called a(n) _____.   | batten   | bench hook  | awl   | <b>fid</b>  |              |
| 213  | A snag or other underwater obstruction may form a _____.   | <b>V-shaped ripple with the point of the V pointing upstream</b> | V-shaped ripple with the point of the V pointing downstream | small patch of smooth water on a windy day                            | smoothing out of the vessel's wake                        |              |
| 214  | A snatch block is a _____.   | block used only with manila rope                                 | chock roller  | <b>hinged block</b>   | strong block used for short, sharp pulls                  |              |
| 215  | A snatch block would most likely be used as a _____.   | boat fall  | <b>fairlead</b>   | riding pawl   | topping lift  |              |
| 216  | A spreader bar is used to _____.   | increase the lifting capacity                                    | increase the lifting radius                                 | protect the slings  | <b>protect the upper part of a load</b>                   |              |
| 217  | A spring line leads _____.   | <b>fore and aft from the ship's side</b>                         | to the dock at a right angle to the vessel                  | through the bull nose or chock at the bow                             | through the chock at the stern                            |              |
| 218  | A stage should only be rigged _____.   | over the bow or stern of a vessel                                | over the flat sides of a vessel                             | <b>over the open water</b>  | over the dockside   |              |
| 219  | A standard net barrel of petroleum products is _____.  | <b>42 gallons at 60°F</b>  | 48 gallons at 70°F  | 50 gallons at 50°F  | 60 gallons at 100°F                                       |              |
| 220  | A stopper used in securing the ground tackle for sea that consists of a grab attached to a turnbuckle is a _____.  | riding pawl  | buckler   | <b>devil's claw</b>   | locking ring  |              |
| 221  | A stream of water immediately surrounding a moving vessel's hull, flowing in the same direction as the vessel is known as _____.   | directional current  | forward current   | propeller current   | <b>wake current</b>                                       |              |
| 222  | A sufficient amount of chain must be veered when anchoring a vessel to ensure _____.   | the vessel has enough room to swing while at anchor              | <b>the anchor flukes bite into the ocean bottom</b>         | there is a sufficient scope of chain to keep the anchor on the bottom | there is more chain out than there is in the chain locker |              |
| 223  | A survey of refrigerated cargo, to certify that proper methods of stowage were utilized, can be conducted by the _____.  | American Bureau of Shipping                                      | Occupational Safety and Health Administration               | U.S. Coast Guard  | <b>National Cargo Bureau</b>                              |              |

| ID # | Question   | Choice A                 | Choice B               | Choice C                 | Choice D                                 | Illustration |
|------|--|--------------------------|------------------------|--------------------------|--|--------------|
| 224  | A tackle is "two blocked" when the blocks are _____.   | equally sharing the load | <b>jammed together</b> | as far apart as possible | rove to the highest mechanical advantage |              |
| 225  | A tank holds 400 tons of sea water when filled. How many tons of liquid of specific gravity 0.9300 will it hold when filled to 90% capacity?   | <b>326.6</b>             | 343.2                  | 377.6                    | 390.2                                    |              |
| 226  | A tank is loaded with 9,000 barrels of gasoline. The temperature of the product is 80°F (27°C), and it has a coefficient of expansion of .0008. The net amount of cargo loaded is _____.                             | <b>8,856 barrels</b>     | 8,944 barrels          | 9,072 barrels            | 9,144 barrels                            |              |
| 227  | A tank is loaded with 9,000 barrels of gasoline. The temperature of the product is 90°F (32°C), and it has a coefficient of expansion of .0008. What is the net amount of cargo loaded?                              | 8856 bbls                | <b>8784 bbls</b>       | 8820 bbls                | 9216 bbls                                |              |
| 228  | A tanker is loaded with 12,000 barrels of #2 fuel oil. The temperature of the product is 88°F. API gravity is 39°. The volume correction factor (VCF) is .0005. The net amount of cargo in barrels, loaded is _____. | 12,168                   | 12,006                 | 11,994                   | <b>11,832</b>                            |              |
| 229  | A tanker is loaded with 12,000 barrels of #2 fuel oil. The temperature of the product is 88°F. API gravity is 39°. The volume correction factor (VCF) is .0005. The net amount of cargo in gallons, loaded is _____. | <b>496,944</b>           | 511,056                | 650,760                  | 669,240                                  |              |
| 230  | 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?                     | 4800                     | <b>4980</b>            | 5020                     | 5200                                     |              |
| 231  | 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?         | 334,320                  | <b>337,680</b>         | 437,800                  | 442,200                                  |              |
| 232  | 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 barrels of cargo loaded?         | <b>8,040</b>             | 8,016                  | 7,984                    | 7,960                                    |              |
| 233  | A temporary wire eye splice made with three wire rope clamps will hold approximately what percentage of the total rope strength?   | 20%                      | 50%                    | <b>80%</b>               | 99%                                      |              |
| 234  | A term applied to the bottom shell plating in a double-bottom ship is _____.   | bottom floor             | <b>outer bottom</b>    | shear plating            | tank top                                 |              |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 235  | A term used to describe the dip in a towline that acts as a shock absorber is _____.   | <b>catenary</b>  | step   | shock dip  | bight  |              |
| 236  | A texas bar _____.   | prevents the towing hawser from snagging any equipment or gear on deck | may be equipped with a greased, free sliding spool to fairlead the towing hawser | allows the crew access to the fantail                | <b>All of the above</b>                                    |              |
| 237  | A thirty pound plate would be _____.   | 3/8" thick   | 1/2" thick   | <b>3/4" thick</b>                                    | 1" thick   |              |
| 238  | A tonnage tax is levied according to the _____.  | deadweight cargo tonnage aboard  | displacement tonnage of vessel   | gross tonnage of vessel                              | <b>net tonnage of vessel</b>                               |              |
| 239  | A tow astern is veering from side to side on its towline. The best way of controlling the action is to _____.  | trim the tow by the bow  | <b>trim the tow by the stern</b>   | list the tow to windward                             | adjust the length of the towing bridle                     |              |
| 240  | A tow bridle is attached to the main tow hawser at the _____.  | bight ring   | tow hook   | <b>fishplate</b>                                     | swivel   |              |
| 241  | A tow can override its tug as a result of _____.   | a mechanical breakdown on the tug                                      | adverse tidal current conditions   | the tug reducing its speed                           | <b>All of the above</b>                                    |              |
| 242  | A tow consists of 8 barges: 6 jumbo barges made up 3 abreast and 2 long, with 2 standard barges abreast as lead barges. How long is this tow?                            | 525 feet   | 545 feet   | <b>565 feet</b>                                      | 595 feet   |              |
| 243  | A tow of 9 barges is made up three abreast and three long. The towboat is faced up to the center string which is known as the _____.                                     | main string  | <b>push string</b>   | power string   | face string  |              |
| 244  | A tow of 9 barges is made up three abreast by three long. The towboat is faced up to the last barge of the center string. The outer two strings of barges are the _____. | port and starboard strings   | outer strings  | <b>drag strings</b>                                  | side strings   |              |
| 245  | A tow that veers to the side on the end of the towline is said to _____.   | <b>yaw</b>   | surge  | sway   | swing  |              |
| 246  | A towing hawser is readied for service by _____.   | spooling it on a winch cathead   | coiling it in a counterclockwise direction on the fantail                        | <b>faking it on deck in a fore and aft direction</b> | spooling it on a reel lying on its side to prevent rolling |              |
| 247  | A towing hawser should be stowed _____.  | <b>in a sealed locker with adequate air circulation</b>                | by spooling it on the winch  | by faking on a rack                                  | by hanging it in the engine room                           |              |
| 248  | A towing hook may be released from the _____.  | tug's engine room or the bow   | <b>pilot house or aft steering station</b>                                       | forecastle   | towing bits by reaching over and releasing a lever         |              |
| 249  | A towing vessel becomes tripped while towing on a hawser astern. What factor is LEAST important when assessing the risk of capsizing?                                    | Length of the towline  | <b>Height of the towline connection</b>  | Length of the barge                                  | Direction of opposing force                                |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 250  | A towing vessel is tripped when _____.  | it is overtaken by the tow                              | <b>it is pulled sideways by the tow</b>  | the weight of the towing hawser causes loss of maneuverability                 | the propeller is fouled by the towing hawser             |              |
| 251  | A towing vessel should be on the crest of a wave at the same time as its tow and in the trough at the same time. The term used to describe this is _____. | tow strain  | catenary length  | <b>being in step</b>   | Williamson's Tow   |              |
| 252  | A towing vessel's capability is BEST measured by horsepower, maneuverability, displacement, and _____.  | stability   | propeller design   | <b>bollard pull</b>  | towing winch horsepower                                  |              |
| 253  | A towing winch, that handles a wire towline, must have all of the following EXCEPT a _____.   | device that evenly spools and tightly winds the towline | brake with holding power appropriate for the vessel's horsepower or bollard pull | brake that can be operated when there is no power available to drive the winch | <b>source of emergency power to operate the winch</b>    |              |
| 254  | A towline should be fastened to _____.  | the chocks at the bow of a towed vessel                 | the most forward, centermost point of a towed vessel such as a sturdy bow rail   | the mast of a towed sailboat   | <b>a secure fitting near the bow of the towed vessel</b> |              |
| 255  | A tug in irons is _____.  | rudder bound  | being tripped by the towline   | <b>unable to maneuver</b>  | broached   |              |
| 256  | A tug is "in irons" when held in a fixed position by _____.   | the weight of its tow, its being anchored, or grounded  | <b>the towing hawser snagged on the bottom</b>                                   | an adverse current   | lack of power or an engine breakdown                     |              |
| 257  | A tug is best positioned for towing and maneuvering on rivers and other restricted waters where wave action is limited when _____.                        | <b>directly astern and pushing the tow</b>              | towing on a hawser   | towing alongside and parallel to the vessel it is towing                       | towing on the hip  |              |
| 258  | A tug is to assist in docking an oceangoing vessel on a hawser. The greatest danger to the tug is _____.  | from the ship's propeller when making up aft            | from being overrun if making up forward  | hull damage while alongside passing a hawser                                   | <b>getting in a tripping position</b>                    |              |
| 259  | A tug may be in danger of tripping when _____.  | towed sideways by an overwhelming force on the towline  | her tow moves parallel to and forward on either side of the tug                  | the tow is no longer directly astern but moves up on her quarter               | <b>All of the above</b>                                  |              |
| 260  | A tug would NOT assist a ship to steer if the tug is made up to the large vessel _____.   | by a tow line ahead of the vessel                       | forward on either bow of the vessel  | <b>approximately amidships of the vessel</b>                                   | on the vessel's quarter                                  |              |
| 261  | A tug's horsepower available at the shaft is _____.   | indicated horsepower                                    | <b>brake horsepower</b>  | dynamic horsepower   | net horsepower   |              |
| 262  | A twin screw vessel, making headway with both engines turning ahead, will turn more readily to starboard if you _____.                                    | reverse port engine, apply right rudder                 | reverse port engine, rudder amidships  | <b>reverse starboard engine, apply right rudder</b>                            | reverse starboard engine, rudder amidships               |              |

| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|---|--|---|--|--------------|
| 263  | A twin-screw ship going ahead on the starboard screw only tends to move _____.  | in a straight line  | <b>to port</b>   | from side to side   | to starboard   |              |
| 264  | A twin-screw vessel can clear the inboard propeller and maneuver off a pier best by holding a(n) _____.   | forward spring line and going slow ahead on the inboard engine                    | after spring line and going slow astern on the outboard engine   | forward spring line and going slow ahead on both engines                                    | <b>forward spring line and going slow ahead on the outboard engine</b> |              |
| 265  | A twin-screw vessel is easier to maneuver than a single-screw vessel because the twin-screw vessel _____.   | permits the rudder to move faster   | generates more power   | <b>can turn without using her rudder</b>  | can suck the water away from the rudder                                |              |
| 266  | A twin-screw vessel with a single rudder is making headway. The engines are full speed ahead. There is no wind or current. Which statement is FALSE?  | If one screw is stopped, the ship will turn toward the side of the stopped screw. | The principal force which turns the ship is set up by the wake against the forward side of the rudder. | <b>Turning response by use of the rudder only is greater than on a single-screw vessel.</b> | With the rudder amidships, the ship will steer a fairly steady course. |              |
| 267  | A U.S. Coast Guard icebreaker may use all of the following distinctive lights when escorting ships in ice EXCEPT _____.   | a single amber rotating light   | a single red rotating light  | red aircraft warning lights   | <b>a single blue rotating light</b>                                    |              |
| 268  | A U.S. Coast Guard icebreaker, while escorting ships in ice, may sound four short and one long blasts on the whistle to indicate that the icebreaker _____.   | <b>has become beset in fast ice</b>   | is increasing speed; watch for broken ice  | has its engines full astern   | is increasing the distance between vessels                             |              |
| 269  | A U.S. or foreign flag vessel that does not comply with the Officers Competency Certificates Convention of 1936 may be detained by certain designated officials. These officials include all of the following EXCEPT a/an _____.                    | <b>State Police officer</b>   | Coast Guard officer  | Coast Guard petty officer   | officer of the U.S. Customs Service                                    |              |
| 270  | A U.S. or foreign flag vessel that does not comply with the Officers Competency Certificates Convention of 1936 may be detained by certain designated officials. These officials include all of the following EXCEPT a/an _____.                    | Coast Guard officer   | employee of the U.S. Customs Service   | Coast Guard petty officer   | <b>State Police officer</b>  |              |
| 271  | A U.S. vessel engaged in foreign trade must be _____.   | classed   | enrolled   | licensed  | <b>registered</b>  |              |
| 272  | A vessel arrives at the port of San Francisco from Yokohama, Japan. The passengers fill out the Baggage Declaration and Entry form. A passenger has baggage arriving on another vessel. How must this baggage be handled for U.S. Customs purposes? | It need not be declared at this time.   | <b>It must be declared on the same form and marked "Unaccompanied Baggage".</b>                        | It must be declared on another form entitled "Continuation Sheet".                          | It must be declared only if the other vessel's name is known.          |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 273  | A vessel arrives in a foreign port and the Master is informed that the vessel is being sold to foreign interests. The new owners request that the crew remain on board to complete the voyage. Under these circumstances, the crew _____. | <b>has the right to an immediate discharge and transportation to original port of engagement</b> | must remain on board  | must comply with the decision made by the Master                         | must remain aboard until the vessel is delivered to the new owners at a mutually agreed upon port |              |
| 274  | A vessel arrives in San Francisco from a foreign voyage. When MUST the Master make formal entry at the custom house?  | Within 24 hours after arrival, Sundays and holidays excepted                                     | <b>Within 48 hours after arrival, Sundays and holidays excepted</b> | Within 48 hours and before all foreign cargo is discharged for that port | Within 24 hours after arrival   |              |
| 275  | A vessel arrives in the port of Los Angeles from a foreign port and discharges some of its inward foreign cargo. What additional manifest is required?  | Discharge Manifest   | Inward Foreign Manifest   | Pro Forma Manifest   | <b>Traveling Manifest</b>   |              |
| 276  | A vessel brought alongside should be fended off the towing vessel by _____.   | crew members using their arms  | a boat hook   | <b>fenders</b>   | No fending is necessary due to the rugged construction of most towing vessels.                    |              |
| 277  | A vessel brought alongside should be fended off the towing vessel by _____.   | crew members using their arms  | a boat hook   | <b>fenders</b>   | No fending is necessary due to the rugged construction of most towing vessels.                    |              |
| 278  | A vessel has a charter party for one voyage to carry a full load of manganese from Durban, South Africa, to Baltimore, Maryland, at a stipulated rate per ton. Which type of contract is involved?  | Bareboat charter party   | <b>Voyage charter party</b>   | Demise charter party   | Time charter party  |              |
| 279  | A vessel has a deadweight carrying capacity of 10,500 tons. Fuel, water, and stores require 1500 tons. The cubic capacity is 500,000 cubic feet. Which cargo will put her full and down?  | Slabs of zinc, SF 7.1  | <b>Rolls of barbed wire, SF 55.5</b>                                | Barrels of tallow, SF 66.8   | Bundles of rubber, SF 140.2   |              |
| 280  | A vessel has an amidships superstructure. Which location would be most suitable for main deck stowage of vehicles?  | On top of #1 hatch   | Beside the hatches, forward of the amidships house                  | On top of the aftermost hatch on the vessel                              | <b>On top of the hatch immediately aft of the amidships house</b>                                 |              |
| 281  | A vessel has arrived in a U.S. port from a foreign voyage. Preliminary entry has been made. Formal entry at the U.S. Custom House must be made within how many hours after arrival (Sundays and holidays excepted)?                       | 12   | 24  | <b>48</b>  | 72 without exception  |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 282  | A vessel has been damaged by fire. The survey shows the cost of repairs will exceed the value of the repaired vessel. This is an example of a(n) _____.   | <b>constructive total loss</b>  | salvage loss  | actual loss  | preferred loss  |              |
| 283  | A vessel has been surveyed in a foreign port and found unseaworthy as a result of neglect. A seaman on this vessel is entitled to discharge and _____.  | transportation to the port of engagement  | one month's pay only  | one month's pay or transportation to the nearest U.S. port, whichever is the least amount                          | <b>one month's pay or transportation to the nearest U.S. port, whichever is the greater amount</b>        |              |
| 284  | A vessel has completed loading cargo in the port of San Francisco. What document is signed by the Master stating the terms that goods were delivered and received by the ship?                          | Bill of Goods   | <b>Bill of Lading</b>   | Cargo Manifest   | Cargo Receipt   |              |
| 285  | A vessel having continuous closely spaced transverse strength members is _____.   | longitudinally framed   | <b>transversely framed</b>  | cellular framed  | web framed  |              |
| 286  | A vessel in Great Lakes service shall carry anchors in accordance with standards established by the _____.  | <b>American Bureau of Shipping</b>  | Canadian Coast Guard  | U.S. Coast Guard   | underwriter of the vessel   |              |
| 287  | A vessel is constructed with a steel hull and an aluminum superstructure. Which statement is TRUE?  | The aluminum will provide greater resistance to the spread of fire by conduction.             | <b>The aluminum structure is usually attached to a steel coaming by a method that insulates the two metals.</b> | If the superstructure is stressed, an aluminum structure requires additional expansion joints to prevent fracture. | The steel at the area of the aluminum-to-steel connection must be closely checked for galvanic corrosion. |              |
| 288  | A vessel is entering port "A" for the first time and has a Pilot conning the vessel. The Master is unsure that the Pilot is taking sufficient action to prevent a collision. What should the Master do? | Nothing; The Pilot is required by law and is solely responsible for the safety of the vessel. | State his concerns to the Pilot but do not interfere with the handling of the vessel.                           | Direct the Pilot to stop the vessel and anchor if necessary until the situation clears.                            | <b>Recommend an alternative action and if not followed relieve the Pilot.</b>                             |              |
| 289  | A vessel is entering port and has a Pilot conning the vessel. The Master is unsure that the Pilot is taking sufficient action to prevent a collision. What should the Master do?                        | Nothing; the Pilot is required by law and is solely responsible for the safety of the vessel. | State his concerns to the Pilot but do not interfere with the handling of the vessel.                           | <b>Recommend an alternative action and if not followed relieve the Pilot.</b>                                      | Direct the Pilot to stop the vessel and anchor if necessary until the situation clears.                   |              |
| 290  | A vessel is equipped with twin propellers, both turning outboard with the engines half ahead. If there is no wind or current and the rudders are amidships, what will happen?                           | The bow will swing to starboard.  | The bow will swing to port.   | The vessel will steer a zigzag course.   | <b>The vessel will steer a fairly straight course.</b>  |              |
| 291  | A vessel is found to be seaworthy after a complaint in writing to the American Consul by the Chief and Second Mates. The cost of the survey is to be paid by the _____.                                 | American Consul   | <b>Chief and Second Mates</b>   | Vessel's agent   | vessel's owners   |              |



| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|---|--|--|---|--------------|
| 292  | A vessel is involved in a casualty. The cost of property damage includes the _____.   | loss of revenue while the vessel is being repaired, up to a maximum of \$50,000                         | <b>cost of labor and material to restore the vessel to the service condition which existed before the casualty</b> | damage claims awarded to individuals or companies involved in the casualty, up to a maximum of \$50,000            | All of the above  |              |
| 293  | A vessel is involved in a casualty. The cost of property damage includes the _____.   | damage claims awarded to individuals or companies involved in the casualty, up to a maximum of \$50,000 | loss of revenue while the vessel is being repaired, up to a maximum of \$50,000                                    | <b>cost of labor and material to restore the vessel to the service condition which existed before the casualty</b> | All of the above  |              |
| 294  | A vessel is loaded to her summer marks for a voyage from Montreal, Canada to Duluth, MN via the Great Lakes System. The voyage has been estimated to take nine (9) days. If the vessel departs Montreal on September 28th, which of the following statements is TRUE? | The vessel must be at her summer marks when she arrives at Duluth.                                      | The vessel is in violation of the load line requirements.  | <b>The vessel's intermediate load line marks may not be submerged after September 30.</b>                          | The vessel must be at her winter marks by the evening of the third day. |              |
| 295  | A vessel is not required to carry urine specimen collecting kits onboard the vessel only if the individuals directly involved in a Serious Marine Incident can be tested ashore within _____?   | 12 hours  | 24 hours   | <b>32 hours</b>  | 48 hours  |              |
| 296  | A vessel is tide rode when it is _____.   | carrying extra rudder to compensate for the current   | necessary to adjust the course steered to allow for the current  | <b>at anchor and stemming the current</b>  | being forced off of a pier by the hydraulic effect of the current       |              |
| 297  | A vessel is to make a voyage between New York and San Juan, Puerto Rico, and return. The crew should be signed on _____.  | <b>Coastwise Articles</b>   | Foreign Articles   | Intercoastal Articles  | no articles   |              |
| 298  | A vessel is underway with a work stage rigged over the side. A seaman may work on the stage, but only when _____.   | wearing a life jacket   | wearing a safety harness secured to the stage  | wearing both a life jacket and a safety harness secured to the stage   | <b>the vessel is not making way</b>                                     |              |
| 299  | A vessel is wind rode when it is _____.   | <b>at anchor and heading into the wind</b>  | backing into the wind  | carrying lee rudder  | necessary to apply a leeway correction to the course                    |              |
| 300  | A vessel loads 100 tons of glass jars. The mate on watch discovers that some of the cartons have been damaged and has an exception made on the Bill of Lading. What is this document called?  | Damage Bill of Lading   | Letter of Indemnity  | Non-negotiable Bill of Lading  | <b>Unclean Bill of Lading</b>   |              |



| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|--|---|--|---|--------------|
| 301  | A vessel loads 5000 tons of manganese ore. The railroad cars that brought the ore to the vessel were previously loaded with iron ore so the ore is contaminated. The agent requests the Master to sign a Clean Bill of Lading and in return the shipper will give him a Letter of Indemnity. What is the best procedure to follow? | Sign a Clean Bill of Lading and accept the Letter of Indemnity.          | <b>Refuse to sign a Clean Bill of Lading.</b>   | Sign the Clean Bill of Lading and have the agent countersign it. | Sign a Clean Bill of lading under protest.  |              |
| 302  | A vessel loads edible oil in a deep tank through a manhole at the mid-length of the tank. In order to fill the tank to maximum capacity, what trim should the vessel have?   | Down by the bow  | Down by the stern   | Down by either the bow or stern                                  | <b>In level trim</b>  |              |
| 303  | A vessel must have one approved ring life buoy on board if its length is over how many feet?   | 6 feet   | 16 feet   | <b>26 feet</b>   | 36 feet   |              |
| 304  | A vessel operating "in class" has met all the requirements of the _____.   | <b>ABS or similar society</b>  | insurance company   | U.S. Coast Guard   | U.S. Customs  |              |
| 305  | A vessel operating on the Great Lakes, and whose position is south of an approaching eastward-moving storm center, would NOT experience _____.   | a falling barometer  | lowering clouds and drizzle   | <b>a southwest to west wind</b>                                  | rain or snow  |              |
| 306  | A vessel proceeding along the bank of a river or channel has the tendency to _____.  | continue in line with the bank   | hug the bank  | <b>sheer away from the bank</b>                                  | increase speed  |              |
| 307  | A vessel proceeding to London, England, from New York makes an unscheduled call at the port of Hamilton, Bermuda. What term is used to denote the voluntary departure from the usual course?   | Alteration   | <b>Deviation</b>  | Liberty  | Unscheduled stop  |              |
| 308  | A vessel puts into the port of Kobe, Japan to discharge cargo. While awaiting completion of the cargo operation, the vessel contracts with a local shipyard to have the hull chipped, scaled, and painted. How is the cost of this maintenance handled with the Collector of Customs?  | <b>A declaration is required and duty is involved on the total cost.</b> | No declaration is required since this is considered routine maintenance.                | A declaration is made and duty is charged on the materials only. | A declaration is made, but duty is charged on the labor only.                       |              |
| 309  | A vessel puts into the port of Kobe, Japan, to discharge cargo. The vessel contracts a local shipyard to have the hull chipped and scaled. If the vessel provides the primer and paint, which statement is TRUE?   | You need NOT declare the cost of labor, since no duty is involved.       | You need NOT declare the cost of labor, since this is considered ship's personnel work. | <b>You MUST declare the cost of labor and pay duty.</b>          | You MUST declare the cost of labor, but no duty is charged since labor is involved. |              |
| 310  | A vessel reduces speed without backing. The rate that her speed through the water decreases depends primarily on the _____.  | vessel's horsepower  | sea state   | number of propellers   | <b>vessel's displacement</b>  |              |

| ID # | Question  | Choice A  | Choice B  | Choice C                          | Choice D   | Illustration |
|------|---|---|---|-----------------------------------|--|--------------|
| 311  | A vessel sailing from Liverpool to New York puts into Boston, Mass. for emergency repairs. If no inward foreign cargo is to be discharged at that port, which of the following documents is required?             | Customs Manifest  | Inward Foreign Manifest                                     | <b>Pro Forma Manifest</b>         | Traveling Manifest   |              |
| 312  | A vessel spotted at 45° relative can be reported as _____.  | on the starboard beam   | <b>broad on the starboard bow</b>                           | 4 points forward of starboard bow | 4 points abaft the starboard beam                                      |              |
| 313  | A vessel that tows astern must have a/an _____.   | towing winch  | <b>method to easily release the towline</b>                 | oxy-acetylene cutting torch       | ax or knife mounted near the towing bits                               |              |
| 314  | A vessel traveling down a narrow channel, especially if the draft is nearly equal to the depth of the water, may set off the nearer side. This effect is known as _____.  | smelling the bottom   | squatting   | bank suction                      | <b>bank cushion</b>  |              |
| 315  | A vessel which is being assisted by an icebreaker should indicate that he is ready to cast off the towline (if one is used) by _____.   | <b>displaying code letter "Y" (Yankee)</b>                          | sounding five short blasts of his whistle                   | displaying code numeral "5"       | sounding one prolonged blast of his whistle                            |              |
| 316  | A vessel which is being assisted by an icebreaker should indicate that she is ready to cast off the towline by _____.   | <b>displaying code letter "Y" (Yankee)</b>                          | sounding five short blasts on his whistle                   | displaying code numeral "5"       | sounding one prolonged blast on his whistle                            |              |
| 317  | A vessel which is being assisted by an icebreaker would display a flag hoist consisting of the code numeral "4" when the vessel _____.  | speed begins to drop  | stops   | receives ice damage               | <b>becomes icebound</b>  |              |
| 318  | A vessel will "squat" when it proceeds underway _____.  | only in deep water  | only in shallow water                                       | <b>in all depths of water</b>     | only in narrow channels  |              |
| 319  | A vessel's "quarter" is that section which is _____.  | abeam   | dead astern   | just aft of the bow               | <b>on either side of the stern</b>                                     |              |
| 320  | A vessel's bottom will be subjected to tension when weight is concentrated _____.   | <b>amidships</b>  | aft   | at both ends of the vessel        | forward  |              |
| 321  | A vessel's Certificate of Documentation _____.  | may be retained by the owner at the home port OR kept on the vessel | must be posted under transparent material in the pilothouse | <b>must be carried on board</b>   | must be kept on file at the corporate offices of the owner or operator |              |
| 322  | A vessel's Classification Certificate is issued by the _____.   | <b>American Bureau of Shipping</b>                                  | National Cargo Bureau                                       | United States Coast Guard         | United States Customs  |              |
| 323  | A vessel's light displacement is 12,000 tons. Its heavy displacement is 28,000 tons. When fully loaded it carries 200 tons of fuel and 100 tons of water and stores. What is the cargo carrying capacity in tons? | 11,700 tons   | <b>15,700 tons</b>  | 16,000 tons                       | 27,700 tons  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D  | Illustration  |
|------|---|--|--|---|---|---------------|
| 324  | A VLCC (100,000 DWT+) with a 30,000 Shaft Horsepower Steam Turbine is slow to respond to engine movements and has less stopping power than normal ships because it has a _____.   | bigger propeller   | <b>smaller power to weight ratio</b>   | smaller propeller   | larger power to weight ratio  |               |
| 325  | A V-shaped ripple with the point of the V pointing upstream in a river may indicate a _____.  | submerged rock, not dangerous to navigation  | sunken wreck, not dangerous to navigation                                    | <b>towed-under buoy</b>                                   | All of the above  |               |
| 326  | A wedge of water building up between the bow and nearer bank which forces the bow out and away describes _____.   | <b>bank cushion</b>  | bank suction   | combined effect   | bend effect   |               |
| 327  | A weight of 1,000 short tons is equivalent to _____.  | 1,500 foot-pounds  | 2,240 long tons  | 2,000 pounds  | <b>2,000 kips</b>   |               |
| 328  | A welded joint's effectiveness is considered _____.   | 48%  | 90%  | <b>100%</b>   | 121%  |               |
| 329  | A well in the uppermost deck of a shelter deck vessel which has only a temporary means of closing for the purpose of gaining an exemption from tonnage measurement is called a(n) _____.  | exemption space  | tonnage deck   | cofferdam   | <b>tonnage opening</b>  |               |
| 330  | A whipping on a fiber line _____.   | <b>keeps the ends from fraying</b>   | strengthens it   | protects your hands                                       | becomes part of a splice  |               |
| 331  | A wildcat is a _____.   | <b>deeply-grooved drum on the windlass with sprockets which engage the links of the anchor chain</b> | winch that is running out of control due to a failure of the overspeed trips | line that has jumped off the gypsyhead while under strain | nylon line that parts under strain and whips back in a hazardous manner |               |
| 332  | A wire rope rove through two single blocks with two parts at the moving block is used for a boat fall. The weight of the 100-person boat is 5 tons. Compute the required breaking strain. Safety Factor - 6, weight per person - 165 lbs., 10% friction per sheave (2 sheaves). | 18.30 tons B.S.  | 20.29 tons B.S.  | <b>22.27 tons B.S.</b>                                    | 24.31 tons B.S.   |               |
| 333  | A wire rope that has been overstrained will show _____.   | a bulge in the wire where the strain occurred  | <b>a decrease in diameter where the strain occurred</b>                      | a kink in the wire where the strain occurred              | no visible effects of an overstrain                                     |               |
| 334  | A wooden deck installed on top of the plating lettered N is known as _____.   | spar decking   | furring  | <b>ceiling</b>  | flooring  | <b>D033DG</b> |
| 335  | A wooden float placed between a ship and a dock to prevent damage to both is called a _____.  | <b>camel</b>   | dolphin  | rat guard   | wedge   |               |
| 336  | A wooden plug fitted tightly in the vent of a damaged tank may prevent the tank from _____.   | <b>filling completely</b>  | developing free surface  | developing free surface moment                            | collapsing  |               |

| ID # | Question  | Choice A  | Choice B  | Choice C                                    | Choice D   | Illustration  |
|------|---|---|---|---|--|---------------|
| 337  | Aboard ship, vertical flat plates running transversely and connecting the vertical keel to the margin plates are called _____.  | <b>floors</b>   | intercostals  | girders                                     | stringers  |               |
| 338  | According to 33 CFR, on board which type of vessel described below is required to maintain Part II (Cargo/Ballast Operations) of the Oil Record Book?   | A ship of 150 gross tons and above, other than an oil tanker. | <b>A non-tanker that carries more than 200 cubic meters of oil in bulk.</b> | Any oil tanker of 100 gross tons and above. | An oil tanker of 150 gross tons and above on domestic voyages only.                  |               |
| 339  | According to Pollution Prevention Regulations (33CFR), after every designated operation, the Oil Record Book is to be signed by _____.  | the master  | a licensed officer present at the operation designated by the master        | <b>person(s) in charge of the operation</b> | person(s) in charge of the operation and a licensed officer present at the operation |               |
| 340  | According to Pollution Prevention Regulations (33CFR), each completed page in the Oil Record Book is to be signed by _____.   | Coast Guard representative designated by COTP                 | <b>the master</b>   | person(s) in charge of the operation        | oil terminal representative  |               |
| 341  | According to regulations when, if ever, may cargo hatches on Great Lakes vessels, with more than 6 feet of freeboard, be left uncovered or open while the vessel is being navigated?                                | If a Mate deems it necessary for ship's maintenance           | <b>At the discretion of the Master, for reasonable purposes</b>             | On the authority of the Bosun               | The hatch may never be uncovered   |               |
| 342  | According to the illustration, which of the figures is the preferred method of forming a temporary eye splice using wire rope clips?  | A.  | B.  | <b>C.</b>                                   | D.   | <b>D058DG</b> |
| 343  | According to the illustration, which of the figures protects the stress bearing end of a wire rope from being crushed while forming a temporary eye splice using wire rope clips?                                   | A.  | B.  | <b>C.</b>                                   | All the above.   | <b>D058DG</b> |
| 344  | According to the IMO Code, what are the minimum number of securing points that should be on each side of a "road vehicle", whose gross vehicle mass is between 20 tons and 30 tons, when carried on Ro-Ro vessels?  | One   | Two   | <b>Three</b>                                | None of the above  |               |
| 345  | According to the IMO Code, what are the minimum number of securing points that should be on each side of a "road vehicle", whose gross vehicle mass is between 3.5 tons and 20 tons, when carried on Ro-Ro vessels? | One   | <b>Two</b>  | Three                                       | None of the above  |               |
| 346  | According to the IMO Code, what are the minimum number of securing points that should be on each side of a "road vehicle", whose gross vehicle mass is between 3.5 Tons and 20 Tons, when carried on Ro-Ro vessels? | One   | <b>Two</b>  | Three                                       | Four   |               |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|---|---|---|---|--------------|
| 347  | According to the IMO Code, what are the minimum number of securing points that should be on each side of a "road vehicle", whose gross vehicle mass is between 30 tons and 40 tons, when carried on Ro-Ro vessels? | One   | Two   | Three   | <b>Four</b>   |              |
| 348  | Adequate horsepower is of great importance when a ship is navigating independently in ice. Adequate horsepower is generally considered to exist when the horsepower to length ratio is at least _____.             | 4 to 1 or better  | 5 to 1 or better  | <b>6 to 1 or better</b>   | 8 to 1 or better  |              |
| 349  | Advection fog holds longest over which portions of the lakes?  | <b>Northwest</b>  | Southeast   | Northeast   | Southwest   |              |
| 350  | Advection fog, a common occurrence on the Great Lakes, forms when _____.   | air comes in contact with a rapidly cooling land surface                  | frigid arctic air moves across the lakes and becomes saturated                      | <b>relatively warm air flows over cooler water</b>  | cool air contacts warm river currents                             |              |
| 351  | After a seaman is discharged, at the end of the voyage, the final payment of wages due must be made, whichever is earliest, either within 24 hours after the cargo has been discharged, or _____.                  | <b>within 4 days after the seaman's discharge</b>                         | prior to the vessel's departure on the next voyage                                  | prior to loading any out-bound cargo  | prior to any change of Master                                     |              |
| 352  | After an explosion, repair of emergency machinery and services should be accomplished _____.   | <b>after control of fire, flooding, and structural repairs</b>            | immediately, before the emergency is under control                                  | after control of fire, but before control of flooding   | after stability is restored                                       |              |
| 353  | After an IOPP Certificate is issued to an inspected vessel, how many other surveys of the vessel's pollution prevention equipment are conducted during the period of validity of the certificate?                  | None  | One   | Two   | <b>Three</b>  |              |
| 354  | After casting off moorings at a mooring buoy in calm weather, you should _____.  | go full ahead on the engine(s)  | <b>back away a few lengths to clear the buoy and then go ahead on the engines</b>   | go half ahead on the engines and put the rudder hard right                                    | go half ahead on the engines and pass upstream of the buoy        |              |
| 355  | After each operation involving the transfer of oil or oily mixture, an entry shall be recorded in the Oil Record Book _____.   | <b>without delay</b>  | within 1 hour of completion of the inspection                                       | within 6 hours of completion of the operation   | as the operation permits  |              |
| 356  | After having been pulled aloft in a bosun's chair on a mast, you must now make yourself fast in the chair prior to painting the mast. You should first _____.  | have the sailor on deck make the hauling part fast to a cleat on the mast | make the tail of the line leading from the becket bend fast to a padeye on the mast | <b>seize the hauling part and the standing part firmly in one hand to support your weight</b> | frap yourself to the mast to take the strain off the hauling part |              |

| ID # | Question  | Choice A                            | Choice B                                 | Choice C  | Choice D                                      | Illustration |
|------|---|-------------------------------------|--|---|---|--------------|
| 357  | After inventorying the Naval Control of Shipping publications you find there is no copy of ATP-2, Volume II "Allied Control of Shipping Manual - Bridge Supplement". You should ask for a replacement from the _____. | <b>Maritime Administration</b>      | Coast Guard                              | Chief of Naval Operations                         | local Operational Control Authority           |              |
| 358  | After riveting is completed, the joints on the shell of a vessel are generally made watertight by _____.  | faying                              | <b>caulking</b>                          | felt or canvas packing                            | red lead                                      |              |
| 359  | After splicing an eye in a piece of wire rope, the splice should be parceled and served to _____.   | strengthen the line                 | increase its efficiency                  | <b>prevent hand injury by covering loose ends</b> | make the line more flexible                   |              |
| 360  | After your vessel has been involved in a casualty, you are required to make your logbooks, bell books, etc., available to _____.  | attorneys for opposition parties    | marine surveyors                         | <b>U.S. Coast Guard officials</b>                 | All of the above                              |              |
| 361  | All entries in the Official Logbook must be signed by the Master and _____.   | the Chief Engineer                  | the person about whom the entry concerns | <b>one other crew member</b>                      | No other signature is required.               |              |
| 362  | All entries in the Official Logbook must be signed by the Master and _____.   | the Union Representative            | the person about whom the entry concerns | no one else                                       | <b>one other crew member</b>                  |              |
| 363  | All handling and stowage of packaged hazardous materials on board a domestic vessel engaged in foreign trade shall be done under the supervision of _____.  | a U.S. Coast Guard Marine Inspector | <b>an officer assigned to the vessel</b> | the American Bureau of Shipping                   | the National Cargo Bureau                     |              |
| 364  | All inspected vessels on unrestricted ocean routes must have equipment on board for testing an individual's _____.  | blood                               | <b>breath</b>                            | urine   | All of the above                              |              |
| 365  | All of the following records are usually maintained by the watch-standing officers aboard a vessel EXCEPT the _____.  | deck logbook                        | <b>official logbook</b>                  | compass record book                               | chronometer error book                        |              |
| 366  | All of the following steps are taken in starting a centrifugal pump, EXCEPT to _____.   | <b>set the relief valve</b>         | check the lubrication system             | vent the pump casing                              | open the pump suction and discharge valves    |              |
| 367  | All U.S. Flag vessels engaged in foreign trade are required to have a(n) _____.   | enrollment                          | license                                  | <b>registry</b>                                   | sea letter                                    |              |
| 368  | All wire rope used in shipboard cargo gear must be identified and described in a certificate. The certificate shall certify all of the following EXCEPT the _____.  | date of the test                    | load at which a test sample broke        | <b>name of the vessel</b>                         | number of strands and of wires in each strand |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|--|---|---|--|--------------|
| 369  | Allied Naval Control of Shipping (NCS) has been established. Which statement is TRUE?  | The Naval Control of Shipping Organization of each nation will serve their own ships only. | Allied ships, which are at sea when an emergency is declared, will all be controlled by a central authority.            | The conduct of US-flag ships in an allied port will be controlled by US NCS authorities.    | <b>After Naval Control of Shipping has been established, permission to sail must come from local naval authorities or consular officers.</b> |              |
| 370  | An advantage of nylon rope over manila rope is that nylon rope _____.  | can be used in conjunction with wire or spring-lay rope                                    | can be stored on decks exposed to sunlight  | <b>can hold a load even when a considerable amount of the yarns have been abraded</b>       | gives audible warning of overstress whereas manila does not  |              |
| 371  | An advantage of the modified Christmas Tree towing method is to _____.   | increase the towing hawser's catenary and provide more spring                              | <b>reduce catenary, allow operation in shallower water, and to release one barge without breaking up the entire tow</b> | enable one tug and its crew without any outside assistance to make up or break down the tow | provide rapid delivery of logs from the northwestern United States to Hawaiian sawmills  |              |
| 372  | An advantage of using chain lashing on heavy vehicles aboard Ro-Ro vessels is that it _____.   | <b>has long life</b>   | is light weight   | absorbs shock   | has fine adjustment  |              |
| 373  | An alien crewmember with a D-1 permit leaves the vessel in a U.S. port and fails to return. The first report you make should be to the _____.          | Customs Service  | <b>Immigration Service</b>  | local police  | OCMI   |              |
| 374  | An example of a messenger is a _____.  | fairlead   | <b>heaving line</b>   | stay  | warp   |              |
| 375  | An example of a modern anchor which has a stock is a(n) _____.   | articulated anchor   | Flipper Delta anchor  | Baldt anchor  | <b>Danforth anchor</b>   |              |
| 376  | An example of an anchor which has a stock is a _____.  | Bruce anchor   | Dunn anchor   | Hook anchor   | <b>Danforth anchor</b>   |              |
| 377  | An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "E" (Echo) to signify that "_____".  | <b>I am altering my course to starboard</b>  | I am altering my course to port   | I am operating astern propulsion  | My vessel is stopped and making no way through the water   |              |
| 378  | An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "I" (India) to signify that "_____". | I am altering my course to starboard   | <b>I am altering my course to port</b>  | I am operating astern propulsion  | My vessel is stopped and making no way through the water   |              |
| 379  | An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "M" (Mike) to signify that "_____".  | I am altering my course to starboard   | I am altering my course to port   | I am operating astern propulsion  | <b>my vessel is stopped and making no way through the water</b>  |              |



| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|--|---|--|--|--------------|
| 380  | An icebreaker assisting a vessel through an ice field would display a visual signal consisting of the code letter "S" (Sierra) to signify that "_____".                            | I am altering my course to starboard                                   | I am altering my course to port   | <b>I am operating astern propulsion</b>                        | My vessel is stopped and making no way through the water   |              |
| 381  | An icebreaker displaying a flag hoist which consists of the code letters "WO" (Whiskey Oscar) is indicating that _____.  | <b>icebreaker support is finished</b>                                  | icebreaker support is commencing  | the icebreaker is icebound                                     | the icebreaker is beset                                    |              |
| 382  | An icebreaker may use the code letter "K" to remind ships of their obligation to listen continuously on their radio. This signal may be made by any of the following EXCEPT _____. | sound signal   | light signal  | visual signal  | <b>radiotelephone</b>                                      |              |
| 383  | An implied warranty of seaworthiness on the part of the vessel's owner lies in the _____.  | Cargo Manifest   | Certificate of Inspection   | Classification Certificate                                     | <b>contract of carriage, i.e. Bill of Lading</b>           |              |
| 384  | An intermediate spring is _____.   | fitted in each leg of the towing bridle                                | <b>generally located between the "fishplate" and the main towing hawser</b> | secured at the "H" bits  | usually made of manila hawser                              |              |
| 385  | An International Tonnage Certificate will be issued to a vessel when it meets several requirements, one of which is that the vessel must _____.                                    | admeasure over 100 GT  | <b>be 79 or more feet in length</b>   | engage in intercoastal or international trade                  | be issued a Certificate of Inspection                      |              |
| 386  | An IOPP Certificate on an inspected vessel is valid for what period of time?   | 6 months   | 12 months   | 18 months  | <b>5 years</b>   |              |
| 387  | An ocean tow is sinking in deep water. Attempts to sever the towing hawser are unsuccessful. Which action should now be taken?   | Abandon the towing vessel.   | Radio for emergency assistance.   | <b>Slip the towline and allow it to run off the drum.</b>      | Secure all watertight openings on the towing vessel.       |              |
| 388  | An ocean towing bridle should _____.   | <b>have equal legs of sufficient length</b>                            | have a large angle between the legs   | be formed on a bight of cable through a ring                   | never be made up of chain                                  |              |
| 389  | An ocean towing bridle whose legs are of equal length, but too short, may _____.   | <b>put excessive strain on each leg</b>                                | cause unequal distribution of the load to one leg                           | cause the bridle legs to jump clear of the chocks or fairleads | None of the above  |              |
| 390  | An Official Logbook is required on which vessel?   | A 150-G.T. tug going from Boston to New Orleans.                       | <b>A 100-G.T. tug going from New York to San Pedro, California.</b>         | A 50-G.T. tug going from Miami to Seattle.                     | A 199-G.T. tug on a coastwise trip of 650 miles.           |              |
| 391  | An underwriter is liable for _____.  | loss arising from the subject itself because of its inherent qualities | loss caused by the ordinary evaporation of liquids                          | <b>loss caused by heavy weather</b>                            | the natural decay of the vessel due to the passage of time |              |
| 392  | Anchors are prevented from running out when secured by the _____.  | brake  | devil's claw  | pawls  | <b>All of the above</b>                                    |              |



| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|--|--|---|--|--------------|
| 393  | Angular motion about the longitudinal axis of a vessel is known as _____.   | pitch  | surge  | sway  | <b>roll</b>  |              |
| 394  | Angular motion about the vertical axis of a vessel is called _____.   | <b>yaw</b>                                       | surge  | sway  | roll   |              |
| 395  | Another name for coal naphtha that would appear on a dangerous cargo manifest is _____.   | <b>benzene</b>                                   | tar  | middle oil  | toluene  |              |
| 396  | Another name for the garboard strake is the _____.  | <b>A strake</b>                                  | Z strake   | side keel plate   | stringer plate   |              |
| 397  | Any vehicle to be loaded aboard a Ro-Ro vessel must _____.  | weigh less than 22 tons                          | <b>be provided with an effective braking system</b>                        | have securing points with each aperture capable of accepting more than one lashing    | All of the above   |              |
| 398  | Anyone voluntarily surrendering their license to a U.S. Coast Guard investigating officer signs a statement indicating that _____.  | all title to the license is given up for 5 years | <b>their rights to a hearing are waived</b>                                | they may be issued a new license in 5 years after passing another written examination | All of the above   |              |
| 399  | Argon is classified as a _____.   | corrosive  | flammable gas  | flammable liquid  | <b>nonflammable gas</b>  |              |
| 400  | As a rule, ships of most configurations, when drifting in calm water with negligible current, will lie _____.   | bow to the wind                                  | <b>beam to the wind</b>  | stern to the wind   | with the wind on the quarter                                       |              |
| 401  | 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, this wake also has a(n) _____.                             | downward and inward flow                         | downward and outward flow  | <b>upward and inward flow</b>   | upward and outward flow  |              |
| 402  | As a ship moves through the water, it drags with it a body of water called the wake. The ratio of the wake speed to the ship's speed is called _____.   | propeller velocity                               | speed of advance   | wake distribution   | <b>wake fraction</b>   |              |
| 403  | As Chief Officer of a vessel underway, it comes to your attention that the vessel is, in some manner, unseaworthy. Under such circumstances the Master is required to take action upon receiving _____. | information of such condition from yourself      | <b>notification of such condition from yourself and the Second Officer</b> | notification of such condition from yourself and any other member of the crew         | notification of such condition from yourself or the Second Officer |              |
| 404  | As defined in the regulations governing marine casualties a "marine employer" may be the _____.   | owner  | agent  | Master  | <b>All of the above</b>  |              |
| 405  | As look-out, you spot an object 45° off your port bow. You should report the object as _____.   | <b>broad on the port bow</b>                     | 3 points on the port bow   | 3 points forward of the port beam   | on the port beam   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|---|--|--|---|---|--------------|
| 406  | As Master or person in charge, you must notify the U.S. Coast Guard if an injury leaves a crewman unfit to perform routine duties for more than _____.  | 24 hours   | 48 hours   | 72 hours  | <b>Any amount of time</b>   |              |
| 407  | As operator of a 199 GT towing vessel sailing foreign, it shall be your duty to enter in the Official Logbook or other permanent record _____.  | all information contained on the barge's Certificate of Inspection   | the condition of all towing gear to be used  | all navigational aids to be used  | <b>the barges load line and draft readings</b>  |              |
| 408  | As seen from the tow, what should connect the leading ends of both towing bridle legs to the main towing hawser?  | A cable clamp  | <b>A fishplate, flounder, or towing plate</b>  | A pad eye   | The towing bits   |              |
| 409  | As the propeller turns, voids are formed on the trailing and leading edges of the propeller blades causing a loss of propulsive efficiency, pitting of the blades, and vibration. These voids are known as _____.                                   | advance  | <b>cavitation</b>  | edging  | slip  |              |
| 410  | As you hold a piece of manila line vertically in front of you, the strands run from the lower left to the upper right. Which type of line is this?  | <b>Right-hand laid</b>   | Cable-laid   | Sennet-laid   | Water-laid  |              |
| 411  | As you hold a piece of manila line vertically in front of you, the strands run from the lower right to the upper left. Which type of line is this?  | Plain-laid   | Shroud-laid  | <b>Left-hand laid</b>   | Water-laid  |              |
| 412  | Assume that your vessel has just entered Lake Erie by way of the Welland Canal and is proceeding in a southwesterly direction. Which statement about the aids to navigation you can expect to encounter along the route is TRUE?                    | <b>The characteristics of buoys and other aids are as if "returning from seaward" when proceeding in this direction.</b> | All aids are maintained by the U.S. Coast Guard, 9th Coast Guard District, Cleveland, Ohio.          | All red even-numbered buoys should be kept on your port side when proceeding in this direction.                     | Lighted aids, fog signals, and radio beacons maintained by Canada are not included in the Great Lakes Light List. |              |
| 413  | Assume that your vessel has just entered Lake Michigan via the Straits of Mackinac and is proceeding south to Chicago. Which statement is TRUE with respect to the aids to navigation you will encounter along this route?                          | Aids to navigation are serviced jointly by the U.S. and Canadian Coast Guard.  | <b>Red buoys should be passed down your starboard side.</b>  | Green buoys mark the location of wrecks or obstructions which must be passed by keeping the buoy on the right hand. | All solid colored buoys are numbered, the red buoys bearing odd numbers and green buoys bearing even numbers.     |              |
| 414  | At least one reinspection shall be made on each vessel holding a Certificate of Inspection valid for two years. This inspection shall be held between the tenth and fourteenth months of the duration period of the certificate and shall be _____. | at the discretion of the inspector, but in no greater detail than required for original certification                    | at the discretion of the inspector, but in no lesser detail than required for original certification | <b>generally similar in scope to the inspection required for certification, but in less detail</b>                  | equivalent to the inspection required for certification   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 415  | At the establishment of Naval Control of Shipping (NCS), ships at sea will _____.   | stop and await further orders   | attempt to make their way to the nearest port of a friendly nation and await further instructions | <b>continue voyages unless in danger areas defined in the advisory or supplemental message</b> | keep radio silence  |              |
| 416  | At the outbreak of war your ship is caught in an enemy port. Which statement is FALSE?  | You should attempt to contact U.S. Consular officials.                      | You should attempt to clear for sea before your ship is interned.                                 | <b>You should resist boarding by local officials.</b>  | You should try to send a Ship Hostile Action Report to the NGA (formerly NIMA). |              |
| 417  | At the required fire drill, all persons must report to their stations and demonstrate their ability to perform the duties assigned to them _____. | by the Coast Guard regulations  | <b>in the Muster List ("Station Bill")</b>  | by the person conducting the drill   | at the previous safety meeting  |              |
| 418  | Atmospheres laden with coal dust or grain dust caused by loading these cargoes _____.   | require loading operations to be shut down until the atmosphere clears      | are toxic to human life   | are subject to spontaneous combustion  | <b>may be explosive in some concentrations</b>                                  |              |
| 419  | Back-up wires on a towed vessel provide _____.  | a factor of safety  | additional strength   | a distribution of the towing load  | <b>All of the above</b>   |              |
| 420  | Barges and vessels are ballasted before departure to _____.   | <b>improve their stability</b>  | avoid polluting waters where liquid ballast may not be discharged                                 | prevent free surface effects   | allow movement of liquids within the barge for tank cleaning                    |              |
| 421  | Battens are fitted in cargo holds across the frames of the vessel from the turn of the bilge upward. The purpose of these cargo battens is _____. | for securing a snatch block when snaking cargo into the wings of the hold   | <b>to prevent cargo from coming in contact with the vessel's frames or shell plating</b>          | to provide fittings to which cargo lashings may be secured                                     | to support the dunnage floors which are laid down between tiers of cargo        |              |
| 422  | Beams are cambered to _____.  | increase their strength   | <b>provide drainage from the decks</b>  | relieve deck stress  | All of the above  |              |
| 423  | Because of the arrangement of the cell guides, the MOST important factor while loading containers is the _____.                                   | contents of the container   | <b>list of the vessel</b>   | size of the shoreside crane  | weight of the container   |              |
| 424  | Before a Master relieves a Pilot of the conn, the _____.  | <b>Master should foresee any danger to the vessel on the present course</b> | vessel must be in extremis  | Master should agree to sign a release of liability form  | Master must first request the Pilot to take corrective action                   |              |
| 425  | Before a tank is to be crude oil washed, the oxygen content in the tank must be measured at a position _____.                                     | immediately above the level of the oil                                      | at the top of the tank  | in the vent riser  | <b>one meter from the deck</b>  |              |
| 426  | Before arriving at the first U.S. port from foreign, you must fill out a Crewman's Landing Permit for each _____.                                 | alien crewmember  | crew member   | <b>nonresident alien crewmember</b>  | unlicensed crew member  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 427  | Before being certified by the American Bureau of Shipping, anchor chain must undergo _____.   | USCG inspection  | <b>a breaking test</b>  | x-ray inspection   | spectroanalysis   |              |
| 428  | Before entering an ice area, the ship should be _____.  | either trimmed by the head or the stern                                | on an even keel   | trimmed down by the head   | <b>trimmed down by the stern</b>  |              |
| 429  | Before leaving port on an ocean tow, a tug captain should assure himself of all the following EXCEPT _____.   | the towing hawser can be released quickly in an emergency              | the correct navigation lights are rigged and operable on the tug and tow      | <b>an insurance underwriter has prepared a pre-sailing survey</b>  | a pick-up wire has been rigged on the tow in case of a breakaway.           |              |
| 430  | Before letting the anchor go, you should check that the _____.  | chain is clear   | anchor is clear of obstructions   | wildcat is disengaged  | <b>All of the above</b>   |              |
| 431  | Before loading bulk grain, bilge wells must be covered to _____.  | add strength to the bilge well strainer                                | permit rapid flow of water to the bilge wells                                 | <b>prevent cargo sifting into the bilge wells</b>  | prevent oil, water, or other liquid from reaching the cargo                 |              |
| 432  | Besides saving distance along the track line, another advantage of the Scharnow Turn over the Williamson Turn in a man overboard situation is because _____.                          | <b>it is faster</b>  | it can be used in both the immediate action and the delayed action situations | in fog, if the turn is started as soon as the man goes over, the vessel will be at the point where he went over when the turn is completed | it returns the vessel to the original track line on a reciprocal course     |              |
| 433  | Besides the chemical testing of a mariner's breath for alcohol, what other specimen testing for alcohol is acceptable to be taken onboard the vessel after a Serious Marine Incident? | <b>Saliva</b>  | Blood   | Hair   | None of the above   |              |
| 434  | Bilge keels are more effective at dampening rolls as the _____.   | pitching increases   | list increases  | <b>rolling increases</b>   | draft decreases   |              |
| 435  | Bilge soundings indicate _____.   | the amount of condensation in the hold                                 | whether the cargo is leaking or not   | whether the vessel is taking on water  | <b>All of the above</b>   |              |
| 436  | Buckler plates are _____.   | triangular-shaped plates connecting the bull chain to the topping lift | <b>metal plates secured over the tops of the hawsepipes</b>                   | faired shell plates with curvature in two directions   | sheets of dunnage used to prevent heavy cargo from buckling the deck plates |              |
| 437  | Bulk cargo refers to _____.   | cargo which occupies a large volume of space                           | cargo which requires refrigeration  | cargo which is very dense  | <b>homogeneous cargo not enclosed in a container</b>                        |              |
| 438  | Butadiene, inhibited, is labeled as a _____.  | combustible liquid   | <b>flammable gas</b>  | flammable liquid   | flammable solid   |              |
| 439  | By definition, a "spar deck" is the _____.  | lower most continuous deck not broken by water tight bulkheads         | after most weather deck above the main strength deck                          | <b>upper or weather deck above the main strength deck</b>  | deck of light construction below the main or strength deck                  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 440  | By law, a user of marijuana shall be subject to _____.  | loss of pay during the period of such use                                      | reprimand by the US Coast Guard   | <b>revocation of license or certificate</b>  | termination of employment                                  |              |
| 441  | By law, the maximum penalty for failing (without reasonable cause) to give aid in the case of collision is _____. | one year imprisonment or \$500   | <b>two years imprisonment or \$1000</b>   | two years imprisonment or \$1500   | two years imprisonment or \$2000                           |              |
| 442  | By paying out more anchor cable, you _____.   | decrease the holding power of your anchor                                      | decrease the swing of your vessel while at anchor                                     | <b>increase the holding power of your anchor</b>                                     | increase the possibility that your vessel will drag anchor |              |
| 443  | Camber, in a ship, is usually measured in _____.  | feet per feet of breadth   | feet per feet of length   | <b>inches per feet of breadth</b>  | inches per feet of length                                  |              |
| 444  | Cargo pump relief valves are piped to the _____.  | cargo pump pressure gauges   | crossover lines interconnecting two pumps   | <b>suction side of pumps</b>   | atmosphere through pump vents                              |              |
| 445  | Cargo securing for Ro-Ro is based on the concept of _____.  | solid packing  | <b>rapid loading and discharge</b>  | vessel loaded full and down to her marks   | palletized cargo   |              |
| 446  | Cargo that gives off fumes that may contaminate other cargo is known as a(n) _____.                               | delicate cargo   | dirty cargo   | toxic cargo  | <b>odorous cargo</b>                                       |              |
| 447  | Cargo that is highly susceptible to damage by tainting from odorous cargo is called _____.                        | clean cargo  | <b>delicate cargo</b>   | dry cargo  | immune cargo   |              |
| 448  | Cargo that is suitable for carriage on Ro-Ro vessels includes _____.  | trailers   | rolling vehicles  | containers   | <b>All of the above</b>                                    |              |
| 449  | Cargo transfer operations on a tank vessel need NOT be stopped when _____.  | <b>a tug comes alongside while the tanker is loading grade D and E cargoes</b> | a large, fresh oil spill is discovered immediately adjacent to the side of the tanker | there is an electrical storm in the vicinity   | there is a fire on the dock or on a nearby vessel          |              |
| 450  | Cargoes that might leak from containers are known as _____.   | dirty cargoes  | caustic cargoes   | <b>wet cargoes</b>   | bulk cargoes   |              |
| 451  | Catenary as applied to tow lines denotes the _____.   | <b>dip of the line</b>   | stretch of the line   | strain on the line   | length of the line   |              |
| 452  | Centrifugal pumps have what advantage(s) over reciprocating pumps?  | They are less expensive.   | They are smaller for equivalent pumping ability.                                      | They pump more cargo in less time.   | <b>All of the above</b>                                    |              |
| 453  | Certain cargoes must be segregated because of their _____.  | <b>inherent characteristics</b>  | weight  | destination  | danger to humans   |              |
| 454  | Chafing gear _____.   | reduces and prevents corrosion of standing rigging                             | prevents corrosion of running rigging   | <b>reduces and prevents wear caused by the rubbing of one object against another</b> | protects the body against extreme cold                     |              |

| ID # | Question  | Choice A   | Choice B                                   | Choice C  | Choice D  | Illustration |
|------|---|--|--|---|---|--------------|
| 455  | Chafing gear is normally used _____.  | for portable fenders                                     | for ground tackle                          | on the inside of the hawsepipe                                    | <b>on mooring lines</b>                         |              |
| 456  | Chafing gear is used to _____.  | increase mechanical advantage on a towing recovery wheel | eliminate yawing of disabled tow           | <b>protect towlines from wearing down against edges of vessel</b> | connects towline to trailer eye of disabled tow |              |
| 457  | Chafing gear is used to _____.  | anchor the boat  | pick up heavy loads                        | <b>protect fiber rope from abrasion</b>                           | strengthen mooring lines                        |              |
| 458  | Chafing gear should be placed _____.  | <b>at all wearing points of mooring lines</b>            | at the bitter ends of all standing rigging | around running rigging  | on wire rope only                               |              |
| 459  | Close link chain of not less the 3/4" (or the wire rope equivalent) is required for lashing deck cargoes of timber. What size flexible wire rope would provide the strength equivalent to 3/4" chain, using a safety factor of 5?     | 9/16"  | <b>1"</b>                                  | 1 1/4"  | 1 3/8"  |              |
| 460  | Coiling new rope against the lay, bringing the lower end up through the center of the coil, then coiling with the lay, in order to remove the kinks, is known as _____.   | coiling  | faking                                     | flemishing  | <b>thoroughfooting</b>                          |              |
| 461  | Combustible liquid is defined as any liquid having a flash point above _____.   | 40°F ( 4°C)  | <b>80°F (27°C)</b>                         | 110°F (43°C)  | 150°F (66°C)                                    |              |
| 462  | Combustible liquids are divided into how many grades?   | One  | <b>Two</b>                                 | Three   | Four  |              |
| 463  | Commercial ships or other persons or agencies requiring the assistance of Canadian Coast Guard icebreakers should first contact _____.  | the Canadian Coast Guard                                 | <b>Ice Sarnia</b>                          | the Ice Navigation Center   | the icebreaker assigned to the area             |              |
| 464  | Compared to manila line, size for size, nylon line _____.   | has less strength than manila line                       | <b>has more strength than manila line</b>  | is equivalent to manila line                                      | will rot quicker than manila line               |              |
| 465  | Conditions for crossing a rough bar are usually best at _____.  | low water slack  | <b>high water slack</b>                    | high water ebb  | high water flood                                |              |
| 466  | Considering manning requirements for US flag vessels, your 2 watch cargo vessel has a deck crew of 20 people, exclusive of officers. How many of these people do the manning regulations require to be able seamen?                   | 13   | <b>10</b>                                  | 7   | 5   |              |
| 467  | Considering the manning requirements for U.S. vessels (100 gross tons and above), your cargo vessel has a deck crew of 20 men, exclusive of the officers. How many of these men do the manning regulations require to be Able Seamen? | 5  | 7  | 10  | <b>13</b>                                       |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|---|---|---|---|--------------|
| 468  | Considering the manning requirements for U.S. vessels, your three watch cargo vessel has a deck crew of 20 people, exclusive of the officers. How many of these people do the manning regulations require to be Able Seamen? | 13  | 10  | 7   | 5   |              |
| 469  | Container vessels are required to maintain an Oil Record Book when the vessel is _____?  | 150 gross tons and above  | 200 gross tons and above  | 300 gross tons above  | 400 gross tons and above  |              |
| 470  | Containers of flammable solids should be conspicuously labeled by the shipper with a _____.  | green label   | red and white label   | orange label  | yellow label  |              |
| 471  | Control of flooding should be addressed _____.   | first   | following control of fire   | following restoration of vital services                                     | only if a threat exists   |              |
| 472  | Conventional anchors are least likely to hold in a bottom consisting of _____.   | soft clay   | hard mud  | very soft mud   | sand  |              |
| 473  | Conventional anchors are least likely to hold in a bottom consisting of _____.   | soft clay   | hard mud  | sand  | rock  |              |
| 474  | Corrosive liquids and acids should have which kind of label?   | Skull and crossbones  | Yellow and white  | Red and white   | White and black   |              |
| 475  | Cottonseed oil is classed as a _____.  | combustible liquid  | flammable liquid  | flammable solid   | poison B  |              |
| 476  | Damage to cargo caused by dust is known as _____.  | contamination   | oxidation   | tainting  | vaporization  |              |
| 477  | Damage to cargo caused by fumes or vapors from liquids, gases, or solids is known as _____.  | contamination   | oxidation   | tainting  | vaporization  |              |
| 478  | Damaged bulkheads often take a permanent set which is independent of the panting or bulge caused by water pressure. To control this, you should _____.   | install shoring so the shoring supports the damaged bulkheads without pushing on them | install shoring so that it pushes on the damaged bulkhead while supporting it | use jacks or chain falls to remove the set before installing shores         | place sandbags by the bulkhead without installing shores  |              |
| 479  | Dead freight is the charge for the _____.  | carriage of demise cargo  | cost of transshipment of over-carried cargo                                   | difference in the amount of cargo loaded and the amount of cargo discharged | difference in the amount of cargo loaded and the amount of cargo booked, through no fault of the vessel |              |
| 480  | Deckhands onboard towing vessels shall be divided into 3 watches when on a trip exceeding _____.   | 600 miles   | 700 miles   | 800 miles   | 1000 miles  |              |
| 481  | Deckhands onboard towing vessels shall be divided into 3 watches when the trip exceeds _____.  | 1000 miles  | 800 miles   | 700 miles   | 600 miles   |              |



| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 482  | Defense plans may cause the operation of electronic aids to navigation to be suspended with _____.  | <b>no notice</b>   | one day's notice  | a week's notice  | thirty (30) days notice  |              |
| 483  | Delivery of a vessel to a charterer is called _____.  | chartering   | dispatching   | fixing   | <b>tendering</b>   |              |
| 484  | Displacement refers to the _____.   | cubic capacity of a vessel   | deadweight carrying capacity of a vessel                    | gross tonnage of a vessel  | <b>number of long tons of water displaced by a vessel afloat</b>             |              |
| 485  | Disregarding friction, a twofold purchase when rove to disadvantage has a mechanical advantage of _____.  | 2  | 3   | <b>4</b>   | 5  |              |
| 486  | Distances on the Great Lakes System are generally expressed in _____.   | miles above the entrance to the St. Lawrence Seaway (MASLW)                          | miles above the head of the passes (AHP)                    | nautical miles   | <b>statute miles</b>   |              |
| 487  | 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?                 | <b>On the Exemption Certificate</b>  | On the reverse of the particular SOLAS certificate affected | On the face of the Certificate of Inspection                                   | Nowhere; the vessel must comply to engage in international trade.            |              |
| 488  | Dunnage may be used to protect a cargo from loss or damage by _____.  | <b>ship's sweat</b>  | inherent vice   | tainting   | hygroscopic absorption   |              |
| 489  | During a period of "whiteout", you should expect which of the following?  | Snowfall or blowing snow   | <b>Lack of ability to estimate distance</b>                 | Harsh contrast between sun-illuminated snow cover and the background           | Hazy horizons with extensive mirage effects                                  |              |
| 490  | During the course of a voyage, a seaman falls on the main deck and injures his ankle. The Master should submit a Report of Marine Accident, Injury or Death if the _____. | injured needs first aid  | <b>injured, is unable to perform routine duties</b>         | injury results in loss of life only  | injury is the result of misconduct   |              |
| 491  | During the manufacture of line, yarns are twisted together in the _____.  | <b>opposite direction from which the fibers are twisted together to form strands</b> | same direction the fibers are twisted to form strands       | opposite direction from which the fibers are twisted together to form the line | opposite direction from which the fibers are twisted together forming cables |              |
| 492  | During which condition should the operator of a pedestal crane shutdown operations?   | Bunkering  | <b>High winds</b>   | Potable water spill on deck  | More than 3° list  |              |
| 493  | During which condition should the operator of a pedestal crane shutdown operations?   | Bunkering barge alongside  | Potable water spill on deck                                 | <b>Crane hydraulic hose bursts</b>   | Trim greater than 4 feet   |              |
| 494  | During which condition should the operator of a pedestal crane shutdown operations?   | Lightning in the vicinity  | An approaching squall line                                  | A fire on the pier   | <b>All of the above</b>  |              |
| 495  | During which condition should the operator of a pedestal crane shutdown operations?   | Lightning  | High winds  | Fire aboard  | <b>All of the above</b>  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 496  | Each crewmember has an assigned firefighting station. This assignment is shown on the _____.                    | fire fighting plan   | shipping articles   | Certificate of Inspection                                    | <b>muster list</b>  |              |
| 497  | Each open lifeboat carried on a vessel on an international voyage must have _____.                              | hand-propelling gear   | <b>a davit span with at least 2 lifelines</b>                   | a mast and a sail  | a motor   |              |
| 498  | Electric cargo winches have an overload safety device which normally cuts the current to the winch motor _____. | <b>after torque causes line pull to exceed the rated capacity of the winch</b> | before the line pull reaches the rated capacity of the winch    | when the line pull reaches the breaking strength of the fall | before the safe working load of the fall is reached                   |              |
| 499  | Entries should be made in a Ro-Ro vessel's cargo-securing device record book for _____.                         | procedures for accepting cargo securing devices                                | procedures for maintaining and repairing cargo-securing devices | record of cargo securing device inspections                  | <b>All of the above</b>   |              |
| 500  | Every entry required to be made in the Official Logbook shall be signed by the _____.                           | Mate on watch  | <b>Master and Chief Mate or other member of the crew</b>        | Master only  | Purser, one of the Mates, and some other member of the crew           |              |
| 501  | Fairleads perform the same function as _____.   | deadeyes   | bollards  | bitts  | <b>chocks</b>   |              |
| 502  | Faking a line means to _____.   | <b>arrange it on deck in long bights</b>                                       | coil it down on deck  | put a whipping on it   | stow it below   |              |
| 503  | Fire and abandon ship stations and duties may be found on the _____.  | crewman's duty list  | Certificate of Inspection                                       | shipping articles  | <b>muster list</b>  |              |
| 504  | Fire fighting equipment requirements for a particular vessel may be found on the _____.                         | <b>Certificate of Inspection</b>   | Certificate of Seaworthiness                                    | Classification Certificate                                   | Certificate of Registry   |              |
| 505  | Fittings used for towing must be _____.   | Coast Guard approved   | stamped with maximum working loads                              | <b>securely fastened</b>                                     | positioned exactly at the bow of the towed vessel                     |              |
| 506  | Flame screens are used to _____.  | contain flammable fumes  | protect firefighters from flames                                | <b>prevent flames from entering tanks</b>                    | keep flames and sparks from getting out of an engine's exhaust system |              |
| 507  | Flammable liquid means any liquid which gives off flammable vapors at or below _____.                           | 40°F (4.4°C)   | <b>80°F (26.7°C)</b>  | 110°F (43.3°C)   | 150°F (65.6°C)  |              |
| 508  | Flammable liquids should have what kind of label?   | Skull and crossbones   | Yellow  | <b>Red</b>   | White   |              |
| 509  | Flanking rudders effect a vessel's heading because of the _____.  | <b>effect of the propeller flow on the rudders</b>                             | water flow due to the vessel's movement through the water       | tunnel affect of the water flow past opposing rudders        | discharge current being channeled to impinge on the vessel's deadwood |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|---|---|---|--|--------------|
| 510  | Floors aboard ship are _____.  | <b>frames to which the tank top and bottom shell are fastened on a double bottomed ship</b> | transverse members of the ships frame which support the decks | longitudinal beams in the extreme bottom of a ship from which the ship's ribs start                           | longitudinal angle bars fastened to a surface for strength   |              |
| 511  | Fog can form in any season on the Great Lakes, but it is most likely to occur over open waters in _____.   | summer and early autumn   | autumn and early winter                                       | winter and early spring   | <b>spring and early summer</b>                               |              |
| 512  | Following a serious marine incident, a device to test an individuals breath can be used by _____.  | <b>any individual trained to conduct such tests</b>   | the marine employer   | qualified medical personnel only  | any USCG licensed deck officer                               |              |
| 513  | Following a Serious Marine Incident, a mariner directly involved in the incident is required to submit a urine specimen for drug testing within _____. | 2 hours   | 12 hours  | 24 hours  | <b>32 hours</b>  |              |
| 514  | Following a Serious Marine Incident, a mariner directly involved in the incident is required to submit to alcohol testing within _____.                | 1 hour  | <b>2 hours</b>  | 6 hours   | 12 hours   |              |
| 515  | Following a Serious Marine Incident, a mariner involved in the incident is prohibited from consuming alcohol until after being tested or _____.        | 2 hours following the incident  | 4 hours following the incident                                | <b>8 hours following the incident</b>   | 12 hours following the incident                              |              |
| 516  | For a given weight of cargo, the stress on the heel block of a cargo boom _____.   | increases as the cargo closes the head while hoisting                                       | increases if the cargo runner is doubled up                   | <b>decreases as the boom is topped to a greater angle</b>   | is determined by the thrust stresses on the boom             |              |
| 517  | For any given pedestal crane, when the boom is lengthened, the lifting capacity is _____.  | unchanged   | increased   | eliminated  | <b>decreased</b>   |              |
| 518  | For operations in pack ice, a vessel should _____.   | be on an even keel  | be trimmed slightly by the head                               | <b>have a drag of not more than 2 to 3 feet</b>   | be ballasted so the forefoot is near the surface             |              |
| 519  | For the deepest water when rounding a bend in a river, you should navigate your vessel _____.  | toward the inside of the bend   | <b>toward the outside of the bend</b>                         | toward the center of the river just before the bend, then change course for the river's center after the bend | in the river's center  |              |
| 520  | For the purpose of regulating tank vessels, flammable liquids are liquids which will _____.  | <b>give off flammable vapors at or below 80°F (27°C)</b>                                    | have a Reid vapor pressure of 18 pounds or more               | give off flammable vapors only above 80°F (27°C)  | sustain combustion at a temperature at or below 100°F (38°C) |              |
| 521  | For towing vessels over 100 gross tons that are permitted to maintain a two-watch system, what percentage of the deck crew must be able seamen?        | <b>50%</b>  | 65%   | 75%   | 100%   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|--|--|--|---|--------------|
| 522  | For vessels fitted with cargo gear, an initial test of the units under a proof load shall be conducted. Subsequent tests and exams of the same nature shall be carried out at what time interval? | 1 year   | 3 years  | 4 years  | <b>5 years</b>  |              |
| 523  | Form 2692 (Notice of Marine Casualty), when required, must be filed to the U.S. Coast Guard within how many days?   | 1 day  | 3 days   | <b>5 days</b>  | 7 days  |              |
| 524  | Forty-five fathoms is marked on the anchor chain by _____.  | one turn of wire on the first stud from each side of the detachable link | two turns of wire on the second stud from each side of the detachable link | <b>three turns of wire on the third stud from each side of the detachable link</b> | four turns of wire on the fourth stud from each side of the detachable link |              |
| 525  | Fracture damage to the end links of the anchor cable, or to the Jews' harp may be eliminated by _____.  | using a small diameter connecting shackle                                | ensuring the swivel is well lubricated and free to turn                    | installing the connecting shackle with the bow towards the anchor                  | <b>securing a piece of wood to the Jews' harp</b>                           |              |
| 526  | Frames to which the tank top and bottom shell are fastened are called _____.  | <b>floors</b>  | intercostals   | stringers  | tank top supports   |              |
| 527  | Freeboard is measured from the upper edge of the _____.   | bulwark  | <b>deck line</b>   | gunwale bar  | sheer strake  |              |
| 528  | Freeing ports on a vessel with solid bulwarks _____.  | prevent stress concentration in the bulwark                              | permit easy jettison of deck cargo in an emergency                         | provide openings through the bulwarks for mooring lines                            | <b>allow water shipped on deck to flow off rapidly</b>                      |              |
| 529  | Functions aboard a tanker or tank barge such as connecting, disconnecting, and topping off must be supervised by _____.   | any certificated tankerman   | the Master of the vessel   | the officer of the watch   | <b>the person designated as "person in charge"</b>                          |              |
| 530  | Galvanizing would be suitable for protecting wire rope which is used for _____.   | cargo runners  | <b>stays</b>   | topping lifts  | All of the above  |              |
| 531  | Galvanizing would not be suitable for protecting wire rope which is used for _____.   | <b>cargo runners</b>   | mooring wires  | shrouds  | stays   |              |
| 532  | Generally speaking, the more destructive storms occurring on the Great Lakes usually come from the _____.   | northeast or east  | <b>southwest or west</b>   | northwest or north   | southeast or south  |              |
| 533  | Generally speaking, the most favorable bottom for anchoring is _____.   | very soft mud  | rocky  | <b>a mixture of mud and clay</b>   | loose sand  |              |
| 534  | Generally, you can best keep a vessel under steering control when the vessel has _____.   | <b>headway</b>   | sternway   | no way on, with engines stopped  | no way on, with engines full ahead  |              |
| 535  | Given a dry bulb temperature of 78°F and wet bulb temperature of 66.5°F, the dew point is _____.  | 47.0°F   | 51.5°F   | <b>59.0°F</b>  | 70.0°F  |              |
| 536  | Good seamanship while towing in heavy weather requires all of the following EXCEPT _____.   | reducing speed to reduce surging on the towline                          | lashing down or stowing all loose gear                                     | dogging all hatches and watertight doors   | <b>streaming all of your towing hawser</b>                                  |              |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 537  | Grade D combustible liquids have a maximum flash point of _____.   | 109°F  | 100°F  | <b>149°F</b>  | 80°F   |              |
| 538  | Grade E combustible liquids have a flash point of _____.   | 80°F to 150°F  | <b>150°F or above</b>  | 60°F to 100°F   | 90°F to 120°F  |              |
| 539  | Great Lakes cargo vessels, having a liferaft stowed more than 100 meters from the bow or stern, must have at least how many liferafts? | One  | <b>Two</b>   | Three   | Four   |              |
| 540  | Great Lakes vessels, using liferafts, must have sufficient liferaft capacity on each side of the vessel to accommodate at least _____. | 50% of the persons on board  | <b>100% of the persons on board</b>  | 100% of the persons normally assigned to those spaces   | 150% of the crew   |              |
| 541  | Gross tonnage indicates the vessel's _____.  | displacement in metric tons  | total weight including cargo   | <b>volume in cubic feet</b>   | draft in feet  |              |
| 542  | Heave is motion along the _____.   | longitudinal axis  | transverse axis  | <b>vertical axis</b>  | centerline axis  |              |
| 543  | Holes in the bulwark, which allow deck water to drain into the sea, are _____.   | doggers  | fidleys  | <b>freeing ports</b>  | swash ports  |              |
| 544  | Horizontal fore or aft motion of a vessel is known as _____.   | pitch  | <b>surge</b>   | sway  | roll   |              |
| 545  | Horizontal transverse motion of a vessel is known as _____.  | pitch  | surge  | <b>sway</b>   | heave  |              |
| 546  | How are aids to navigation on the Great Lakes arranged geographically?   | In a westerly and northerly direction, except on Lake St. Clair                                | In an easterly and southerly direction, except on Lake Erie  | <b>In a westerly and northerly direction, except on Lake Michigan</b>   | In an easterly and southerly direction, except on the New York State Barge Canal                 |              |
| 547  | How are riveted lap joints made watertight?  | The faying surfaces are coated with white lead (or similar product) before the rivets are set. | A sealing weld bead of 1/8" or less pitch is run along the plate edge.                                       | <b>The plate edge is split close to an adjacent plate and mechanically forced into contact with the adjacent plate.</b> | A properly riveted joint will be watertight; any leakage is stopped by setting up on the rivets. |              |
| 548  | How can the Coast Guard determine that a crew member is "able to understand any order spoken by the officers"?                         | <b>Require a demonstration by the officer and the crew member</b>                              | Require a written test   | Require that an interpreter be provided   | All of the above   |              |
| 549  | How could lashing gear used aboard Ro-Ro vessels be stowed when not in use?  | Drape along brackets   | Hang vertically in a sheltered area  | Stow in bins at hatch coming side   | <b>All of the above</b>  |              |
| 550  | How do the height and location of a tug's towing bitts relate to the danger of tripping?   | <b>The further forward and closer to amidships the more readily the tug will trip.</b>         | Placement further aft permits more effective pulling, better steering and eliminates the danger of tripping. | Installing the bitts down low lowers the center of gravity.   | The height and position of towing bitts has no significance.                                     |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 551  | How do you determine the weight of the vessel that is supported by the ground when a vessel has run aground?                        | This requires extensive calculation and is usually performed only by a naval architect not by a ship's officer. | Determine the point where aground and the draft at that point, then calculate it using the grounding formula. | <b>Use the hydrostatic tables and enter with the mean draft before grounding and the mean draft after grounding.</b> | Use the inclining experiment formula and substitute the change of trim for the angle of list. |              |
| 552  | How does a vessel's rate of turn change when entering shallow water?  | It is faster.   | It is slower.   | <b>There is no change.</b>   | It remains constant for varying propeller revolutions.  |              |
| 553  | How does an icebreaker normally free a ship which has become beset while navigating independently?                                  | By backing down the track and cutting out ice on either bow   | <b>By approaching from the stern and crossing ahead at an angle of 20° to 30° to the beset ship's course</b>  | By overtaking the beset ship, running ahead and then backing down the track to the beset vessel                      | By approaching the vessel from astern and towing the beset vessel stern first                 |              |
| 554  | How does the effect known as "bank suction" act on a single-screw vessel proceeding along a narrow channel?                         | <b>It pulls the stern toward the bank.</b>  | It heels the vessel toward the bank.  | It pushes the entire vessel away from the bank.  | It pulls the bow toward the bank.   |              |
| 555  | How does the effect known as "bank suction" act on a single-screw vessel proceeding along a narrow channel?                         | It pulls the bow toward the bank.   | It heels the vessel toward the bank.  | It pushes the entire vessel away from the bank.  | <b>It pulls the stern toward the bank.</b>  |              |
| 556  | How is the size of chain determined?  | Length of link in inches  | <b>Diameter of metal in link in inches</b>  | Links per fathom   | Weight of stud cable in pounds  |              |
| 557  | How long is the standard container used to measure equivalent units?  | 10 feet (3 meters)  | <b>20 feet (6 meters)</b>   | 35 feet (11 meters)  | 40 feet (12 meters)   |              |
| 558  | How many board feet of dunnage are in a draft 4 feet wide, 1-1/2 feet high and 13 feet long?  | 84  | 756   | <b>936</b>   | 1021  |              |
| 559  | How many board feet of dunnage are there in a draft 3 feet wide, 1-1/2 feet high, and 14 feet long?                                 | 526   | <b>756</b>  | 876  | 906   |              |
| 560  | How many board feet of dunnage would you estimate to be in a pile 5 feet wide, 1 foot high and 14 feet long?                        | 70  | <b>840</b>  | 960  | 1080  |              |
| 561  | How many cubic feet of space is required to stow 775 tons of a cargo with a stowage factor of 25? (estimated broken stowage is 15%) | 12,916  | <b>22,794</b>   | 25,833   | 29,397  |              |
| 562  | How many fathoms are in a shot of anchor cable?   | 6   | <b>15</b>   | 20   | 30  |              |
| 563  | How many feet are there in 2 shots of anchor chain?   | 50  | 60  | <b>180</b>   | 360   |              |
| 564  | How many legs does the bridle for an ocean tow have?  | One   | <b>Two</b>  | Three  | Four  |              |
| 565  | How many turns of wire normally mark either side of the detachable link 45 fathoms from the anchor?                                 | 1   | 2   | <b>3</b>   | 4   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|---|---|--|--|--------------|
| 566  | How many wire clips must be used to make a temporary repair to a tow wire?  | 3   | 4   | <b>5</b>   | Wire clips are never, under any circumstances, permitted   |              |
| 567  | How much force would be required to lift a weight of 200 lbs. using a gun tackle rigged to disadvantage (do not consider friction)? | 50 lbs.   | <b>100 lbs.</b>   | 150 lbs.   | 200 lbs.   |              |
| 568  | How much weight can you lift by applying 100 lbs. of force to a twofold purchase rigged to disadvantage (do not consider friction)? | 200 lbs.  | 300 lbs.  | <b>400 lbs.</b>  | 500 lbs.   |              |
| 569  | How should you signal the crane operator to dog everything?   | Place both fists in front of your body with thumbs pointing toward each other.  | <b>Clasp hands in front of your body.</b>   | Extend arm with the palm down and hold this position rigidly.                            | Extend arm with the thumb pointing up, and flex the fingers in and out.                          |              |
| 570  | How should you signal the crane operator to hoist?  | <b>With forearm vertical and forefinger pointing up, move hand in small horizontal circles.</b>                                   | With arm extended downwards and forefinger pointing down, move hand in small horizontal circles.                    | Extend arm with fingers closed and thumb pointing upward.                                | Place both fists in front of body with the thumbs pointing upward.                               |              |
| 571  | How should you signal the crane operator to lower the boom and raise the load?  | Extend arm and point finger in the direction to move the boom.  | <b>Extend arm with thumb pointing downward and flex fingers in and out.</b>   | With forearm vertical and forefinger pointing up, move hand in small horizontal circles. | With arm extended downwards and forefinger pointing down, move hand in small horizontal circles. |              |
| 572  | How should you signal the crane operator to lower the boom?   | <b>With arm extended and fingers closed, point thumb downward.</b>  | With arm extended downwards and forefinger pointing down, move hand in small horizontal circles.                    | Extend arm with the palm down, and hold this position rigidly.                           | With hands clasped in front of your body.  |              |
| 573  | How should you signal the crane operator to lower?  | With forearm vertical and forefinger pointing up, move hand in small horizontal circles.  | <b>With arm extended downwards and forefinger pointing down, move hand in small horizontal circles.</b>             | Extend arm and point finger in the direction to move the boom.                           | Extend arm with thumb pointing downward, and flex fingers in and out.                            |              |
| 574  | How should you signal the crane operator to move slowly?  | <b>Use one hand to give any motion signal, and place the other hand motionless in front of the hand giving the motion signal.</b> | Extend arm with the thumb pointing up, and flex the fingers in and out for as long as the load movement is desired. | First tap your elbow with one hand and then proceed to use regular signals.              | First tap the top of your head with your fist and then proceed to use regular signals.           |              |



| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 575  | How should you signal the crane operator to raise the boom and lower the load? | Extend arm with the palm down and hold this position rigidly.  | Place both fists in front of your body with thumbs pointing toward each other.                                     | Clasp hands in front of your body.   | <b>Extend arm with the thumb pointing up, and flex the fingers in and out for as long as the load movement is desired.</b> |              |
| 576  | How should you signal the crane operator to raise the boom?                    | Extend arm with the thumb pointing up and flex the fingers in and out.   | Place both fists in front of the body with the thumbs pointing upward.   | With forearm vertical and forefinger pointing up, move hand in small horizontal circles. | <b>Extend arm with fingers closed and point thumb upward.</b>  |              |
| 577  | How should you signal the crane operator to stop in an emergency?              | Extend arm with the palm down and hold this position rigidly.  | Place clasped hands in front of your body.   | <b>Extend arm and move hand rapidly right and left with the palm down.</b>               | Place both fists in front of the body with the thumbs pointing outward.  |              |
| 578  | How should you signal the crane operator to stop?                              | Place both fists in front of your body with the thumbs pointing outward.   | With both arms extended out and palms down, move arms back and forth.  | <b>Extend arm with the palm down and hold this position rigidly.</b>                     | Clasp hands in front of your body.   |              |
| 579  | How should you signal the crane operator to swing?                             | With both arms extended out and palms down, move arms back and forth.  | With arm extended downwards and forefinger pointing down, move hand in small horizontal circles.                   | <b>Extend arm and point finger in the direction to move the boom.</b>                    | Place both fists in front of the body with the thumbs pointing outward.  |              |
| 580  | How should you signal the crane operator to use the main hoist?                | Use one hand to give any motion signal, and place the other hand motionless in front of the hand giving the motion signal. | Extend arm with the thumb pointing up and flex the fingers in and out for as long as the load movement is desired. | First tap your elbow with one hand, and then proceed to use regular signals.             | <b>First tap the top of your head with your fist, and then proceed to use regular signals.</b>                             |              |
| 581  | How should you signal the crane operator to use the whip line?                 | Extend arm with the thumb pointing up, and flex the fingers in and out for as long as the load movement is desired.        | <b>First tap your elbow with one hand, and then proceed to use regular signals.</b>                                | First tap the top of your head with your fist, and then proceed to use regular signals.  | Use one hand to give any motion signal, and place the other hand motionless in front of the hand giving the motion signal. |              |
| 582  | Hygroscopic cargoes should be ventilated when _____.                           | <b>going from a warm to a cold climate</b>   | the dew point of the outside air is greater than the dew point of the air in the hold                              | the dew point of the air in the hold is very low   | the outside dew point is 60°F (16°C) and the cargo temperature is 54°F (12°C)  |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|---|---|---|--|--------------|
| 583  | Ice concentration is measured in tenths. What concentration range of ice corresponds to "Close Pack"?   | 9 - 10 tenths   | <b>7 - 8 tenths</b>   | 4 - 6 tenths  | 1 - 3 tenths                                     |              |
| 584  | Ice concentration is measured in tenths. What concentration range of ice corresponds to "Open Pack"?  | < 1 tenth   | 1 - 3 tenths  | <b>4 - 6 tenths</b>   | 7 - 8 tenths                                     |              |
| 585  | Ice concentration is measured in tenths. What concentration range of ice corresponds to 1- 3 tenths?  | <b>Very Open Pack</b>   | Open Pack   | Close Pack  | Very Close Pack                                  |              |
| 586  | Ice is often strong enough to halt navigation through the St. Lawrence Seaway by mid- _____.  | October   | November  | <b>December</b>   | January  |              |
| 587  | If a drill required by regulations is not completed, the Master or person in charge must _____.   | report this immediately to the Commandant of the Coast Guard                | <b>log the reason for not completing the drill</b>                | conduct two of the required drills at the next opportunity                      | All of the above                                 |              |
| 588  | If a hydraulic pump on a winch accidentally stops while hoisting, the load will stay suspended because _____.   | <b>a check valve will close and prevent reverse circulation</b>             | a centrifugal counterweight counteracts the force of gravity.     | the electric pump motor will cut out  | the control lever will move to the stop position |              |
| 589  | If a Master must jettison a container loaded with hazardous material, he must, as soon as possible, notify the _____.   | National Cargo Bureau   | Environmental Protection Agency                                   | National Hazardous Chemical Response Center                                     | <b>nearest Captain of the Port</b>               |              |
| 590  | If a mooring line should part while you are tying up at a dock, you should make a temporary eye by tying a _____.   | becket bend   | clove hitch   | <b>bowline</b>  | square knot                                      |              |
| 591  | If a passenger vessel navigating the Great Lakes is required to carry 8 life buoys, what is the allowable minimum number of these buoys that must have self-igniting lights attached? | 8   | 6   | <b>4</b>  | 2  |              |
| 592  | If a tow sinks in shallow water, you should _____.  | release it immediately  | attempt to beach it before it goes under                          | <b>pay out cable until it's on the bottom and place a buoy on the upper end</b> | shorten cable to keep it off the bottom          |              |
| 593  | If a tug equipped with flanking rudders is to be turned in a confined circle, when going astern, the stern will move to port the quickest if _____.                                   | <b>the rudder is hard to port and the flanking rudders are hard to port</b> | the rudder is amidships and the flanking rudders are hard to port | the rudder is hard to port and the flanking rudders are hard to starboard       | all rudders are hard to starboard                |              |
| 594  | If an alien stowaway is discovered aboard your vessel, his name must be placed on the _____.  | Alien Crew List   | Crew List   | Passenger List  | <b>separate Passenger List marked stowaways</b>  |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|---|---|--|--|--------------|
| 595  | If an attempt is made to hoist a load that exceeds the capacity of an electric winch, an overload safety device causes a circuit breaker to cut off the current to the winch motor _____.            | when the line pull reaches the rated winch capacity   | <b>after the line pull exceeds the rated winch capacity</b>                               | after a short build-up of torque   | immediately  |              |
| 596  | If an electric cargo winch is being used to lift a draft of cargo and the engine room loses all power, which will occur?   | A pawl, forced by a spring mechanism, will engage the teeth of the bull gear and hold the load.                   | <b>An electromagnetic brake will hold the load where it is suspended.</b>                 | The load will fall rapidly to the deck unless the foot brake is engaged.                                       | The load will slowly lower to the deck under control of the drag of the winch motor. |              |
| 597  | If given equal care, nylon line should last how many times longer than manila line?  | Three   | Four  | <b>Five</b>  | Six  |              |
| 598  | If kinking results while wire rope is being coiled clockwise, you should _____.  | coil it counterclockwise  | not coil it   | <b>take a turn under</b>   | twist out the kinks under a strain   |              |
| 599  | If reefer spaces are not properly cleaned prior to loading cargo, it will most likely cause _____.   | <b>mold to develop on commodities</b>   | malfunction of the refrigeration equipment  | contamination of the insulation in the space   | All of the above   |              |
| 600  | If the Master of a US-flag towing vessel replaces any crew member with a non-US citizen, he/she must ensure that the _____.  | replacement holds a license or document equivalent in experience and training to a mariner holding US credentials | replacement can communicate with other crew members to the extent required by regulations | vessel is on a foreign voyage, outside US jurisdiction, and not operating above the US outer continental shelf | <b>all of the above</b>  |              |
| 601  | If the situation arose where it became necessary to tow a disabled vessel, which statement is TRUE concerning the towing line?   | The towing line between the two vessels should be clear of the water.   | The towing line should be taut at all times between the vessels.                          | <b>There should be a catenary so the line dips into the water.</b>   | None of the above  |              |
| 602  | If the towing bridle legs are not of equal length _____.   | excessive strain is placed on the shorter leg   | the shorter leg may fail  | the longer leg is slack  | <b>All of the above</b>  |              |
| 603  | If the towline parts, you should _____.  | start pushing ahead   | abandon the towing vessel   | <b>retrieve the tow bridle</b>   | relieve strain on the retrieving line  |              |
| 604  | If the winch should fail while you are hauling in the anchor, what prevents the anchor cable from running out?   | Chain stopper   | Devil's claw  | Hawse ratchet  | <b>Riding pawl</b>   |              |
| 605  | If there are any changes in the crew in a foreign port, the changes will be made by _____.   | the Master on the Certified Crew List   | <b>the Master on the Shipping Articles</b>  | U.S. Consul on the Certified Crew List   | U.S. Consul on the Shipping Articles   |              |
| 606  | If there is a discrepancy in the cargo totals, between the cargo onboard the vessel and the cargo listed in the cargo manifest, the more accurate account of cargo totals can be found in the _____. | Notice of Readiness   | Charter Party   | <b>Bill of Lading</b>  | Portage Bill   |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|---|--|--|---|--------------|
| 607  | If two falls are attached to lift a one-ton load, what angle between the falls will result in the stress on each fall being equal to the load being lifted? | 60°   | 75°  | <b>120°</b>  | 150°  |              |
| 608  | If two mooring lines are to be placed on the same bollard, which method is BEST?  | Place the eye from the forward line on the bollard and then place the eye from the second line directly over the first. | It makes no difference how the lines are placed.                                 | <b>Place the eye from either line on the bollard, and then bring the eye of the other line up through the eye of the first, and place it on the bollard.</b> | Place both eyes on the bollard, in any manner, but lead both lines to the same winch head on the vessel and secure them on the winch. |              |
| 609  | 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 _____.        | <b>increase</b>   | decrease   | stop   | remain constant   |              |
| 610  | 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?      | Issuance of a letter of warning   | Suspension of your license   | Revocation of your license   | <b>A fine placed against your license</b>   |              |
| 611  | If you are loading fruit in reefer spaces and you notice that the fruit is beginning to mold, you should _____.   | carry the cargo at a cooler temperature than originally planned   | <b>write up exceptions on the cargo</b>  | refuse to carry the cargo  | discharge CO2 into the compartment after loading  |              |
| 612  | If you carry packaged hazardous cargoes on a break bulk vessel bound foreign, you must _____.   | stow the hazardous cargoes on deck available for jettisoning if necessary   | remove the hazardous cargo labels from a portable tank after the tank is emptied | <b>have the shipping papers indicate the proper shipping name and the technical name of n.o.s. cargoes</b>   | log the receipt of hazardous cargoes in the Official Logbook  |              |
| 613  | If you intend to land tulip bulbs from Holland in a U.S. port, they must be inspected by the _____.   | <b>Animal and Plant Health Service Inspector</b>  | Captain of the Port personnel  | Quarantine Officer   | All of the above  |              |
| 614  | If you shorten the scope of anchor cable, your anchor's holding power _____.  | <b>decreases</b>  | increases  | remains the same   | has no relation to the scope  |              |
| 615  | If you were to pass a stopper on a wire rope, what should the stopper be made of?   | Wire  | Manila   | Nylon  | <b>Chain</b>  |              |
| 616  | If your propeller is racing in rough weather, you should _____.   | <b>decrease your engine speed</b>   | ignore it  | increase your engine speed   | stop your engine until the rough weather passes   |              |
| 617  | If your vessel is dragging her anchor in a strong wind, you should _____.   | shorten the scope of anchor cable   | <b>increase the scope of anchor cable</b>  | put over the sea anchor  | put over a stern anchor   |              |
| 618  | If, after examination by the Quarantine Officer, your vessel is found to have a specific deficiency, you may be issued _____.                               | Bill of health  | Free Pratique  | Notice to Comply   | <b>Controlled Free Pratique</b>   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 619  | In a following sea, a wave has overtaken your vessel and thrown the stern to starboard. To continue along your original course, you should _____.                                     | <b>use more right rudder</b>   | use more left rudder                            | increase speed  | decrease speed   |              |
| 620  | In a foreign port with a consulate, the U.S. Consul may excuse the Master from personally appearing before him to consent to the mutual release of an injured seaman, when the _____. | <b>injury requires immediate inpatient hospitalization of the seaman</b> | Master authorizes the agent to act in his place | ship is still in port and the seaman can appear before the Consul after medical treatment | seaman also consents to the absence, and there is no dispute as to the wages due |              |
| 621  | In a longitudinally-framed ship, the longitudinal frames are held in place and supported by athwartship members called _____.   | floors   | margin plates                                   | stringers   | <b>web frames</b>  |              |
| 622  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated FLASH will be delivered within _____.                                 | <b>10 minutes</b>  | 3 hours   | 30 minutes  | 6 hours  |              |
| 623  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated FLASH will be delivered within _____.                                 | 6 hours  | 3 hours   | <b>10 minutes</b>   | 30 minutes   |              |
| 624  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated FLASH will be delivered within _____.                                 | 3 hours to start of business the following day                           | 1 to 6 hours                                    | 30 minutes to 1 hour  | <b>less than 10 minutes</b>  |              |
| 625  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated IMMEDIATE will be delivered within _____.                             | <b>30 minutes</b>  | 3 hours   | 6 hours   | 10 minutes   |              |
| 626  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated IMMEDIATE will be delivered within _____.                             | 3 hours to start of business the following day                           | 1 to 6 hours                                    | <b>30 minutes to 1 hour</b>   | 10 minutes if possible   |              |
| 627  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated IMMEDIATE will be delivered within _____.                             | 6 hours  | 3 hours   | 10 minutes  | <b>30 minutes</b>  |              |
| 628  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated PRIORITY will be delivered within _____.                              | 6 hours  | <b>3 hours</b>                                  | 30 minutes  | 10 minutes   |              |
| 629  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated PRIORITY will be delivered within _____.                              | 6 hours  | 30 minutes                                      | <b>3 hours</b>  | 10 minutes   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|--|--|---|--|--------------|
| 630  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated PRIORITY will be delivered within _____.                      | 6 hours  | 10 minutes   | 30 minutes  | <b>3 hours</b>   |              |
| 631  | In a national emergency, when communicating via the Navy, messages are sent by precedence. A message designated ROUTINE will be delivered within _____.                       | <b>6 hours</b>   | 3 hours  | 30 minutes  | 10 minutes or less   |              |
| 632  | In a racetrack turn, to recover a man overboard, the vessel is steadied for the SECOND time after a turn of how many degrees from the original heading?                       | 60°  | 135°   | 180°  | <b>360°</b>  |              |
| 633  | In a tow made up astern, the fishplate _____.   | <b>connects the hawser to the bridle</b>   | connects the bridle to the tow   | keeps the hawser amidships on the tug   | is the capping piece on the "H" bitt   |              |
| 634  | In a transversely framed ship, the transverse frames are supported by all of the following EXCEPT _____.  | girders  | longitudinals  | side stringers  | <b>web plates</b>  |              |
| 635  | In a Williamson turn, the rudder is put over full until the _____.  | vessel has turned 90°From her original course  | <b>vessel has turned 60°From her original course</b>                           | vessel is on a reciprocal course  | emergency turn signal sounds   |              |
| 636  | In addition to the load lines indicated in illustration D003DG, some vessels have a Winter North Atlantic line. Which statement about this load line mark is TRUE?            | It is carried on VLCC/ULCC type vessels and allows reduced freeboard considering their size. | It is marked above line B in the diagram.                                      | It is applied to vessels on restricted trade routes between the United Kingdom, Iceland, and Northern European countries. | <b>It applies only to vessels not exceeding 328 ft. navigating in the Winter North Atlantic zones.</b> |              |
| 637  | In astern towing, a tow span, also called the "tow bar" or "towing arch", is used to _____.   | insure that the hawser leads directly aft as it passes over the stern of the towing vessel   | increase the stability of the towing vessel by raising the hawser off the deck | reduce chafing of the towing hawser   | <b>prevent fouling of the hawser on deck gear located on the stern of the towing vessel</b>            |              |
| 638  | In bad weather, what length of chain should be used with a single anchor?   | 3 times the depth of water   | 6 times the depth of water   | <b>10 times the depth of water</b>  | 15 times the depth of water  |              |
| 639  | In controlling pollution, which action should be taken after all dirty ballast has been transferred to the slop tank and prior to discharge through the oily water separator? | The clean tanks should be ballasted.   | <b>The slops should be allowed time to settle.</b>                             | Chemicals should be added to emulsify the oil.  | The dirty ballast tank is crude oil washed.  |              |
| 640  | In determining the scope of anchor line to pay out when anchoring a small boat, one must consider the _____.  | charted depth of water only  | <b>depth of water, including tidal differences</b>                             | type of line being used for the anchor rope   | type of anchor being used  |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D                                     | Illustration  |
|------|--|---|---|---|--|---------------|
| 641  | In determining the scope of cable to be used when anchoring, what would NOT be considered?                                 | Depth of the water  | Character of the holding ground                             | <b>maintenance cost for the chain</b>                 | Type of anchor cable                         |               |
| 642  | In general, a reinforced vessel can safely navigate in ice provided the concentration does not exceed how many tenths?     | 1-2 tenths  | 3-4 tenths  | <b>5- 7 tenths</b>                                    | 8- 9 tenths with ice breaker assistance      |               |
| 643  | In general, an un-reinforced vessel can safely navigate in ice provided the concentration does not exceed how many tenths? | 9 - 10 tenths   | 6 - 8 tenths  | 4 - 6 tenths  | <b>1 - 3 tenths</b>                          |               |
| 644  | In handling break bulk hazardous materials, it is forbidden to use _____.  | cargo nets  | <b>metal bale hooks</b>                                     | pallets   | slings                                       |               |
| 645  | In illustration D044DG, the mooring line labeled "A" is called a(n) _____.   | onshore stern line  | <b>offshore stern line</b>                                  | after breast line                                     | after spring line                            | <b>D044DG</b> |
| 646  | In illustration D044DG, the mooring line labeled "B" is called a(n) _____.   | <b>inshore stern line</b>                                     | offshore stern line   | after spring line                                     | after breast line                            | <b>D044DG</b> |
| 647  | In illustration D044DG, the mooring line labeled "C" is called a _____.  | <b>breast line</b>  | shore line  | spring line   | stern line                                   | <b>D044DG</b> |
| 648  | In illustration D044DG, the mooring line labeled "D" is called a(n) _____.   | <b>after spring line</b>                                      | forward spring line   | waist breast line                                     | stern line                                   | <b>D044DG</b> |
| 649  | In illustration D044DG, the mooring line labeled "E" is called a(n) _____.   | after spring line   | <b>bow spring line</b>                                      | forward breast line                                   | bow line                                     | <b>D044DG</b> |
| 650  | In illustration D044DG, the mooring line labeled "F" is called a _____.  | bow line  | <b>breast line</b>  | forward spring line                                   | None of the above                            | <b>D044DG</b> |
| 651  | In illustration D044DG, the mooring line labeled "G" is called a(n) _____.   | <b>inshore bow line</b>                                       | offshore bow line   | forward breast line                                   | forward spring line                          | <b>D044DG</b> |
| 652  | In illustration D044DG, the mooring line labeled "H" is called a(n) _____.   | forward breast line   | offshore spring line  | <b>offshore bow line</b>                              | onshore bow line                             | <b>D044DG</b> |
| 653  | In moderate wind and current what should be the length of chain with a single anchor?                                      | <b>5 times the depth of the water in good holding ground</b>  | 10 times the depth of the water in shallow water            | 2 times the depth of the water in poor holding ground | 8 times the depth of the water in deep water |               |
| 654  | In most cases, when a large merchant vessel enters shallow water at high speed the _____.                                  | maneuverability will increase                                 | speed will increase   | <b>bow will squat farther than the stern</b>          | vessel will rise slightly, on a level plane  |               |
| 655  | In nautical terminology a "dog" is a _____.  | crow bar  | <b>device to force a water tight door against the frame</b> | heavy steel beam                                      | wedge  |               |
| 656  | In order to back a right-handed, single-screw vessel in a straight line, you will probably need to use _____.              | very little rudder  | some left rudder  | <b>some right rudder</b>                              | full left rudder                             |               |
| 657  | In order to correctly open a new coil of manila line, you should _____.  | pull the tagged end from the top of the coil                  | <b>pull the tagged end through the eye of the coil</b>      | secure the outside end and unroll the coil            | unreel the coil from a spool                 |               |
| 658  | In order to help protect a natural fiber rope from rotting, the line must be _____.  | <b>dried, and stowed in a place with adequate ventilation</b> | stowed in a hot, moist compartment                          | stowed on deck at all times                           | stowed in any compartment                    |               |



| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 659  | In order to pay out or slack a mooring line which is under strain, you should _____.  | sluice the line  | <b>surge the line</b>                                 | stopper the line  | slip the line  |              |
| 660  | In order to reduce the accumulation of static electricity while loading petroleum products, you should _____.   | start to load at maximum pressure                        | <b>start to load slowly</b>                           | increase the air flow into the tank   | use the overall method of loading only   |              |
| 661  | In order to reduce your wake in a narrow channel you should _____.  | apply enough rudder to counter the effect of the current | change your course to a zigzag course                 | <b>reduce your speed</b>  | shift the weight to the stern  |              |
| 662  | In plugging submerged holes; rags, wedges, and other materials should be used in conjunction with plugs to _____.   | reduce the water pressure on the hull                    | reduce the possibility of stress fractures            | prevent progressive flooding  | <b>reduce the water leaking around the plugs</b>   |              |
| 663  | In polar regions you should NOT expect to see _____.  | mirage effects   | sea smoke   | <b>extensive snowfall</b>   | false horizons   |              |
| 664  | In preparation for receiving chilled reefer cargo, the reefer space has been precooled for over twenty-four hours. Loading may begin when the space has been cooled to a temperature between _____. | -10°F (-23°C) and +10°F (-12°C)                          | 12°F (-11°C) and 20°F (-7°C)                          | <b>28°F (-2°C) and 40°F (4°C)</b>   | 42°F (6°C) and 55°F (13°C)   |              |
| 665  | In relation to cargo gear, what does "SWL" mean?  | <b>Safe working load</b>                                 | Ship's working lift                                   | Starboard wing lift   | Stress, weight, load   |              |
| 666  | In relation to the turning circle of a ship, the term "advance" means the distance _____.   | gained at right angles to the original course            | <b>gained in the direction of the original course</b> | moved sidewise from the original course when the rudder is first put over   | around the circumference of the turning circle   |              |
| 667  | In relation to the turning circle of a ship, the term "kick" means the distance _____.  | around the circumference of the turning circle           | gained at right angles to the original course         | gained in the direction of the original course  | <b>or throw of a vessel's stern from her line of advance upon putting the helm hard over</b> |              |
| 668  | In relation to the turning circle of a ship, the term "transfer" means the distance _____.  | gained in the direction of the original course           | <b>gained at right angles to the original course</b>  | the ship moves sidewise from the original course away from the direction of the turn after the rudder is first put over | around the circumference of the turning circle   |              |
| 669  | In securing a towing cable, consideration must be given to letting go in an emergency. The possible whip of towlines when released can be overcome by _____.  | increasing the shaft RPM prior to release                | using a pelican hook for quick release                | <b>using preventers</b>   | using a short chain for the lead through the stern chock                                     |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|---|---|---|--|--------------|
| 670  | In ship construction, frame spacing is _____.   | greater at the bow and stern  | <b>reduced at the bow and stern</b>   | uniform over the length of the vessel   | uniform over the length of the vessel, with the exception of the machinery spaces, where it is reduced due to increased stresses |              |
| 671  | In ship construction, keel scantlings should be the greatest _____.   | at each frame   | <b>amidships</b>  | one-third the distance from the bow   | one-third the distance from the stern  |              |
| 672  | In small craft terminology, all of the anchor gear between a boat and her anchor is called the _____.   | stock   | chock   | scope   | <b>rode</b>  |              |
| 673  | In some cases, the 50% duty on all foreign repairs made to American flag merchant vessels may be remitted. Which work does NOT come under the remitting policy of U.S. Customs? | <b>Chipping, painting, and scaling by foreign labor</b>   | Repairs to hull structural damage   | Repairs due to damage done by heavy weather   | Repairs to the main propulsion machinery   |              |
| 674  | In stopping distances of vessels, "head reach" can best be described as the _____.  | difference between the vessel's speed through the water at any instant and the new speed ordered on the telegraph | distance the vessel has actually run through the water since a change of speed was ordered  | <b>distance the vessel will run between taking action to stop her and being stationary in the water</b> | speed at which a vessel should proceed to ensure that she will run a predetermined distance, once her engines have been stopped  |              |
| 675  | In terms of vessel manning, a watch is the _____.   | <b>direct performance of deck or engine operations in a scheduled and fixed rotation</b>                          | performance of maintenance work necessary for the vessel's safe operation, on a daily basis | performance of lookout duties   | direct performance of cargo loading and discharge operations only  |              |
| 676  | In the context of shiphandling, what would be the definition of shallow water?  | <b>Water depth of less than twice a vessel's draft</b>  | Water depth of less than 1½ times a vessel's draft  | Under keel clearance of twice a vessel's draft  | Under keel clearance of less than 10 feet  |              |
| 677  | In the manufacture of line, plant fibers are twisted together to form _____.  | cable   | line  | strands   | <b>yarns</b>   |              |
| 678  | In the manufacture of wire rope, if the wires are shaped to conform to the curvature of the finished rope before they are laid up, the rope is called _____.                    | composite   | left-lay  | improved  | <b>preformed</b>   |              |
| 679  | In the stowage of deck cargo, "cribbing" is _____.  | <b>placed on deck to support the cargo</b>  | separation pieces used to keep cylinders upright and steady                                 | shims for stowing baled cargo   | nets placed across the hatch opening to keep the cargo from falling in the hatch   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|---|---|---|---|--------------|
| 680  | In the United States, the load line markings are set by the _____.  | <b>American Bureau of Shipping</b>  | Coast Guard   | Federal Maritime Board  | IMO   |              |
| 681  | In time of war Naval Control of Shipping Authorities may give orders concerning the _____.  | cargo to be loaded  | final destination   | <b>ship's route</b>   | All of the above  |              |
| 682  | In towing it is desirable for the tug and the tow to ride wave crests simultaneously because _____.   | <b>shock loading on the tow line is reduced</b>   | towing speed is improved  | the tow is more visible from the tug  | the catenary of the towline is reduced  |              |
| 683  | In towing, chocks are used to _____.  | <b>protect the towline from chafing</b>   | secure the end of the towline on the tug  | stop off the towline while retrieving it  | absorb shock loading on the towline   |              |
| 684  | In towing, heaving lines are used for _____.  | passing a tow bridle to the tug   | <b>passing a messenger line</b>   | heaving in the tow bridle   | service lines with rocket line throwers   |              |
| 685  | In twin-screw engine installations while going ahead, maneuvering qualities are most effective when the tops of the propeller blades both turn _____. | to starboard  | <b>outboard from the center</b>   | to port   | inboard toward the center   |              |
| 686  | In vessel construction, the garboard strake is _____.   | <b>located next to and parallel to the keel</b>   | located next to and parallel to the gunwale   | another term for the bilge keel   | another term for the rub rail   |              |
| 687  | In which case is the IOPP Certificate of an inspected vessel NOT invalidated?   | <b>The required oily-water separator malfunctions.</b>  | The ship is transferred to Liberian registry.   | An annual survey is conducted fifteen months after the date of certificate issuance.                  | A 15 ppm oily-water separator is replaced by a 100 ppm oily-water separator.                          |              |
| 688  | In which casualty case is it UNNECESSARY to notify the local Coast Guard Marine Safety Office?  | <b>Your vessel strikes a pier and does \$1,500 damage to the pier but none to the vessel.</b> | A nylon mooring line parts while the vessel is tied up and kills a harbor worker who was on the pier. | A seaman is injured and in the hospital for four days.  | Your vessel is backing from a dock and runs aground, but is pulled off by tugs in 30 minutes.         |              |
| 689  | In which casualty case is it UNNECESSARY to notify the local Coast Guard Marine Safety Office?  | Your vessel is backing from a dock and runs aground, but is pulled off by tugs in 30 minutes. | <b>Your vessel strikes a pier and does \$1,500 damage to the pier but no damage to the vessel.</b>    | A nylon mooring line parts while the vessel is tied up and kills a harbor worker who was on the pier. | A seaman is injured and in the hospital for four days.  |              |
| 690  | In which casualty case is it UNNECESSARY to notify the local Coast Guard Marine Safety Office?  | Your vessel is backing from a dock and runs aground, but is pulled off by tugs in 30 minutes. | A seaman is injured and in the hospital for four days.  | <b>Your vessel strikes a pier and does \$1,500 damage to the pier but no damage to the vessel.</b>    | A nylon mooring line parts while the vessel is tied up and kills a harbor worker who was on the pier. |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 691  | In which casualty case is it UNNECESSARY to notify the local Coast Guard Marine Safety Office?  | A seaman is injured and in the hospital for four days.   | Nylon mooring line parts while the vessel is tied up and kills a harbor worker who was on the pier. | Your vessel is backing from a dock and runs aground, but is pulled off by tugs in 30 minutes. | <b>Your vessel strikes and sinks an anchored sailboat costing a total of \$20,000 for salvage and repair.</b>  |              |
| 692  | In which situation could a vessel most easily capsize?  | Running into head seas   | <b>Running in the trough</b>  | Running with following seas   | Anchored with your bow into the seas   |              |
| 693  | In writing up the logbook at the end of your watch, you make an error in writing an entry. What is the proper means of correcting this error? | <b>Cross out the error with a single line, and write the correct entry, then initial it.</b>                         | Carefully and neatly erase the entry and rewrite it correctly.                                      | Remove this page of the log book, and rewrite all entries on a clean page.                    | Blot out the error completely and rewrite the entry correctly.   |              |
| 694  | Indicated horsepower refers to a towing vessel's power which is _____.  | <b>theoretically available</b>   | measured on a test bed  | developed at the shaft  | measured by dynamometer  |              |
| 695  | Instead of whipping an end of a line, a temporary means of preventing the line from unraveling is to tie a _____.                             | becket bend  | blackwall hitch   | <b>figure-eight knot</b>  | square knot  |              |
| 696  | Instructions to the crew in the use of all the ship's lifesaving equipment shall be completed _____.  | before sailing   | within one week of sailing  | in one month and repeated quarterly   | <b>within any two month period</b>   |              |
| 697  | Insufficient space between the hull and bottom in shallow water will prevent normal screw currents resulting in _____.                        | waste of power   | sudden sheering to either side  | sluggish rudder response  | <b>All of the above</b>  |              |
| 698  | Insulating flanges minimize the dangers arising from _____.   | smoking on deck  | loading asphalt   | <b>accumulations of electrostatic charges</b>   | tank over-pressurization   |              |
| 699  | Is tripping limited to harbor and coastal towing?   | <b>No. Forces tending to capsize a tug are as dangerous on the high seas as they are in harbor and coastal work.</b> | Yes. The long towing hawser used in ocean towing eliminates the danger of tripping.                 | No. Tripping is common in ocean towing because of more frequent maneuvering                   | Yes. Because of increased water depths, forces required to capsize a tug are not usually found in ocean towing |              |
| 700  | It is easier to dock a right-hand, single-screw vessel _____.   | starboard side to the wharf  | either side to the wharf  | <b>port side to the wharf</b>   | stern to the wharf   |              |
| 701  | It is good practice to use long towlines for ocean tows because the _____.  | wear on the towline is equalized   | weight of the towline increases the towing force  | <b>dip in the towline absorbs shock loads</b>   | danger of overriding is reduced  |              |
| 702  | It is not advisable to use nylon for alongside towing because it _____.   | <b>stretches too much</b>  | is too expensive for everyday towing usage  | binds on the cleats   | parts too readily  |              |
| 703  | It is NOT advisable to use nylon for alongside towing because it _____.   | <b>stretches too much</b>  | is too difficult to make fast   | parts too readily   | is too susceptible to mildew   |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D   | Illustration  |
|------|--|--|---|---|--|---------------|
| 704  | It is permissible to place an eye splice in wire rope used as cargo gear providing the splice is made using _____. | two tucks with whole strands and one tuck with one-half strand | <b>three tucks with whole strands and two tucks with 1/2 the wire cut from the tucking strand</b> | three tucks with whole strands                                      | two tucks with whole strands and three tucks with half strands       |               |
| 705  | It is possible, and sometimes necessary, to strengthen the deck of a vessel for carriage of deck cargo by _____.   | placing bunker on the deck                                     | building a stage on which to place the cargo  | welding steel "feet" to the deck, on which the cargo is placed      | <b>erecting vertical pillars under the deck to support the cargo</b> |               |
| 706  | It is the responsibility of the crane operator to, at all times, be aware of the location of the _____.            | load   | hook  | boom  | <b>All of the above</b>  |               |
| 707  | It is the responsibility of the Master to ensure that _____.   | the muster list is posted in each compartment                  | <b>temporary personnel and visitors are advised of emergency stations</b>                         | names of crew members are listed on the muster list                 | no changes are made to the muster list                               |               |
| 708  | Item A is the _____.   | <b>lashing</b>   | drag wire   | scissor wire  | tandem wire  | <b>D024DG</b> |
| 709  | Keel scantlings of any vessel are greatest amidships because _____.  | connections between forebody and afterbody are most crucial    | <b>of maximum longitudinal bending moments</b>  | of severest racking stresses  | resistance to grounding is at a maximum amidships                    |               |
| 710  | Keeping certain cargoes separated because of their inherent characteristics is known as _____.                     | overstowage  | <b>segregation</b>  | spot loading  | cargo typing   |               |
| 711  | Keeping the draft at or below the load line mark will insure that the vessel has adequate _____.                   | ballast  | <b>reserve buoyancy</b>   | displacement  | rolling periods  |               |
| 712  | Kort nozzles are installed around the propellers of some vessels to _____.   | <b>increase the thrust of the propeller</b>                    | protect the propeller from striking sawyers   | prevent the propeller from striking barges towed on the hip         | prevent the propeller from touching bottom in low water              |               |
| 713  | Laying out a line in successive circles flat on deck with the bitter end in the center is known as _____.          | coiling  | faking  | <b>flemishing</b>   | lining   |               |
| 714  | Leeway is the _____.   | difference between the true course and the compass course      | momentum of a vessel after her engines have been stopped  | <b>lateral movement of a vessel downwind of her intended course</b> | displacement of a vessel multiplied by her speed                     |               |
| 715  | Lifting the anchor from the bottom is called _____.  | broaching the anchor   | shifting the anchor   | walking the anchor  | <b>weighing the anchor</b>   |               |
| 716  | Lighter longitudinal stiffening frames on the vessel's side plating are called _____.                              | <b>stringers</b>   | side frames   | side stiffeners   | intercostals   |               |
| 717  | Line is called "small stuff" if its circumference is less than _____.  | 1/2"   | 3/4"  | 1"  | <b>1 3/4"</b>  |               |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|---|---|---|---|--------------|
| 718  | Litmus paste is used in order to determine _____.  | innage  | <b>thieverage</b>   | ullage  | the tank's datum point  |              |
| 719  | Load lines for U.S. vessels are assigned by _____.   | the U.S. Coast Guard  | <b>the American Bureau of Shipping</b>                                | Lloyd's Register of Shipping                                | the National Cargo Bureau   |              |
| 720  | Manila lines in which the strands are right-hand laid _____.   | <b>should be coiled in a clockwise direction</b>                | should be coiled in a counterclockwise direction                      | may be coiled either clockwise or counterclockwise          | should never be coiled  |              |
| 721  | Many dangerous cargoes are stowed on deck because of the _____.  | danger to crew and cargo  | necessity of periodic inspection                                      | possible need to jettison                                   | <b>All of the above</b>   |              |
| 722  | Many sheath-screw davits have markings to indicate the maximum angle to which they should be cranked out. If the angle is exceeded, the davit _____. | may jam against the stops                                       | will not automatically position the boat at the embarkation station   | <b>screw may come out of the sheath</b>                     | will chafe against the falls and may cause their failure          |              |
| 723  | Maritime Administration personnel may be allowed in the pilothouse upon the responsibility of the _____.   | Chief Officer   | Navigator   | most senior person present from the Maritime Administration | <b>officer in charge of the watch</b>                             |              |
| 724  | Marline is _____.  | four-stranded sisal line  | three-stranded cotton line  | sail twine  | <b>two-stranded hemp cord</b>                                     |              |
| 725  | Metal plates that cover the top of the hawsepipe are called _____.   | footings  | plugs   | <b>buckler plates</b>                                       | stop waters   |              |
| 726  | Molded depth is measured from the _____.   | <b>inside of the shell</b>                                      | outside of the shell  | top of the center vertical keel                             | top of the garboard stake   |              |
| 727  | Mooring lines should be turned end-for-end occasionally. This is because _____.  | a line is weakened by constantly pulling on it in one direction | <b>normal wear on the line is thus distributed to different areas</b> | it prevents the line from kinking or unlaying               | it prevents permanent misalignment of the line's internal strands |              |
| 728  | Mooring with two bow anchors has which major advantage over anchoring with one bow anchor?   | The vessel will not reverse direction in a tidal current.       | <b>The radius of the vessel's swing will be shortened.</b>            | A mooring approach may be made from any direction.          | The vessel will not swing with a change in wind.                  |              |
| 729  | Most crude oils are classified as grade _____.   | A or B  | B   | <b>C or D</b>   | E   |              |
| 730  | Most of your vessel's superstructure is forward. How will the vessel lie when drifting with no way on?   | With the wind from ahead  | With the wind off the port beam                                       | With the wind off the starboard beam                        | <b>With the wind from abaft the beam</b>                          |              |
| 731  | Most pedestal crane power is provided by _____.  | <b>Electro-hydraulic units</b>                                  | Steam units   | Independent internal combustion power units                 | All of the above  |              |
| 732  | Most very large ocean going vessels, such as bulk carriers and large tankers, tend to squat _____.   | <b>by the bow</b>   | by the stern  | at the end nearest the bottom                               | evenly fore and aft   |              |
| 733  | Mousing a cargo hook with marline or small line _____.   | increases the lifting capacity of the hook                      | protects the hook from the sling ring                                 | <b>prevents the sling ring from coming out of the hook</b>  | All of the above  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|--|--|--|--|--------------|
| 734  | 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?                | Greenish   | <b>Bluish</b>  | Grey   | Grey-white   |              |
| 735  | Nautical charts published by the Canadian Hydrographic service which are referenced in the United States Coast Pilot are identified by _____.         | the abbreviation "can" preceding the chart number      | the letter "C" in parentheses following the chart number | <b>an asterisk preceding the chart number</b>                        | a footnote number  |              |
| 736  | Naval authorities would NOT give orders about which of the following, when the vessel is under control of the Naval Control of Shipping Organization? | Visual communication at sea                            | Rescue operations  | Diversions   | <b>Schedules for loading cargo</b>                         |              |
| 737  | Naval Control of Shipping (NCS) publications should be _____.   | in the Master's custody                                | safely stowed  | turned over to the relieving Master                                  | <b>All of the above</b>                                    |              |
| 738  | Nearly half of all storms that enter the Great Lakes Basin during the period from October through May come from _____.                                | highs which originate in the east and east central USA | lows which originate in north central and western Canada | highs which originate in north eastern and eastern Canada            | <b>lows which originate in the central and western USA</b> |              |
| 739  | No hot work shall be performed on board a vessel with hazardous materials as cargo unless the work is approved by the _____.                          | American Bureau of Shipping                            | <b>local U.S. Coast Guard Captain of the Port</b>        | National Cargo Bureau  | harbormaster   |              |
| 740  | Nonflammable gases should have what kind of label?  | Skull and crossbones                                   | White  | <b>Green</b>   | Red  |              |
| 741  | Nylon line can be dangerous because it _____.   | breaks down when wet                                   | kinks when wet   | is not elastic   | <b>stretches</b>   |              |
| 742  | Nylon line is better suited than manila for _____.  | towing alongside                                       | <b>towing astern</b>                                     | holding knots and splices  | resisting damage from chemicals                            |              |
| 743  | Nylon line is NOT suitable for _____.   | towing   | <b>lashings</b>  | stoppers   | mooring lines  |              |
| 744  | Nylon rope is often used in the makeup of a towline because it _____.   | floats   | <b>stretches</b>   | handles easily   | resists rot  |              |
| 745  | Odorous cargoes are those that _____.   | are susceptible to damage by tainting                  | are exceptionally dusty and leave a residue              | are liquid, but in containers  | <b>give off fumes that may damage other cargoes</b>        |              |
| 746  | Of which type of material may a towing hawser be constructed?   | Wire rope  | Nylon  | Polyester  | <b>All of the above</b>                                    |              |
| 747  | Official proof of an American vessel's nationality is contained in the _____.   | Certificate of Inspection                              | Official Log   | <b>Certificate of Documentation</b>                                  | Shipping Articles  |              |
| 748  | Oil may NOT be transferred unless _____.  | there are two certificated tankermen on each vessel    | the vessel is equipped with constant-tension winches     | <b>discharge containment equipment (i.e. drip pans) are in place</b> | All of the above   |              |
| 749  | Oil product samples should be taken from the _____.   | dock riser   | ship's cargo tanks                                       | shore tank discharge   | <b>All of the above</b>                                    |              |



| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|--|---|---|--|--------------|
| 750  | On a coastwise tugboat of 199 GT, on a voyage over 600 miles, what percentage of the deck crew (excluding licensed officers) must hold a document of able seaman?          | <b>65%</b>   | 50%   | 25%   | 0%   |              |
| 751  | On a light tow, what could you substitute for a fishplate?   | <b>heart-shaped shackle</b>  | pelican hook  | swivel  | ring   |              |
| 752  | On a long ocean tow, the bridle should be made up of two equal lengths of _____.   | <b>chain</b>   | wire  | nylon   | polyester  |              |
| 753  | On a manned vessel carrying packaged hazardous cargo, the hazardous materials shall be inspected _____.  | every 24 hours unless equipped with a fire detecting system                | prior to entry into a U.S. port   | after stowage is complete   | <b>All of the above</b>  |              |
| 754  | On a passenger vessel over 400 gross tons, routine entries for the Oil Record Book are recorded in _____.  | Oil Record Book is not required  | <b>Part I (Machinery Space Operations)</b>                                  | Part II (Cargo Oil/Ballast Operations)                            | Part III (Emergency Discharge/Spillage)  |              |
| 755  | 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? | 1  | 2   | 3   | <b>4</b>   |              |
| 756  | On a shallow water tow, the catenary of the towline should be _____.   | large  | <b>small</b>  | eliminated  | adjusted frequently  |              |
| 757  | On a ship's crane, the load chart relates the allowable load to the combination of the boom length and _____.  | winch speed  | boom strength   | <b>load radius</b>  | cable strength   |              |
| 758  | On a single-screw vessel the stern frame _____.  | <b>furnishes support to the rudder, propeller shaft, and transom frame</b> | provides foundations for after mooring winches                              | provides foundations for the main propulsion engines              | transfers the driving force of the propeller to the hull   |              |
| 759  | On a single-screw vessel, when coming port side to a pier and being set off the pier, you should _____.  | swing wide and approach the pier so as to land starboard side to           | approach the pier on a parallel course at reduced speed                     | <b>make your approach at a greater angle than in calm weather</b> | point the vessel's head well up into the slip and decrease your speed                                |              |
| 760  | On a small boat, if someone fell overboard and you did not know over which side the person fell, you should _____.   | immediately reverse the engines  | <b>stop the propellers from turning and throw a ring buoy over the side</b> | increase speed to full to get the vessel away from the person     | first put the rudder hard over in either direction   |              |
| 761  | On a small boat, which knot is best suited for attaching a line to the ring of an anchor?  | Clove hitch  | Figure-eight knot   | <b>Fisherman's bend</b>   | Overhand knot  |              |
| 762  | On a small passenger vessel the collision bulkhead is _____.   | amidships forward of the engine room                                       | just forward of the steering compartment                                    | in the engine room  | <b>A distance of 5% to 15% of the waterline length abaft the stem measured at the load waterline</b> |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|---|--|--|--|--------------|
| 763  | On a transpacific voyage, you receive a message from your vessel's operators saying that your vessel has been consigned to Naval Control of Shipping. Further information is contained in _____.           | <b>Radio Aids to Navigation (PUB 117)</b>   | the Coast Pilot  | the International Code of Signals (PUB 102)  | the Light List   |              |
| 764  | On a transpacific voyage, you receive a message from your vessel's operators saying that your vessel has been consigned to Naval Control of Shipping. Further information is contained in _____.           | the Light List  | the International Code of Signals (PUB 102)  | <b>Radio Navigational Aids (PUB 117)</b>   | the Coast Pilot  |              |
| 765  | On a transpacific voyage, you receive a message from your vessel's operators saying that your vessel has been consigned to Naval Control of Shipping. Further information is contained in _____.           | the Light List  | the Coast Pilot  | the International Code of Signals (PUB 102)  | <b>Radio Aids to Navigation (PUB 117)</b>                              |              |
| 766  | On a transpacific voyage, you receive a message from your vessel's operators saying that your vessel has been consigned to voluntary Naval Control of Shipping. Further information is contained in _____. | the Light List  | <b>Radio Aids to Navigation (PUB 117)</b>  | the International Code of Signals (PUB 102)  | the Coast Pilot  |              |
| 767  | On a twin-screw, twin-rudder vessel, the most effective way to turn in your own water, with no way on, is to put _____.  | <b>one engine ahead and one engine astern, with full rudder</b>                   | one engine ahead and one engine astern, with rudders amidships                           | both engines ahead, with full rudder   | both engines astern, with full rudder                                  |              |
| 768  | On a vessel proceeding from a very cold to a warm climate with a cargo of a nonhygroscopic nature in the holds, which is TRUE?   | Danger of heavy ship sweat exists; constant and vigorous ventilation is required. | <b>There is danger of heavy cargo sweat if outside air is introduced by ventilation.</b> | There is little danger of ship's sweat, slight possibility of cargo sweat; moderate ventilation is needed. | The possibility of any sweat problem, either cargo or ship, is remote. |              |
| 769  | On a vessel with a single propeller, transverse force has the most effect on the vessel when the engine is put _____.  | full ahead  | <b>full astern</b>   | half ahead   | slow astern  |              |
| 770  | On a voyage charter, when a vessel is ready to load cargo, the Master should render to the charterer a _____.  | <b>Notice of Readiness</b>  | Master Certificate of Service  | Shipmasters Declaration  | Vessel Utilization and Performance Report                              |              |
| 771  | On an anchor windlass, the wheel over which the anchor chain passes is called a _____.   | brake compressor wheel  | devil's claw   | <b>wildcat</b>   | winchhead  |              |
| 772  | On Great Lakes vessels, midsummer load lines apply _____.  | April 16 through April 30 and September 16 through September 30                   | <b>May 1 through September 15</b>  | July 16 through August 30  | June 16 through September 16   |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|---|---|---|--|--------------|
| 773  | On stud-link anchor chain the addition of the stud increases the strength of the link by about _____.  | 10%   | <b>15%</b>  | 20%   | 50%  |              |
| 774  | On the cargo manifest, the gross weight of a box containing cargo is the weight of the _____.  | cargo   | box   | <b>cargo and box</b>  | rate weight  |              |
| 775  | On the cargo manifest, the total weight of a box containing cargo is the _____.  | tare weight   | net weight  | <b>gross weight</b>   | cargo weight   |              |
| 776  | On the cargo manifest, the total weight of an empty cargo box is the _____.  | <b>tare weight</b>  | net weight  | gross weight  | cargo weight   |              |
| 777  | On the cargo manifest, the weight of the cargo inside a box is called _____.   | gross weight  | <b>net weight</b>                                   | light weight  | rate weight  |              |
| 778  | On the fully containerized ship, approximately one-third or more of the cargo is on deck above the rolling center. Top stowed containers are subject to _____.                       | <b>accelerations greater than on conventional vessels</b>                   | accelerations less than on conventional vessels     | accelerations the same as on conventional vessels   | no accelerations   |              |
| 779  | On the Great Lakes, short-term fluctuations in water levels may be a result of any of the following EXCEPT _____.  | strong winds  | sudden changes in barometric pressure               | seiches   | <b>below normal rain fall</b>  |              |
| 780  | On the Great Lakes, the term "controlling depth" means the _____.  | designed dredging depth of a channel constructed by the Corps. of Engineers | minimum amount of tail water available behind a dam | distance in units of the chart (feet, meters or fathoms) from the reference datum to the bottom | <b>least depth within the limits of the channel which restricts the navigation</b> |              |
| 781  | On the Great Lakes, winter storms compound the ice threat by bringing a variety of wind, wave, and weather problems on an average of every _____.                                    | two days  | three days  | <b>four days</b>  | five days  |              |
| 782  | On U.S. flag vessels, which certificate is always issued by the Coast Guard?   | Load Line Certificate   | <b>Safety Equipment Certificate</b>                 | Safety Construction Certificate   | Register of cargo gear   |              |
| 783  | On vessels over 100 gross tons, whose responsibility is it to ensure that all able seamen in the vessel's crew have the documents and qualifications required by law and regulation? | <b>Master of the vessel</b>   | USCG Officer in Charge of Marine Inspection         | Owner or operator of the vessel   | Company's personnel director   |              |
| 784  | On which form do you provide a written report of Marine Casualty to the nearest Coast Guard Marine Safety Office?  | DD 214  | <b>CG 2692</b>                                      | DOT 211   | CG 5511  |              |
| 785  | On which of the Great Lakes would shore ice be the most pronounced?  | Lake Michigan   | <b>Lake Superior</b>                                | Lake Huron  | Lake Erie  |              |
| 786  | On which vessels are the officers and deck crew allowed to operate under a two-watch system on voyages of less than 600 miles?   | Towing vessels  | Offshore supply vessels                             | Barges, when manned   | <b>All of the above</b>  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration  |
|------|---|--|---|--|--|---------------|
| 787  | On which vessels may licensed individuals be required to stand watch under the two-watch system, on voyages of more than 600 miles in length?   | <b>Uninspected towing vessels</b>  | Offshore supply vessels                             | Cargo ships  | Tank vessels   |               |
| 788  | On your vessel, a wire rope for the cargo gear shows signs of excessive wear and must be replaced. In ordering a new wire for this 10-ton boom, what safety factor should you use?                                | Three  | <b>Five</b>   | Six  | Seven  |               |
| 789  | Onboard a Ro-Ro vessel many decks are used for the carriage of both rolling and container cargoes, as such it is most useful if a deck socket accepts both _____.   | <b>twist-Locks and lashing hooks</b>   | container locks and bridge fittings                 | bridge fittings and lashing hooks                                  | twist-locks and container locks  |               |
| 790  | Once a towline is connected between the towing vessel and the disabled vessel, the towing vessel should _____.  | not exceed bare steerageway during the transit                               | take a strain as soon as you can to control the tow | <b>come up to speed very slowly and maintain a "safe speed"</b>    | come up to speed quickly, then cut back power considerably to ease the strain            |               |
| 791  | Once a vessel has loaded packaged hazardous cargo, the cargo spaces shall be inspected. The spaces shall also be inspected at least once in every 24 hours. The only exception to daily inspection is when _____. | <b>a vessel is equipped with an automatic smoke or fire detecting system</b> | the cargo hatches are of steel construction         | the cargo is of a nonflammable type                                | there is sufficient fire protection located on the main deck adjacent to the cargo hatch |               |
| 792  | One advantage of chain over wire rope for a tow bridle is that chain _____.   | is better suited for inland towing   | <b>resists damage from chafing</b>                  | handles more easily  | equals towing forces better  |               |
| 793  | One function of a bulwark is to _____.  | <b>help keep the deck dry</b>  | prevent stress concentrations on the stringer plate | protect against twisting forces exerted on the frame of the vessel | reinforce the side stringers   |               |
| 794  | One major advantage of the round turn maneuver in a man overboard situation is that it _____.   | <b>is the fastest method</b>   | is easy for a single-screw vessel to perform        | requires the least shiphandling skills to perform                  | can be used in reduced visibility  |               |
| 795  | One of the greatest hazards of pushing ahead is parting which item shown?   | A  | B   | F  | <b>I</b>   | <b>D024DG</b> |
| 796  | One of the requirements for a general average act is _____.   | <b>a successful venture</b>  | no imminent peril                                   | no losses  | All of the above   |               |
| 797  | One of your crew members falls overboard from the starboard side. You should IMMEDIATELY _____.   | apply left rudder  | <b>throw the crew member a life preserver</b>       | begin backing your engines   | position your vessel to windward and begin recovery                                      |               |
| 798  | One reason a tug's towing bits are located forward of the rudders is because _____.   | it makes it easier to hook up the towing hawser                              | this is where the towhook is located                | <b>this allows more responsive steering</b>                        | it is traditional  |               |
| 799  | One shot of anchor chain is equal to how many feet (meters)?  | 6 (1.8 meters)   | 15 (4.6 meters)                                     | 45 (13.7 meters)   | <b>90 (27.4 meters)</b>  |               |
| 800  | Operators of Uninspected Passenger Vessels are required to keep their Coast Guard License aboard _____.   | only when operating more than one mile from shore                            | only when operating at night                        | <b>only when carrying passengers for hire</b>                      | At all times   |               |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|---|--|--|---|--------------|
| 801  | Overcarriage is best prevented by _____.   | assuring heavy cargo is stowed low in the vessel                      | checking the vessel's load line calculations carefully             | <b>inspection of the hold at completion of discharge</b>   | stowing the cargo which is to be discharged last on the bottom                    |              |
| 802  | Owing to the greater girth of a ship amidships than at the ends, certain strakes are dropped as they approach the bow and stern to reduce the amount of plating at the ends. These strakes are called _____. | <b>drop strakes</b>   | stealers   | throughs   | voids   |              |
| 803  | Panting frames are located in the _____.   | after double bottoms  | centerline tanks on tankships                                      | <b>fore and after peaks</b>  | forward double bottoms  |              |
| 804  | Particular average is _____.   | the average distance steamed per day over the duration of the voyage  | charges against all parties in a marine venture to pay for damages | <b>loss sustained by only one party</b>  | claimed after all liens against the vessel are settled                            |              |
| 805  | Payment of penalty for a ship's delay after the expiration of lay days due to some fault of the charterer or his agent is known as _____.  | <b>demurrage</b>  | late fee   | miscibility  | volatility  |              |
| 806  | Peck and Hale gear is used most commonly for securing _____.   | <b>automobiles</b>  | baled cargo  | large wooden crates  | palletized cargo  |              |
| 807  | Pedestal cranes have limit switches to restrict movement of which function(s)?   | Hoist upper & lower limits  | Luff travel limits   | Rider block hoist upper & lower limits   | <b>All of the above</b>   |              |
| 808  | Pedestal cranes have limit switches to restrict the movement of which function?  | Luff rate limits  | <b>Slew travel limits</b>  | Swivel power limits  | Slew rate limits  |              |
| 809  | Pedestal cranes have limit switches to restrict the movement of which function?  | Slew travel limits  | Turntable limits   | Luff travel limits   | <b>All of the above</b>   |              |
| 810  | Periodic surveys to renew the load line assignment must be made at intervals NOT exceeding _____.  | 18 months   | two years  | three years  | <b>five years</b>   |              |
| 811  | Petroleum cargo tanks should not be topped off at deck level when loading on a cold day because _____.   | <b>a subsequent temperature rise will cause the cargo to overflow</b> | air pockets may cause the cargo to bubble out of the ullage hole   | the increased viscosity of the product requires higher loading pressure which increases the chances of a spill | the tank valve may be stiff and a spill will occur before the valve can be closed |              |
| 812  | Pinching of the cargo hose between the vessel and the dock should be prevented by _____.   | <b>adjusting the hose supports</b>                                    | laying out an excess length of hose on deck                        | tying off the topping lifts and runners to winch heads   | All of the above  |              |
| 813  | Pitching is angular motion of the vessel about what axis?  | Longitudinal  | <b>Transverse</b>  | Vertical   | Centerline  |              |
| 814  | Preparation of muster lists and signing of same is the responsibility of the _____.  | Chief Officer of the vessel   | owner of the vessel  | <b>Master of the vessel</b>  | United States Coast Guard   |              |

| ID # | Question   | Choice A                                       | Choice B                                     | Choice C  | Choice D  | Illustration |
|------|--|--|--|---|---|--------------|
| 815  | Prior to being able to sail, each vessel that carries grain in bulk must have a certificate of loading issued by the _____.              | American Bureau of Shipping                    | Lloyds of London                             | <b>National Cargo Bureau</b>  | U.S. Salvage  |              |
| 816  | Prior to getting underway in fresh or brackish water, the Master must _____.   | <b>log the density of the water</b>            | secure all overboard discharges              | take on fresh water ballast   | clean the sides with fresh water  |              |
| 817  | Progressive flooding is controlled by securing watertight boundaries and _____.  | transferring water ballast                     | jettisoning cargo                            | <b>pumping out flooded compartments</b>   | abandoning ship   |              |
| 818  | Progressive flooding may be indicated by _____.  | ballast control alarms                         | excessive draft                              | excessive list or trim  | <b>a continual worsening of list or trim</b>  |              |
| 819  | Protective clothing must be worn while sampling hazardous cargo on a tankship, and as a minimum includes _____.                          | a hood or hard hat                             | <b>a face mask or goggles</b>                | boots   | chemical resistant gloves   |              |
| 820  | Regulations concerning the stowage, lashing, and securing of timber deck cargoes aboard general cargo vessels may be found in the _____. | International Cargo Bureau Regulations         | <b>Load Line Regulations</b>                 | Rules and Regulations for Cargo and Miscellaneous Vessels                                 | vessel's classification society rules and regulations   |              |
| 821  | Reid vapor pressure is _____.  | exerted by liquid cargo on the sides of a tank | exerted by liquid cargo on a cargo hose body | the lowest temperature and pressure that will cause a flammable liquid to give off vapors | <b>a measurement of the amount of flammable vapors given off by a liquid at a certain temperature</b> |              |
| 822  | Reinforcing frames attached to a bulkhead on a vessel are called _____.  | side longitudinals                             | intercostals                                 | <b>stiffeners</b>   | brackets  |              |
| 823  | Repairing damage to the hull at or above the waterline reduces the threat of _____.  | free surface effects                           | capsizing                                    | <b>continued progressive flooding</b>   | wind heel   |              |
| 824  | Right-laid line should be coiled _____.  | <b>clockwise</b>                               | counterclockwise                             | either clockwise or counterclockwise  | on a reel   |              |
| 825  | River currents tend to _____.  | pick up speed where the channel widens         | run slower in the center of the channel      | hug the inside of a bend  | <b>cause the greatest depth of water to be along the outside of a bend</b>                            |              |
| 826  | Rivets are usually made of _____.  | wrought-iron                                   | aluminum                                     | high-tensile steel  | <b>mild steel</b>   |              |
| 827  | Rolling is angular motion of the vessel about what axis?   | <b>Longitudinal</b>                            | Transverse                                   | Vertical  | Centerline  |              |
| 828  | Roundline is a _____.  | four-stranded, left- or right-handed line      | <b>three-stranded, right-handed line</b>     | three-stranded, left-handed line  | small tarred hempline of three strands laid left-handed   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|--|---|---|---|--------------|
| 829  | Safety equipment on board vessels must be approved by the _____.  | <b>U.S. Coast Guard</b>  | Safety Standards Bureau   | Occupational Safety and Health Administration (OSHA)                                    | National Safety Council   |              |
| 830  | Securing cargo by running timbers from an upper support down to the cargo, either vertically or at an angle, is called _____.   | braces   | dunnage   | shores  | <b>toms</b>   |              |
| 831  | Seeing that all hands are familiar with their duties, as specified in the muster list, is the responsibility of the _____.  | <b>Master</b>  | Chief Mate  | safety officer  | department heads  |              |
| 832  | Segregation of cargoes refers to _____.   | <b>separating cargoes so that the inherent characteristics of one cannot damage the other</b>                  | separating cargoes by destination   | classifying cargoes according to their toxicity   | listing the cargoes in order of their flammability                                      |              |
| 833  | Separating both blocks of a tackle to prepare it for reuse is called _____.   | chockablocking   | out-hauling   | <b>over-hauling</b>   | two-blocking  |              |
| 834  | Serving is _____.   | marline or ratline wound along the grooves of a rope   | narrow strips of light canvas or cotton cloth spiral-wrapped along the rope         | <b>marline tightly wound on the rope by means of a board or mallet</b>                  | a splice made by laying the strand of one rope into the vacated grooves of another rope |              |
| 835  | Several merchant ships are arriving at the scene of a distress incident. One of the them must assume the duties of the Coordinator Surface Search (CSS). Which of the following statements is TRUE? | CSS duties are always assumed by passenger vessels, dry cargo vessels, or tankers in that order of precedence. | <b>The CSS must be established by mutual agreement between the ships concerned.</b> | A tank vessel should never be assigned CSS duties unless only tank vessels are present. | The first vessel to arrive at the distress incident is designated as the CSS.           |              |
| 836  | Shell plating is _____.   | the galvanizing on steel   | a hatch cover   | <b>the outer plating of a vessel</b>  | synonymous with decking   |              |
| 837  | Shell plating that has curvature in two directions and must be heated and hammered to shape over specially prepared forms is called _____.  | compound plate   | <b>furnaced plate</b>   | flat plate  | rolled plate  |              |
| 838  | Shipping articles are a contract of agreement between the members of the crew and the _____.  | charterers   | Coast Guard   | <b>Master</b>   | vessel's owner  |              |
| 839  | Ship's officers should check every cargo compartment after it is filled with bulk grain to ensure _____.  | all lighting circuits are energized  | <b>all void spaces are filled</b>   | the correct grade of cargo has been loaded  | the heavier grade is in the lower hold  |              |



| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|---|--|--|---|--------------|
| 840  | Sidewise force of the propeller tends to throw a vessel's stern to the right or left, depending on rotation. This force is caused by _____.   | back current from the rudder  | greater pressure on the right or left side of the propeller, depending on rotation | lower pressure on the right or left side of the propeller, depending on rotation | <b>torque from the velocity and angle at which the surrounding water impinges upon the propeller blades</b> |              |
| 841  | Signs of racking stresses generally appear at the _____.  | bow and stern shell frames and plating  | <b>junction of the frames with the beams and floors</b>                            | garboard strake, at each side of the keel  | thrust bearing of the main shaft  |              |
| 842  | Single hull vessels operating exclusively on the Great Lakes must be dry docked at intervals not to exceed _____.   | 12 months   | 24 months  | 48 months  | <b>60 months</b>  |              |
| 843  | Sluicing or slushing wire rope _____.   | prevents internal and external rust and corrosion                                       | reduces chafing and increases its useful service life                              | reduces internal friction within the wire  | <b>All of the above</b>   |              |
| 844  | Small floes of rough, hummocky sea ice capable of damaging a vessel _____.  | <b>can usually be detected by radar in a smooth sea at a range of 4 to 6 kilometers</b> | are indistinguishable from sea return on the PPI                                   | are invisible to radar when covered with a thick layer of snow                   | are usually seen at night before they are close enough to provide a radar echo                              |              |
| 845  | Small hull leaks can be temporarily repaired by _____.  | parceling   | parbuckling  | <b>caulking</b>  | seizing   |              |
| 846  | Snow has obliterated surface features and the sky is covered with uniform, altostratus clouds. There are no shadows and the horizon has disappeared. What is this condition called? | Ice blink   | <b>Whiteout</b>  | Water sky  | Aurora reflection   |              |
| 847  | SOLAS requires a lifesaving training manual be provided in each crew cabin or in the _____.   | bridge  | engineering control station  | <b>recreation and messrooms</b>  | fire control room   |              |
| 848  | Sometimes it is desirable to connect a member both by riveting and welding. Which statement is TRUE concerning this procedure?  | Tearing through the member is more likely in this type connection.                      | The weld may be broken by the stresses caused by riveting.                         | The weld increases the tensile stress on the rivet heads.                        | <b>The welding must be completed before the riveting commences.</b>   |              |
| 849  | Sour crude oil _____.   | <b>contains high quantities of hydrogen sulfide</b>                                     | is diluted with other products for carriage  | is lighter than other crudes   | is less hazardous to load than other crudes   |              |
| 850  | Splices made in nylon should _____.   | be long splices only  | <b>have extra tucks taken</b>  | be short splices only  | be around a thimble   |              |
| 851  | Spontaneous heating of coal rapidly accelerates at the approximate minimum temperature of _____.  | 88°F  | <b>100°F</b>   | 111°F  | 119°F   |              |
| 852  | Static electricity may be built up by the _____.  | spraying or splashing of petroleum  | settling of solids or water in petroleum   | flow of petroleum through pipes  | <b>All of the above</b>   |              |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|---|--|---|---|--------------|
| 853  | Storms that enter the Great Lakes Basin from the west and northwest at a peak in October are the products of pressure systems known as _____.  | Northwesters  | <b>Alberta lows</b>  | Fata morgana  | Polar highs   |              |
| 854  | Strengthening damaged bulkheads by using wood or steel is called _____.  | bracing   | battening  | blocking  | <b>shoring</b>  |              |
| 855  | Stress on the topping lift of a swinging boom can be reduced by _____.   | rigging a back stay   | <b>raising the boom</b>  | increasing the mechanical advantage of the cargo purchase                                     | taking all slack out of the preventer                               |              |
| 856  | Stuffer-braid rope has _____.  | <b>a yarn core</b>  | no core  | three strands   | 12 threads  |              |
| 857  | Sulfuric acid is a _____.  | clear syrupy liquid with no odor  | <b>colorless-to-brown liquid with a choking odor when hot</b>                  | colorless liquid with a pleasant fruity odor  | whitish liquid with a faint, pleasant odor                          |              |
| 858  | Sweat damage in a hatch full of canned goods in cartons will occur when the _____.   | air temperature is higher than the temperature of the cargo                     | air temperature is lower than the temperature of the cargo                     | <b>dew point is higher than the temperature of the cargo</b>                                  | dew point is lower than the temperature of the cargo                |              |
| 859  | Sweat damage will occur in a cargo hold containing cased machinery when the _____.   | air temperature of the hold is higher than the temperature of the outside air   | <b>dew point of the hold is higher than the temperature of the ship's skin</b> | dew point of the outside air is lower than the temperature of the cargo                       | outside air temperature is colder than the temperature of the cargo |              |
| 860  | Synchronous towing means that the _____.   | tug is on the crest of a wave while the tow is in the trough                    | tug is in the trough while the tow is riding on the crest of a wave            | <b>tug and tow are both in the same relative position on different waves at the same time</b> | port and starboard engines on the tug are turning at the same RPM   |              |
| 861  | Temporary Certificates of Inspection are effective until the _____.  | Solas Certificate is issued   | Load Line Certificate is renewed   | classification society approval is issued   | <b>permanent Certificate of Inspection is issued</b>                |              |
| 862  | Temporary seizings on wire rope are made with _____.   | marline   | sail twine   | tape  | <b>wire</b>   |              |
| 863  | Ten triangular piles of piping on the pier are to be loaded - each pile has a 20 foot base, is 15 feet high and 30 feet long. If the breadth of the hold is 60 feet and the piping is to be stowed fore and aft in a 30 foot space, how high will it stow? | 16.6 feet   | <b>25.0 feet</b>   | 50.0 feet   | 75.0 feet   |              |
| 864  | Tensile stress is a result of two forces acting in _____.  | <b>opposite directions on the same line, tending to pull the material apart</b> | opposite directions on the same line, tending to compress the object           | opposite directions along parallel lines  | the same direction along parallel lines                             |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|---|--|--|---|--------------|
| 865  | The "carrick bend" is used to _____.   | add strength to a weak spot in a line                             | <b>join two hawsers</b>  | be a stopper to transfer a line under strain                             | join lines of different sizes                                   |              |
| 866  | The "grip" of a joint represents the _____.  | <b>thickness of the connected members</b>                         | diameter of the head   | entire length of the rivet   | diameter of the shank   |              |
| 867  | The "inner bottom" is the _____.   | <b>tank top</b>   | compartment between the tank top and shell of the vessel                               | inner side of the vessel's shell   | space between two transverse bottom frames                      |              |
| 868  | The "iron mike" is a(n) _____.   | pilot   | speaker  | standby wheel  | <b>automatic pilot</b>  |              |
| 869  | The "lay" of a line refers to _____.   | its normal location of stowage                                    | <b>the direction of twist in the strands</b>   | the manner in which it is coiled   | the manner in which it is rigged                                |              |
| 870  | The "margin plate" is the _____.   | <b>outboard strake of plating on each side of an inner bottom</b> | outer strake of plating on each side of the main deck of a vessel                      | plate which sits atop the center vertical keel                           | uppermost continuous strake of plating on the shell of a vessel |              |
| 871  | The "Mode" selector switch can be positioned and select all of the following EXCEPT _____.                                     | <b>weather adjustments</b>  | hand-electric steering   | automatic gyro   | non-followup control  |              |
| 872  | The "Mode" selector switch on the autopilot steering stand is used to select any of the following with the EXCEPTION of _____. | automatic pilot steering  | hand-electric steering   | non-followup steering  | <b>rudder adjustment</b>  |              |
| 873  | The "Port-Off-Stbd" selector switch on an autopilot steering stand is used to _____.   | change from hand electric steering to automatic gyro              | <b>change over one steering system to the other</b>                                    | change over hand electric steering to non-followup                       | change over the port to the starboard bow thruster              |              |
| 874  | The "rolling hitch" could be used to _____.  | join two lines of different sizes                                 | join two lines of equal sizes  | add strength to a weak spot in a line                                    | <b>act as a stopper to transfer a line under strain</b>         |              |
| 875  | The "rudder adjustment" control on an autopilot steering stand is used to _____.   | align the rudder angle indicator with the true rudder angle       | <b>set the number of degrees of rudder per degree of course error</b>                  | set the departure from base course before actuating the rudder           | set the rate at which the rudder responds                       |              |
| 876  | The "square knot" is used for _____.   | forming temporary eyes in lines                                   | <b>joining two lines of equal size</b>   | keeping line from unlaying or fraying                                    | joining two lines of different size                             |              |
| 877  | The "weather adjustment" control on an autopilot steering stand is used to _____.  | allow leeway according to the weather conditions                  | proportionally set the number of degrees of rudder response per degree of course error | <b>set the null band or dead zone signal before actuating the rudder</b> | set the speed at which the rudder responds                      |              |
| 878  | The (auto)ignition temperature is that temperature at which _____.   | <b>no spark or flame is required to ignite gas or vapor</b>       | a fuel begins to give off explosive vapors   | a fuel if ignited will continue to burn                                  | a 1% mixture of the fuel with air will explode                  |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|---|--|--|---|--------------|
| 879  | The 30 ton capacity pedestal cranes shown in the illustration can lift a maximum weight of how many tons in the single mode?  | 15 tons   | <b>30 tons</b>   | 60 tons  | 120 tons  | D047DG       |
| 880  | The 30 ton capacity pedestal cranes shown in the illustration can lift a maximum weight of how many tons in the twin mode?  | 15 tons   | 30 tons  | <b>60 tons</b>   | 120 tons  | D049DG       |
| 881  | The 30 ton capacity pedestal cranes shown in the illustration can lift a maximum weight of how many tons when two cranes are married together in twin with the other pair of cranes at the opposite end of the hatch? | 30 tons   | 60 tons  | 90 tons  | <b>120 tons</b>   | D051DG       |
| 882  | The advantage(s) of using wire rope lashing on vehicles aboard Ro-Ro vessels is that it _____.  | is Lighter than chain   | has a good working life  | is not affected by temperature   | <b>All of the above</b>   |              |
| 883  | The agency most concerned with a stowaway is _____.   | Customs   | <b>Immigration</b>   | Public Health  | U.S.D.A.  |              |
| 884  | The agency which assigns load lines and issues Load Line Certificates is the _____.   | <b>American Bureau of Shipping</b>  | Secretary of Commerce  | U.S. Customs   | U.S. Coast Guard  |              |
| 885  | The American Consul has asked the Master of a vessel bound for a port in the U.S. to transport a destitute seaman back to the U.S. Which action may the Master take?  | He must always take the seaman.   | He is required to accept the seaman only if the seaman is medically unfit. | <b>He may refuse the seaman if the seaman has a contagious disease.</b>            | He may refuse to take the seaman if he is being held by shore authorities.                |              |
| 886  | The American Consul has asked the Master of a vessel bound for a port in the U.S. to transport a destitute seaman back to the U.S. Which action may the Master take?  | He may refuse to take the seaman if the ship will not stop at a U.S. port within 30 days. | He is required to accept the seaman only if the seaman is medically unfit. | <b>He may refuse to take the seaman if the seaman has a contagious disease.</b>    | He is required to take the seaman under any circumstance.                                 |              |
| 887  | The American Consul has asked the Master of a vessel bound for a port in the U.S. to transport a destitute seaman back to the U.S. Which action may the Master take?  | He may refuse to accept the seaman if the seaman is medically unfit.                      | He must take the seaman even if the seaman has a contagious disease.       | He is always required to take the seaman.  | <b>He may refuse to take the seaman if it will violate the Certificate of Inspection.</b> |              |
| 888  | The American Consul has asked the Master of a vessel bound for a port in the U.S. to transport a destitute seaman back to the U.S. Which action may the Master take?  | He is normally required to take the seaman.   | He may refuse to take the seaman if the seaman has a contagious disease.   | He may refuse to take the seaman if it will violate the Certificate of Inspection. | <b>All of the above</b>   |              |
| 889  | The amount of force a tug can exert on a stationary pull is called its _____.   | brake horsepower  | indicated horsepower   | shaft horsepower   | <b>bollard pull</b>   |              |
| 890  | The amount of strain on each runner of a married fall system lifting 2000 lbs. when the angle made by the legs is 90° would be _____.   | 1000 lbs.   | 1154 lbs.  | <b>1414 lbs.</b>   | 2000 lbs.   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration  |
|------|---|---|---|---|---|---------------|
| 891  | The anchor chain should be kept moderately taut during a Mediterranean moor to _____.                   | facilitate speed of recovery during the weighing process                            | indicate the anchor's location to passing or mooring ships                      | <b>prevent damage to the stern in the event of a headwind</b>           | provide a steady platform for the gangway between the fantail and pier          |               |
| 892  | The anchor shackle is indicated by which letter?  | <b>K</b>  | J   | H   | F   | <b>D038DG</b> |
| 893  | The anchors on the bow are known as _____.  | <b>bower anchors</b>  | kedge anchors   | spare anchors   | stream anchors  |               |
| 894  | The anchors should be dropped well out from the pier while at a Mediterranean moor to _____.            | eliminate navigational hazards by allowing the chain to lie along the harbor bottom | increase the anchor's reliability by providing a large catenary in the chain    | <b>permit the ship to maneuver in the stream while weighing anchors</b> | prevent damage to the stern caused by swinging against the pier in the approach |               |
| 895  | The angle at which the fluke penetrates the soil is called the _____.                                   | <b>fluke angle</b>  | tripping angle  | penetration angle   | holding angle   |               |
| 896  | The angle at which the fluke penetrates the soil is called the _____.                                   | tripping angle  | <b>fluke angle</b>  | penetration angle   | holding angle   |               |
| 897  | The angular movement of a vessel about a horizontal line drawn from its bow to its stern is _____.      | pitching  | <b>rolling</b>  | heaving   | swaying   |               |
| 898  | The annual survey for endorsement of a Load Line Certificate must be held within _____.                 | the three month period immediately following the certificate's anniversary date     | the three month period immediately preceding the certificate's anniversary date | <b>three months either way of the certificate's anniversary date</b>    | the three month period centered on the certificate's anniversary date           |               |
| 899  | The area indicated by the letter G is known as the _____.   | entrance  | stringer plate  | <b>turn of the bilge</b>  | garboard  | <b>D033DG</b> |
| 900  | The Articles of Agreement _____.  | is also known as a Merchant Mariner's Document                                      | designates the quarters a seaman will occupy during a voyage                    | <b>advises the crew of the conditions of employment</b>                 | are signed by each crewmember at the end of the voyage                          |               |
| 901  | The basic shipping paper that forms an agreement between a shipowner and a charterer is a _____.        | Cargo Declaration   | Charter Commission  | <b>Charter Party</b>  | Letter of Intent  |               |
| 902  | The beam of a vessel refers to the _____.   | depth between decks   | internal cubic capacity   | molded depth of the vessel  | <b>width of the vessel</b>  |               |
| 903  | The BEST holding ground for conventional anchors is _____.  | <b>sand</b>   | very soft mud   | shale   | rock  |               |
| 904  | The BEST holding ground for conventional anchors is _____.  | very soft mud   | <b>hard mud</b>   | shale   | rock  |               |
| 905  | The best information on the location of the blocks when dry docking a vessel is contained in the _____. | shell expansion plan  | docking diagram   | <b>ship's docking plan</b>  | general arrangement plan  |               |
| 906  | The BEST information on the nature and extent of damage to the vessel is obtained from _____.           | alarms and monitoring devices   | the engine room watch   | <b>personnel at the scene of the damage</b>                             | the bridge watch  |               |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|---|--|---|--|--------------|
| 907  | The best method of determining if a vessel is dragging anchor is to note _____.  | the amount of line paid out   | how much the vessel sheers while at anchor                             | any change in the tautness of the anchor chain  | <b>changes in bearings of fixed objects onshore</b>                                  |              |
| 908  | The best method of protecting that portion of a fiber anchor line nearest the anchor from chafing on the bottom is by _____. | using a small scope ratio   | <b>replacing that portion with a short length of chain</b>             | using a hockle to keep that portion of the anchor line off the bottom                             | using a synthetic line   |              |
| 909  | The best method to secure a tow line to a cleat is to _____.   | <b>take a turn around the cleat, then figure-eights, and a half-hitch</b> | make figure-eights, followed by a half-hitch, then a figure-eight knot | take a turn, a half turn, and a figure-eight  | take several turns around the cleat only   |              |
| 910  | The best method to stop a vessel from dragging anchor in a sand bottom is to _____.  | reduce the length of the cable  | <b>pay out more anchor cable</b>                                       | back the engines  | swing the rudder several times to work the anchor into the bottom                    |              |
| 911  | The best time to work a boat into a slip is _____.   | when the wind is against you  | with the current setting against you                                   | <b>at slack water</b>   | with a cross current   |              |
| 912  | The best way to determine if a load is within maximum lift limits is to use _____.   | a boom angle indicator  | <b>a load weight indicator</b>   | material invoices for shipping weights  | prior experience with similar lifts  |              |
| 913  | The best way to lift many small articles aboard your vessel is with a _____.   | <b>pallet</b>   | barrel hook  | spreader  | snotter  |              |
| 914  | The BEST way to steer a twin-screw vessel if you lose your rudder is by using _____.   | one engine and a steering oar   | both engines at the same speed   | one engine at a time  | <b>one engine running at reduced speed and controlling the vessel with the other</b> |              |
| 915  | The biggest problem encountered when towing bridle legs are too short is _____.  | retrieval   | adjusting tension  | <b>excessive strain</b>   | hookup to main towline   |              |
| 916  | The biggest problem you generally encounter while towing a single tow astern is _____.                                       | the catenary dragging on the bottom                                       | swamping of the tow  | the tow tending to dive   | <b>yaw</b>   |              |
| 917  | The boat is stowed on the davit rather than on a cradle with which type of davit?  | <b>Crescent</b>   | Sheath-screw boom  | Quadrantal  | Radial   |              |
| 918  | The body plan of a vessel is a(n) _____.   | <b>endwise view of the ship's molded form</b>                             | longitudinal side elevation view                                       | plan made looking down on the ship, showing it's hull cut horizontally by the first set of planes | vertical view made looking up in the ship, with the keel at the center               |              |
| 919  | The boom indicator on a crane will indicate the _____.   | length of the boom  | <b>angle of the boom</b>   | lifting capacity of the boom  | direction of the boom  |              |
| 920  | The boom indicator tells the operator at what angle the boom is compared to the _____.                                       | <b>horizontal position of the boom</b>                                    | vertical position of the boom  | horizontal position of the load being lifted  | vertical position of the load being lifted   |              |
| 921  | The boom stops on a pedestal crane prevent the boom from _____.  | <b>being raised too high</b>  | swinging at sea  | overloading when not in use   | being lowered too low  |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|---|---|---|--|--------------|
| 922  | The bow thruster generally is ineffective at _____.   | <b>over 3 knots headway</b>   | at any speed astern   | at any speed ahead  | over 1 knot sternway   |              |
| 923  | The catenary _____.   | acts as a reserve length of towing hawser when the tug applies more power, and it dampens the surge effect of the tow | gives an approximation of the amount of strain on the towing hawser | is the dip in the towing hawser between the tug and the tow                 | <b>All of the above</b>  |              |
| 924  | The catenary in a towline is _____.   | a short bridle  | <b>the downward curvature of the hawser</b>                         | another name for a pelican hook   | used to hold it amidships  |              |
| 925  | The ceiling is _____.   | the overhead in berthing compartments   | <b>a wooden protection placed over the tank top</b>                 | material driven into seams or cracks to prevent leaking                     | None of the above are correct  |              |
| 926  | The Certificate of Freeboard is the _____.  | <b>Load Line Certificate</b>  | Certificate of Inspection   | Admeasurer's Certificate  | Forecastle Card  |              |
| 927  | The Certificate of Inspection for a containership _____.  | <b>must be posted under transparent material in a conspicuous place</b>   | is issued by the Coast Guard and is usually valid for 2 years.      | lists all of the stability limitations and conditions imposed on the vessel | shows the due date of the quadrennial test of the cargo gear                         |              |
| 928  | The Certificate of Inspection for your tankship authorizes the carriage of grade A and lower products. Which chemical may NOT be carried unless it is specifically endorsed on the Certificate of Inspection? | Amylene   | Diisobutyl Phthalate  | Oleic acid  | <b>Vinyl acetate</b>   |              |
| 929  | The Certificate of Inspection of a damaged tank barge has expired. What certificate authorizes the barge to move to a repair facility for repair and inspection?  | Application for Inspection  | Change of Employment  | <b>Permit to Proceed</b>  | Temporary Certificate of Inspection  |              |
| 930  | The Certificate of Inspection on a passenger vessel of over 100 gross tons must be posted _____.  | in the Master's office  | on the bridge   | <b>in a conspicuous place where observation by the passengers is likely</b> | in the passengers' dining room or, where there is no dining room, in the lounge area |              |
| 931  | The certificate of loading required by each vessel carrying grain in bulk is issued by the _____.   | owner or charterer of the vessel  | American Bureau of Shipping   | shipper of the cargo  | <b>National Cargo Bureau</b>   |              |
| 932  | The charterer has completed loading the vessel in 3 days instead of the 5 days agreed to in the charter party. As a result of this, the _____.  | shipowner may charge for two lay days   | <b>charterer may receive dispatch money</b>                         | stevedore may collect demurrage   | consignee may be required to pay a ceaser fee  |              |



| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration  |
|------|--|--|--|---|---|---------------|
| 933  | The cheek length of a block in inches should be about _____.   | <b>three times the circumference of a manila line</b>                                | five times the diameter of a manila line   | twice the diameter of its sheaves for manila line           | twenty times the diameter of a manila line                  |               |
| 934  | The choice of length of tow bridle legs is governed by the _____.  | expected towing forces   | capability of retrieving gear  | freeboard of the unit being towed                           | <b>need to reduce yaw</b>                                   |               |
| 935  | The circular steel structure installed around the propeller of a towboat is the _____.   | <b>nozzle</b>  | shroud   | strut   | hood  |               |
| 936  | The citizenship of a crew member of a vessel in a U.S. port is determined solely by the _____.   | Customs Officer  | <b>Immigration Officer</b>   | Coast Guard   | Union Official  |               |
| 937  | 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 _____. | Oil Transfer Procedures Manual   | <b>Crude Oil Washing Operations and Equipment Manual</b>                             | Code of Federal Regulations                                 | Crude Oil Washing addendum to the Certificate of Inspection |               |
| 938  | The condition of a towline must be monitored by _____.   | keeping record of the towline's initial minimum breaking strength                    | keeping record of each retest of the towline's minimum breaking strength             | conducting routine visual inspections of the towline        | <b>All of the above</b>                                     |               |
| 939  | The connection to the towline must be secured with a _____.  | galvanized screw-pin shackle   | hardened steel thimble   | <b>shackle secured a nut and cotter pin</b>                 | shackle fitted with a swivel piece                          |               |
| 940  | The Coordinator Surface Search (CSS) in a SAR situation should display by night _____.   | deck lights forward and aft  | a white light over two red lights  | a red light, white light, and blue light in a vertical line | <b>a distinctive signal promulgated by the CSS</b>          |               |
| 941  | The Coordinator Surface Search in a SAR situation should display by day _____.   | <b>the code flags FR</b>   | a black ball over a black diamond shape  | code flag Quebec over a black ball                          | two black diamond shapes in a vertical line                 |               |
| 942  | The correct way to make an eye in a wire rope with clips is to place the clips with the _____.   | first and third U-bolts on the bitter end and the second U-bolt on the standing part | first and third U-bolts on the standing part and the second U-bolt on the bitter end | <b>U-bolts of all clips on the bitter end</b>               | U-bolts of all clips on the standing part                   |               |
| 943  | The crane manufacturer's operating tables are posted near the _____.   | crane pedestal   | wire-rope locker   | main deck   | <b>crane controls</b>                                       |               |
| 944  | The critical point in nylon line elongation is about _____.  | 20%  | 30%  | <b>40%</b>  | 50%   |               |
| 945  | The crown of the anchor shown is indicated by which letter?  | K  | J  | <b>H</b>  | G   | <b>D038DG</b> |
| 946  | The damage to a vessel is over \$25,000. Who must notify the nearest Coast Guard Marine Safety or Marine Inspection Office as soon as possible?  | The person in charge of the vessel   | The operator of the vessel   | The Master of the vessel                                    | <b>All of the above</b>                                     |               |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 947  | The damage to a vessel is over \$25,000. Who must notify the nearest Coast Guard Marine Safety or Marine Inspection Office as soon as possible?  | The owner of the vessel                                      | The Master of the vessel   | The person in charge of the vessel at the time of casualty | <b>Any one of the above</b>                                  |              |
| 948  | The danger of a towing vessel tripping is increased the closer the towline is secured to _____.  | the stern  | <b>amidships</b>   | the bow  | the quarter  |              |
| 949  | The dangerous cargo manifest does NOT indicate _____.  | the stowage location of hazardous material aboard the vessel | a description of the packaging (drums, boxes, etc.)                          | UN identification numbers                                  | <b>the net weight of each hazardous cargo</b>                |              |
| 950  | The deck beam brackets of a transversely framed vessel resist _____.   | hogging stresses   | sagging stresses   | <b>racking stresses</b>                                    | shearing stresses  |              |
| 951  | The deck load capacity of a compartment into which you intend to load a cargo of soft brick is 380 lbs. per sq. ft. The stowage factor of the brick is 21.3. Disregarding broken stowage, what is the maximum height the brick may be stacked without endangering the structure? | 1.7 feet   | <b>3.6 feet</b>  | 5.0 feet   | 7.1 feet   |              |
| 952  | The declaration made by the Master when he anticipates hull and/or cargo damage due to unusual weather conditions is a _____.  | <b>Note of Protest</b>                                       | Notice of Casualty   | Portage Bill   | Bottomry Bond  |              |
| 953  | The designations A, B, C, D, and E grades of cargo refer to the _____.   | degrees of quality of petroleum products                     | <b>flash point range and Reid vapor pressure index of petroleum products</b> | grades of crude oil  | pour point, color, and viscosity index of petroleum products |              |
| 954  | The disadvantage of using three strand nylon line for towing is its _____.   | inherent weakness  | tendency to rot if left damp   | <b>danger to crew if it parts</b>                          | strength and shock absorbing abilities                       |              |
| 955  | The disadvantage(s) of using chain lashing on heavy vehicles aboard Ro-Ro vessels is that _____.   | it is heavy  | the links lose strength if placed over corners                               | it does not absorb shock                                   | <b>All of the above</b>                                      |              |
| 956  | The disadvantage(s) of using web lashing on light vehicles aboard Ro-Ro vessels is that it _____.  | deteriorates in sunlight                                     | cuts on sharp edges  | is vulnerable to damage and pilferage                      | <b>All of the above</b>                                      |              |
| 957  | The distance a vessel moves at right angles to the original course, when a turn of 180° has been completed, is called the _____.   | advance  | pivoting point   | <b>tactical diameter</b>                                   | kick   |              |
| 958  | The distance a vessel moves parallel to the original course from the point where the rudder is put over to any point on the turning circle is called the _____.  | <b>advance</b>   | drift angle  | pivoting point   | transfer   |              |
| 959  | The distance between rivets in a row is known as the _____.  | arm  | <b>pitch</b>   | gage   | rivet distance   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|--|---|---|---|--------------|
| 960  | The distance between the surface of the liquid and the tank top in a cargo tank is called _____.  | thievage   | innage  | <b>ullage</b>   | tankage   |              |
| 961  | The distance that a ship moves forward with each revolution of its propeller, if there is no slip, is called _____.                                 | advance  | head reach  | <b>pitch</b>  | transfer  |              |
| 962  | 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 _____. | advance  | <b>head reach</b>   | surge   | transfer  |              |
| 963  | The document on a vessel, annually endorsed by an American Bureau of Shipping surveyor, is called the _____.  | Certificate of Inspection  | Classification Certificate  | <b>Load Line Certificate</b>  | Seaworthy Certificate   |              |
| 964  | The document that establishes the facts of a casualty and is the prima facie relief from liability for the damage is the _____.                     | adjuster's report  | insurance policy  | invoice   | <b>Master's protest</b>   |              |
| 965  | The document that the Master uses to attest to the truth of the manifest of cargo is called _____.  | Master's Protest   | <b>Oath of Entry</b>  | Owner's Oath  | Shipper's Certification   |              |
| 966  | The document which acknowledges that the cargo has been received and is in the carrier's custody is called the _____.                               | <b>Dock Receipt</b>  | Hatch Report and Recapitulation   | Cargo Manifest  | Stowage Plan  |              |
| 967  | The document which shows a vessel's nationality, ownership, and tonnage is the _____.   | Manifest Certificate   | Bill of Lading Certificate  | <b>Certificate of Documentation</b>   | Official Logbook  |              |
| 968  | The easiest way to anchor a vessel in a current is to _____.  | stem the current and make very slow headway when the anchor is dropped | <b>stem the current and be falling aft very slowly when the anchor is dropped</b> | stem the current and endeavor to make neither headway nor sternway when the anchor is dropped | stop all headway through the water and keep the current astern when the anchor is dropped |              |
| 969  | The effect known as "bank cushion" acts in which of the following ways on a single-screw vessel proceeding along a narrow channel?                  | <b>It forces the bow away from the bank.</b>                           | It forces the stern away from the bank.   | It forces the entire vessel away from the bank.   | It heels the vessel toward the bank.  |              |
| 970  | The effect of excessive catenary in shallow water may be _____.   | dragging the towing hawser along the bottom and chafing it             | snagging sunken or submerged objects  | slowing, stopping or endangering the towing operation by placing the tug in irons             | <b>All of the above</b>   |              |
| 971  | The effect of ocean current is usually more evident on a tug and tow than on a tug navigating independently because the _____.                      | <b>speed of the tug and tow is less</b>                                | towline catches the current   | current causes yawing   | current will offset the tow   |              |
| 972  | The effect of wind on exposed areas of the vessel is most noticeable when _____.  | <b>backing</b>   | going slow ahead  | going full ahead  | turning   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C                                       | Choice D   | Illustration  |
|------|---|--|---|--|--|---------------|
| 973  | The electrical components for each single crane are installed in its _____.   | crane house  | machinery base  | turntable                                      | <b>All of the above</b>                                      |               |
| 974  | The equipment used to control, protect and connect a towline is called _____.   | cat head   | <b>terminal gear</b>                                    | level wind                                     | poured socket  |               |
| 975  | The exact and complete identification of all cargo on board must be found on the _____.   | <b>Cargo Manifest</b>  | Mate's Receipt  | Hatch Report                                   | Loading List   |               |
| 976  | The explosive range of a fuel lies between the lower explosive limit and the _____.   | flash point  | ignition temperature                                    | <b>upper explosive limit</b>                   | fire point   |               |
| 977  | The extension of the after part of the keel in a single-screw vessel upon which the stern post rests is called the _____.   | boss   | knuckle   | <b>skeg</b>                                    | strut  |               |
| 978  | The facewire refers to item _____.  | I  | H   | B  | A  | <b>D024DG</b> |
| 979  | The figure obtained by dividing the total volume of the ship in cubic feet (after omission of exempted spaces) by 100 is the _____.                                 | bale cubic   | <b>gross tonnage</b>                                    | light displacement                             | net tonnage  |               |
| 980  | The fitting at the end of a cargo line in a tank that allows suction to be taken close to the bottom of a tank is a _____.  | suction end  | strainer  | <b>bell-mouth</b>                              | vacuum valve   |               |
| 981  | The fitting that allows a boom to move freely both vertically and laterally is called the _____.  | swivel   | lizard  | spider band                                    | <b>gooseneck</b>   |               |
| 982  | The fittings used to secure a watertight door are known as _____.   | clamps   | clasps  | <b>dogs</b>                                    | latches  |               |
| 983  | The flash point of vinyl chloride is _____.   | <b>-108°F (-78°C)</b>  | -20°F (-29°C)   | 32°F (0°C)                                     | 97°F (36°C)  |               |
| 984  | The floors in a vessel's hull structure are kept from tripping, or folding over, by _____.  | face plates  | <b>bottom longitudinals</b>                             | longitudinal deck beams                        | transverse deck beams  |               |
| 985  | The fluke is indicated by which letter?   | F  | G   | H  | <b>I</b>   | <b>D038DG</b> |
| 986  | The forecastle card _____.  | is posted in the crews quarters and lists the emergency stations | <b>advises the crew of the conditions of employment</b> | is also known as a Merchant Mariner's Document | designates the quarters a seaman will occupy during a voyage |               |
| 987  | The force acting on a single cargo runner which is vertically lifting or lowering a load is greatest when _____.  | <b>decelerating when lowering the load</b>                       | decelerating when raising the load                      | lowering the load at constant speed            | raising the load at constant speed                           |               |
| 988  | The force exerted by a propeller which tends to throw the stern right or left is called _____.  | slip   | <b>sidewise force</b>                                   | rotational force                               | thrust   |               |
| 989  | The fore and aft run of deck plating which strengthens the connection between the beams and the frames and keeps the beams square to the shell is called the _____. | garboard strake  | limber strake   | sheer strake                                   | <b>stringer strake</b>                                       |               |
| 990  | The forecastle card is a copy of the _____.   | quarters allocation  | <b>shipping agreement</b>                               | Muster List ("Station Bill")                   | unlicensed shipping card from the union                      |               |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration  |
|------|---|--|---|--|---|---------------|
| 991  | The forecastle card is a(n) _____.  | <b>copy of the shipping agreement</b>                | quarters allocation   | Muster List ("Station Bill")   | unlicensed shipping card from the union   |               |
| 992  | The forecastle card is a(n) _____.  | quarters allocation                                  | Muster List ("Station Bill")  | unlicensed shipping card from the union                              | <b>copy of the shipping agreement</b>   |               |
| 993  | The function of the bilge keel is to _____.   | <b>reduce the rolling of the vessel</b>              | serve as the vessel's main strength member  | add strength to the bilge  | protect the vessel's hull when alongside a dock                                     |               |
| 994  | The garboard strake is indicated by which letter?   | A  | B   | G  | <b>H</b>  | <b>D033DG</b> |
| 995  | The garboard strake is the _____.   | raised flange at the main deck edge                  | riveted crack arrester strap on all-welded ships  | riveting pattern most commonly used in ship construction             | <b>row of plating nearest the keel</b>  |               |
| 996  | The Great Lakes Edition of the Notice to Mariners is published _____.   | <b>weekly by the 9th Coast Guard District</b>        | monthly by the Army Corps of Engineers  | monthly by the Naval Oceanographic office                            | biweekly by the Commandant, U.S. Coast Guard  |               |
| 997  | The greatest horizontal stress between the heads of the booms in the yard and stay rig occurs when the load is in such a position that the _____. | <b>falls are at an equal angle to the horizontal</b> | stay fall is vertical   | stay fall is at a greater angle to the horizontal than the yard fall | yard fall is at a greater angle to the horizontal than the stay fall                |               |
| 998  | The greatest strain, when lifting a load with the jumbo purchase, is on _____.  | all of the parts, dividing the load equally          | <b>the hauling part because it must absorb the frictional losses of all the sheaves</b> | the parts in the movable block                                       | the standing part because it is directly connected to the weight                    |               |
| 999  | The grooved wheel inside a block is called a _____.   | cheek  | gypsy   | <b>sheave</b>  | drum  |               |
| 1000 | The group of markings shown is called a _____.  | loft mark  | <b>load line mark</b>   | test mark  | water mark  | <b>D003DG</b> |
| 1001 | The half-breadth plan is _____.   | an endwise view of the ship's molded form            | a plan with the forebody to right of centerline and afterbody to the left of centerline | a longitudinal side elevation  | <b>usually drawn for the port side only</b>   |               |
| 1002 | The head block is located _____.  | at the base of the boom                              | <b>at the head of the boom</b>  | at the head of the mast  | on top of the jack staff  |               |
| 1003 | The heel block is located _____.  | <b>at the base of the boom</b>                       | at the cargo hook   | near the amidships guy   | near the spider band  |               |
| 1004 | The helm command "Check her" means _____.   | test the steering control                            | read the compass heading  | stop the swing using hard over rudder                                | <b>slow the swing using moderate rudder</b>   |               |
| 1005 | The helm command "Left twenty" means _____.   | change course twenty degrees to the left             | <b>put the rudder left twenty degrees</b>   | put the rudder hard left for the first twenty degrees of swing       | put the rudder left twenty degrees and then ease back as the vessel starts swinging |               |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 1006 | The helm command "meet her" means _____.  | <b>use rudder to check the swing</b>                                 | decrease the rudder angle which is on             | steer more carefully                                       | note the course and steady on that heading         |              |
| 1007 | The helm command "Nothing to the left" means do NOT _____.  | use left rudder  | <b>steer left of the ordered course</b>           | steer right of the ordered course                          | leave any buoys on the port side                   |              |
| 1008 | The helm command "Steady as you go" means _____.  | <b>steer the course you are on now</b>                               | steer the course when the swing stops             | maintain the rate of swing                                 | don't allow the vessel to swing off course so much |              |
| 1009 | The hitch used to secure the standing part of a gantline to the horns of a stage is a _____.  | <b>marlinespike hitch</b>  | clove hitch                                       | blackwall hitch  | Killick hitch                                      |              |
| 1010 | The holding capabilities of an anchor are determined PRIMARILY by the _____.  | design of the anchor   | weight of the anchor                              | <b>scope of the anchor chain</b>                           | size of the vessel                                 |              |
| 1011 | The holding capability of an anchor is primarily determined by the _____.   | shape of the anchor  | stowage of the anchor on board                    | <b>anchor's ability to dig in</b>                          | size of the vessel and its draft                   |              |
| 1012 | The holding power of an anchor at a given scope of cable increases when the _____.  | <b>amount of chain lying along the bottom increases</b>              | length of the catenary is reduced                 | mooring line tension is increased                          | amount of chain lying along the bottom decreases   |              |
| 1013 | The Honolulu (Christmas tree) tow was devised to _____.   | <b>keep the catenary to a minimum</b>                                | allow easy removal of a center tow                | reduce hawser length                                       | increase the catenary                              |              |
| 1014 | The horizontal flat surfaces where the upper stock joins the rudder are the _____.  | rudder keys  | <b>rudder palms</b>                               | lifting flanges  | shoes of the rudder                                |              |
| 1015 | The horizontal fore-and-aft movement of a vessel is called _____.   | yaw  | sway  | heave  | <b>surge</b>                                       |              |
| 1016 | The horizontal port or starboard movement of a vessel is called _____.  | yaw  | <b>sway</b>                                       | surge  | heave  |              |
| 1017 | 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?                                | Cargo Manifest   | <b>Certified Crew List</b>                        | Curio List   | Shipping Articles                                  |              |
| 1018 | The implied condition(s) with respect to the doctrine of deviation in a marine insurance policy is(are) _____.  | that the cargo be discharged from the vessel with customary dispatch | that the voyage be commenced in a reasonable time | that the voyage be pursued over the usual and direct route | <b>All of the above</b>                            |              |
| 1019 | The internal volume of a cargo hold measured from the inside faces of the cargo battens, the lower side of the deck beams, and the top of the tank top ceiling is known as the _____. | gross tonnage  | deadweight space                                  | <b>bale cubic</b>  | stowage area                                       |              |
| 1020 | The internal volume of a cargo hold measured from the inside of the side shell, the underside of the deck, and the tank top is known as the _____.                                    | gross tonnage  | deadweight space                                  | measurement space  | <b>grain cubic</b>                                 |              |
| 1021 | The joint formed when two steel plates are placed end-to-end is called a _____.   | bevel  | seam  | <b>butt</b>  | bond   |              |

| ID # | Question   | Choice A   | Choice B                                   | Choice C   | Choice D                                     | Illustration  |
|------|--|--|--|--|--|---------------|
| 1022 | The joint formed when two steel shell plates are placed longitudinally side to side is called a _____.   | bevel  | bond                                       | strake   | <b>seam</b>                                  |               |
| 1023 | The joint indicated by letter D is a _____.  | seam   | <b>butt</b>                                | span   | sheet line                                   | <b>D033DG</b> |
| 1024 | The key to rescuing a man overboard is _____.  | good equipment   | a dedicated crew                           | <b>well-conducted drills</b>                     | good communication                           |               |
| 1025 | The key to rescuing a man overboard is _____.  | good communication   | a dedicated crew                           | good equipment                                   | <b>well-conducted drills</b>                 |               |
| 1026 | The knot at the end of the heaving line used to pass the towing hawser is called a _____.  | <b>monkey's fist</b>   | ball or baseball knot                      | heaving knot                                     | three strand Turk's head                     |               |
| 1027 | The knot lettered E is a _____.  | stopper hitch  | blackwall hitch                            | <b>timber and half hitch</b>                     | bowline on a bight                           | <b>D030DG</b> |
| 1028 | The knot lettered G in the illustration is a _____.  | round turn and two half hitches                                  | <b>fisherman's bend</b>                    | timber hitch                                     | barrel hitch                                 | <b>D030DG</b> |
| 1029 | The knot lettered I as shown is a _____.   | square knot  | round knot                                 | <b>bowline on a bight</b>                        | timber hitch                                 | <b>D030DG</b> |
| 1030 | The knot lettered J is a _____.  | <b>plain whipping</b>  | bowline                                    | marline hitch                                    | becket bend                                  | <b>D030DG</b> |
| 1031 | The knot lettered N as shown is a _____.   | timber hitch   | rolling bowline                            | <b>stopper</b>                                   | heaving line hitch                           | <b>D030DG</b> |
| 1032 | The knot lettered O is a _____.  | timber hitch   | <b>barrel hitch</b>                        | carrick bend                                     | blackwall hitch                              | <b>D030DG</b> |
| 1033 | The knot lettered P is a _____.  | <b>rolling hitch</b>   | clove hitch                                | round turn and two half hitches                  | marline hitch                                | <b>D030DG</b> |
| 1034 | The knot lettered Q as shown is a _____.   | square knot  | clove hitch                                | <b>bowline</b>                                   | round knot                                   | <b>D030DG</b> |
| 1035 | The knot lettered R is a _____.  | <b>double becket bend</b>  | bowline                                    | fisherman's bend                                 | round turn and two half hitches              | <b>D030DG</b> |
| 1036 | The knot lettered S is a _____.  | bowline  | <b>blackwall hitch</b>                     | half hitch                                       | hook hitch                                   | <b>D030DG</b> |
| 1037 | The knot lettered U is a _____.  | <b>half hitch</b>  | round knot                                 | becket bend                                      | plain whipping                               | <b>D030DG</b> |
| 1038 | The knot shown lettered W is a _____.  | clove hitch  | <b>square knot</b>                         | barrel hitch                                     | stopper knot                                 | <b>D030DG</b> |
| 1039 | The knot used to form the bridle at the standing part of a gantline rigged to a stage is a _____.  | sheet bend   | carrick bend                               | fisherman's bend                                 | <b>bowline</b>                               |               |
| 1040 | The knot used to join two lines of different diameter is a _____.  | square knot  | carrick bend                               | <b>becket bend</b>                               | sheepshank                                   |               |
| 1041 | The knot used to join two lines or two large hawsers for towing is called a _____.   | square knot  | <b>carrick bend</b>                        | sheet bend                                       | bowline                                      |               |
| 1042 | The label required for magnesium scrap is _____.   | oxidizer   | yellow                                     | corrosive  | <b>None of the above</b>                     |               |
| 1043 | The label required on containers carrying barium oxide in an international shipment must read _____.   | <b>"Poison"</b>  | "Spontaneously Combustible"                | "Radioactive"                                    | "Infectious Substance"                       |               |
| 1044 | The Lake Carriers Association and the Canadian Shipowners Association prescribe separation routes for upbound and downbound vessels on the Great Lakes. The recommended courses for these routes are shown on the Great Lakes Charts in the form of _____. | <b>red or magenta figures over a segmented course line track</b> | red figures over a solid course line track | black figures over a segmented course line track | green figures over a solid course line track |               |



| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration  |
|------|---|---|--|--|---|---------------|
| 1045 | The larger sizes of manila line are measured by their _____.  | radius  | diameter   | <b>circumference</b>   | weight per foot   |               |
| 1046 | The lashings on a stack of containers with interlocking fittings restrain the forces that cause _____.  | toppling  | <b>racking</b>   | buckling   | crushing  |               |
| 1047 | The lashings used on Ro-Ro vessels should be capable of withstanding the forces of _____.   | rolling   | pitching   | heaving  | <b>All of the above</b>   |               |
| 1048 | The last shot of an anchor cable is usually painted _____.  | white   | international orange   | yellow   | <b>red</b>  |               |
| 1049 | The latch of a safety hook _____.   | increases the strength of the hook  | <b>prevents the sling ring from coming out of the hook if the strain is abruptly eased</b> | prevents the sling ring from coming out of the hook if there is a strain on the sling ring | All of the above  |               |
| 1050 | The lead of a tow bridle is usually redirected with a _____.  | bollard   | <b>chock</b>   | pad eye  | devil's claw  |               |
| 1051 | The legs of a tow bridle are joined together with a _____.  | bridle plate  | shackle  | <b>fishplate</b>   | tri-link  |               |
| 1052 | The length of a standard "shot" of chain is _____.  | 12 fathoms  | <b>15 fathoms</b>  | 18 fathoms   | 20 fathoms  |               |
| 1053 | The letter I indicates the keel. Which of the following plates is NOT part of the keel?   | Center vertical keel  | Rider plate  | <b>Longitudinal girder</b>   | Flat plate keel   | <b>D033DG</b> |
| 1054 | The letter M indicates a(n) _____.  | <b>web frame</b>  | intercostal  | stringer   | cant frame  | <b>D033DG</b> |
| 1055 | The lifeboats on your vessel are stowed on cradles on deck and are handled by sheath-screw boom davits. Which of the following statements about launching a boat is TRUE? | The boat should be hoisted a few inches clear of the cradle before cranking out the davits. | The inboard gripes should be cast off before the outboard gripes.                          | <b>The outboard section of the cradle must be released.</b>                                | The tricing pendants will automatically bring the boat alongside at the embarkation deck. |               |
| 1056 | The line with the most stretch is _____.  | manila  | <b>nylon</b>   | polypropylene  | dacron  |               |
| 1057 | The lines led forward from the bow and aft from the stern when a vessel is moored to the dock are _____.  | <b>bow and stern lines</b>  | breast lines   | halyards   | warps   |               |
| 1058 | The load chart of a crane enables the operator to combine the load radius with boom length to determine the _____.  | maximum counter weight required   | minimum horsepower required  | hoist rope strength  | <b>allowable load</b>   |               |
| 1059 | The load line certificate is issued by _____.   | <b>the American Bureau of Shipping</b>  | the National Cargo Bureau  | the United States Coast Guard  | United States Customs   |               |
| 1060 | The load line markings shown are inscribed on the vessel's _____.   | port side   | starboard side   | <b>port and starboard sides</b>  | stern   | <b>D031DG</b> |
| 1061 | The load line regulations are administered by the _____.  | <b>U.S. Coast Guard</b>   | Maritime Administration  | Lloyd's Register of Shipping   | National Cargo Bureau   |               |
| 1062 | The locking pin that joins the parts of a detachable link is held in position by _____.   | a tack weld   | the self-locking characteristics of its taper  | a cotter pin   | <b>a lead plug</b>  |               |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration  |
|------|---|---|--|--|---|---------------|
| 1063 | The lookout sights a vessel dead ahead. This should be reported on the bell with _____.   | one bell  | two bells  | <b>three bells</b>   | four bells  |               |
| 1064 | The lower hold of your vessel has a bale capacity of 45,000 cubic feet. How many cases of a cargo weighing 450 lbs. and measuring 2.5 feet by 3 feet by 3 feet could be stowed in the hold, assuming a broken stowage factor of 15 percent? | 300   | 675  | 1325   | <b>1700</b>   |               |
| 1065 | The lower hold of your vessel has a bale capacity of 60,000 cubic feet. How many tons of cotton in bales having a stowage factor of 85 can be stowed in the lower hold, assuming a broken stowage factor of 20%?                            | 141   | <b>565</b>   | 706  | 847   |               |
| 1066 | The lower hold of your vessel has a bale cubic of 52,000 cu. ft. You will load a cargo of cases, each weighing 380 lbs. and measuring 3 ft. x 2 ft. x 2 ft. The estimated broken stowage is 15%. How many tons of cases can be loaded?      | 137 tons  | 161 tons   | <b>625 tons</b>  | 969 tons  |               |
| 1067 | The lower seam of the strake indicated by the letter B is sometimes riveted. This is done to _____.   | increase the strength in a highly stressed area             | provide the flexibility inherent in a riveted seam | <b>serve as a crack arrestor and prevent hull girder failure</b> | reduce construction costs   | <b>D033DG</b> |
| 1068 | The lowest temperature at which a liquid will give off sufficient vapors to form a flammable mixture with air is known as the _____.  | fire point  | <b>flash point</b>                                 | lower explosive limit  | threshold limit value   |               |
| 1069 | The machinery associated with heaving in and running out anchor chain is the _____.   | winch   | <b>windlass</b>                                    | draw works   | dynamic pay out system  |               |
| 1070 | The main advantage and chief characteristic of a Steulchen boom is that it can be _____.  | operated by one winchman                                    | cradled on deck                                    | <b>swung from one hatch to the adjacent hatch</b>                | collared to the mast  |               |
| 1071 | The main advantage of a Chinese stopper over the one line stopper is that it _____.   | <b>will not jam on the mooring line</b>                     | is stronger  | is easier to use when under heavy tension                        | is safer to use when under heavy tension  |               |
| 1072 | The main function of a stripping system is to _____.  | maintain the temperature of the cargo throughout the vessel | dispose of dangerous vapors within the cargo tanks | increase the loading rate of the shoreside pumps                 | <b>discharge liquid left in the cargo tanks after the main pumps have discharged the bulk</b> |               |
| 1073 | The main function of the core of a wire rope is to _____.   | give flexibility  | <b>support the strands laid around it</b>          | allow some circulation around the strands                        | allow lubrication inside the rope   |               |
| 1074 | The main reason a long towline is used during an ocean tow is that _____.   | a margin of safety is provided should the line part         | the towline will wear more evenly                  | <b>there will be less stress on the towline</b>                  | a slight increase in speed will be realized   |               |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D                                       | Illustration  |
|------|--|--|---|---|--|---------------|
| 1075 | The main underdeck pipeline on a tankship is connected to individual tanks by _____.   | tank drops   | line drops  | crossovers  | <b>branch lines</b>                            |               |
| 1076 | The MAIN use of the knot lettered M is to _____.   | <b>marry two hawsers</b>   | form a temporary eye in the end of a line   | secure a heaving line to a hawser   | provide a seat for a man to work over the side | <b>D030DG</b> |
| 1077 | The major components which determine the length of a catenary in a deployed anchor cable are water depth, cable weight, and _____.   | <b>cable tension</b>   | water temperature   | bottom conditions   | water density                                  |               |
| 1078 | The major components which determine the length of catenary in a deployed anchor cable are cable tension, cable weight, and _____.   | water density  | bottom conditions   | environmental forces  | <b>water depth</b>                             |               |
| 1079 | The major components which determine the length of catenary in a deployed anchor cable are water depth, cable tension, and _____.  | environmental forces   | bottom conditions   | <b>cable weight</b>   | water density                                  |               |
| 1080 | The maneuver which will return your vessel in the shortest time to a person who has fallen overboard is _____.   | engine(s) crash astern, no turn  | <b>a single turn with hard rudder</b>   | a Williamson Turn   | two 180° turns                                 |               |
| 1081 | The maneuver which will return your vessel to a person who has fallen overboard in the shortest time is _____.   | a Williamson Turn  | engine(s) crash astern, no turn   | <b>a single turn with hard rudder</b>                                       | two 180° turns                                 |               |
| 1082 | The marking on an anchor chain for 30 fathoms is _____.  | <b>two links on each side of the 30 fathom detachable link are painted white</b> | one link on each side of the 30 fathom detachable link is painted white               | three links on each side of the 30 fathom detachable link are painted white | only the detachable link is painted red        |               |
| 1083 | The Master may have his/her license suspended or revoked for _____.  | carrying stowaways   | sailing shorthanded   | <b>being negligent</b>  | All of the above                               |               |
| 1084 | The Master may require part of the crew to work when needed for _____.   | maneuvering, shifting berth, mooring and unmooring                               | performing work necessary for the safety of the vessel, its passengers, crew or cargo | performing fire, lifeboat or other drills in port or at sea                 | <b>All of the above</b>                        |               |
| 1085 | The Master must maintain the Oil Record Book on board for at least _____.  | 1 month  | 12 months   | 24 months   | <b>36 months</b>                               |               |
| 1086 | The Master of a passenger vessel which is not required to maintain an Official Logbook must keep a record of the number of passengers received and delivered from day to day. This record must be available for a period of _____. | 6 months   | <b>12 months</b>  | 24 months   | 36 months                                      |               |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|---|--|---|---|--------------|
| 1087 | The Master of a vessel may tender a Notice of Readiness to the charterer when the vessel _____.  | has completed the terms of the charter party  | <b>is in all respects ready to load</b>  | is in all respects ready to sail  | is safely moored or at a suitable anchorage   |              |
| 1088 | The Master of any vessel bound on a voyage must apply to a district court when an allegation of unseaworthiness has been made to the Master by _____.                                | any member of the crew of the vessel  | any two officers of the vessel and a majority of the crew  | <b>the First and Second Officers of the vessel or a majority of the crew</b>                        | the First Officer of the vessel   |              |
| 1089 | The master or individual in charge of a vessel prepares a certificate of discharge for each mariner being discharged from the vessel where the original discharge goes to the _____. | National Maritime Center  | Officer In Charge, Marine Inspection (OCMI)  | Shipping Company  | <b>Mariner</b>  |              |
| 1090 | The maximum draft to which a vessel can legally be submerged is indicated by the _____.  | <b>load line mark</b>   | Certificate of Inspection  | Muster List ("Station Bill")  | tonnage mark  |              |
| 1091 | The maximum length allowed between main, transverse bulkheads on a vessel is referred to as the _____.   | floodable length  | factor of subdivision  | compartment standard  | <b>permissible length</b>   |              |
| 1092 | The maximum theoretical stress that can be developed on a guy in a yard and stay rig is limited by the _____.  | <b>lifting capacity of the winch</b>  | location of the boom   | position of the guy   | weight of the load  |              |
| 1093 | The measurement of the amount of force a towing vessel is capable of applying to a motionless tow is called _____.   | shaft horsepower  | delivered horsepower   | <b>bollard pull</b>   | towrope pull  |              |
| 1094 | The metal, teardrop-shaped object sometimes used within an eyesplice is a _____.   | grommet   | reinforcement  | splice form   | <b>thimble</b>  |              |
| 1095 | The MINIMUM acceptable size for a towing bridle would be that size in which the safe working load (SWL) of each leg of the bridle is equal to _____.                                 | one-half the SWL of the main towing hawser  | three-fourths the SWL of the main towing hawser  | <b>that of the main towing hawser</b>   | twice that of the main towing hawser  |              |
| 1096 | The minimum temperature required to ignite gas or vapor without a spark or flame being present is called _____.  | flash point   | fire point   | <b>autoignition temperature</b>   | lower explosive limit   |              |
| 1097 | The moisture equilibrium chart can be used to determine the _____.   | absolute moisture content of the air surrounding a hygroscopic cargo when moisture equilibrium exists | <b>dew point temperature that the air surrounding a hygroscopic commodity will have when in moisture equilibrium with that commodity</b> | enthalpy of the air surrounding a hygroscopic cargo which is in moisture equilibrium with the cargo | temperature at which moisture equilibrium will occur in a cargo hold containing a hygroscopic cargo |              |
| 1098 | The most common method of securing a line to a cleat is a _____.   | half hitch, then round turns  | <b>round turn, then figure eights</b>  | figure eight, then round turns  | figure eight, then half hitches   |              |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 1099 | The most important safety consideration during loading or discharge aboard a Ro-Ro vessel is _____.                              | having all crewmembers and longshoremen wear hard hats                             | <b>the thorough ventilation of all cargo spaces</b>                          | ensuring that visitors cannot come aboard   | having the outboard anchor down  |              |
| 1100 | The most likely time for oil pollution while bunkering is when _____.  | <b>final topping off is occurring</b>  | first starting to receive fuel   | hoses are being blown down  | hoses are disconnected and being capped  |              |
| 1101 | The most probable position of the object of a search at any given time is the _____.   | <b>datum position</b>  | incident position  | reported position   | dead-reckoning position  |              |
| 1102 | The Muster List ("Station Bill") shows each person's lifeboat station, duties during abandonment, basic instructions, and _____. | <b>all emergency signals</b>   | instructions for lowering the lifeboats                                      | the time each weekly drill will be held   | work schedule  |              |
| 1103 | The muster list must be posted in conspicuous locations and signed by the _____.   | safety officer   | Coast Guard Officer approving the bill                                       | owner   | <b>Master</b>  |              |
| 1104 | The name and hailing port of a documented commercial vessel is _____.  | not required to be marked anywhere on the vessel                                   | required to be marked on both bows and on the keel                           | <b>required to be marked on the stern with the name of the vessel marked on both bows</b>                     | required to be marked on the keel, stern, and both bows  |              |
| 1105 | The National Cargo Bureau represents the _____.  | agent  | operator   | shipper   | <b>All of the above</b>  |              |
| 1106 | The next-to-last shot of an anchor cable is usually painted _____.   | white  | international orange   | <b>yellow</b>   | red  |              |
| 1107 | The normal and safest way for a sailor in a bosun's chair to be raised aloft is _____.   | for the sailor to pull himself aloft and then make fast with a bosun's chair hitch | <b>manually by two or three sailors heaving away on deck</b>                 | by taking the gantline to a winch drum and heaving away with the winch  | by fairleading the gantline with a snatch block and pulling with a cargo runner                                |              |
| 1108 | The normal and safest way for a sailor to be lowered in a bosun's chair when descending vertically is _____.                     | <b>for that sailor to feed the hauling part through a bosun's chair hitch</b>      | to lead the hauling part to a cleat on the mast and slacking the sailor down | by taking several turns of the gantline on a winch drum and then lower the sailor by backing off on the winch | by leading the bight of the hauling part to a rail and taking several turns, then slacking away with the bight |              |
| 1109 | The number of able seamen required on board is stated in the _____.  | American Bureau of Shipping code   | Solas Certificate  | Classification Certificate  | <b>Certificate of Inspection</b>   |              |
| 1110 | The number of certificated able seamen and lifeboatmen required on a vessel is determined by the _____.                          | International Maritime Organization  | Corps of Engineers   | <b>Coast Guard</b>  | American Bureau of Shipping  |              |
| 1111 | The number of certificated able seamen and lifeboatmen required on board is listed in the _____.                                 | <b>Certificate of Inspection</b>   | American Bureau of Shipping code   | Muster List ("Station Bill")  | Safety of Life at Sea Convention   |              |
| 1112 | The number of certificated lifeboatmen required for a vessel is found on the _____.  | <b>Certificate of Inspection</b>   | Muster List ("Station Bill")   | lifeboats   | Register or Enrollment   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|--|--|--|---|--------------|
| 1113 | The number or name of a tank barge shall be _____.  | displayed in at least 4 different positions on the barge       | carved on a wooden board and attached to the barge's hull          | displayed as close to the navigation lights as possible      | <b>displayed at the highest point of the barge's hull such that it can be seen from either side</b> |              |
| 1114 | The objective of shoring a damaged bulkhead is to _____.  | force the warped, bulged, or deformed sections back into place | <b>support and hold the area in the damaged position</b>           | withstand subsequent additional damage                       | make a watertight seal at the damaged area  |              |
| 1115 | The Officers Competency Certificates Convention of 1936 applies to all of these vessels operating seaward of the boundary line EXCEPT a/an _____. | offshore supply vessel over 200 gross tons                     | passenger vessel of 295 gross tons                                 | <b>uninspected towing vessel of less than 200 gross tons</b> | inspected towing vessel of 305 gross tons   |              |
| 1116 | The official identification of a vessel is found in the _____.  | Certificate of Inspection                                      | Classification Certificate   | Load Line Certificate  | <b>Certificate of Documentation</b>   |              |
| 1117 | The official logbook is filed with the Officer in Charge, Marine Inspection (OCMI) _____.   | <b>upon completion of the voyage</b>                           | at the next Certificate of Inspection                              | within 30 days of the date of arrival of the first U.S. port | at the end of the year with all other official logbooks   |              |
| 1118 | The official number of a documented vessel is _____.  | not required to be marked anywhere on the vessel               | <b>required to be permanently marked on the vessel's structure</b> | required to be painted on the vessel's stern                 | required to be painted on the vessel's bow  |              |
| 1119 | The Oil Record Book for all fixed or floating drilling rigs is the property of the _____.   | <b>U.S. government</b>   | state in whose water the drilling rig is located                   | drilling rig's owner   | company leasing the drilling rig  |              |
| 1120 | The Oil Record Book for all U.S. ships is the property of the _____.  | <b>U.S. government</b>   | master of the vessel   | vessel's owner   | charterer of the vessel   |              |
| 1121 | The oil record book is required to be carried aboard _____.   | tankers  | passenger vessels  | cargo vessels  | <b>All of the above</b>   |              |
| 1122 | The Oil Record Book on a vessel NOT engaged on a foreign voyage shall be maintained on board for not less than _____.                             | 12 months  | 24 months  | <b>36 months</b>   | 48 months   |              |
| 1123 | The opening in the deck beneath the anchor windlass that leads to the chain locker is the _____.  | hawsepape  | fallpipe   | drop-pipe  | <b>spill pipe</b>   |              |
| 1124 | The opening in the deck that leads the anchor cable outside the hull is the _____.  | <b>hawsepape</b>   | fall pipe  | drop-pipe  | spill pipe  |              |
| 1125 | The operator of an uninspected vessel MUST assist people affected by an accident if he or she can do so without _____.                            | <b>serious danger to his or her own vessel</b>                 | further damaging the other vessel                                  | undue delay  | creating a panic on either vessel   |              |
| 1126 | The operator of an uninspected vessel MUST assist people affected by an accident if he or she can do so without _____.                            | serious danger to his or her own vessel                        | further damaging the other vessel                                  | harming persons onboard                                      | <b>All of the above</b>   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 1127 | The order of importance in addressing damage control is _____.  | control flooding, control fire, repair structural damage                          | restore vital services, control fire, control flooding                                | control fire, restore vital services, control flooding                   | <b>control fire, control flooding, repair structural damage</b>                                     |              |
| 1128 | The organization that certifies the safe working load of cargo cranes on a vessel is the _____.   | <b>classification society</b>   | National Cargo Bureau   | U.S. Coast Guard   | none of the above   |              |
| 1129 | The original Bill of Lading, once signed by the Master, is NOT _____.   | a receipt and proof that goods have been received on board                        | <b>surrendered to the customs agency of the country where the cargo is discharged</b> | used to transfer ownership of the cargo while the ship is enroute        | proof of title or ownership of the cargo  |              |
| 1130 | The owner or Master of a towing vessel must ensure that each person that directs and controls the movement of the vessel knows all of the following EXCEPT _____.   | the effects of maneuvering on the vessel and its tow                              | the speed and direction of any current for the area being transited                   | how to apply variation and deviation to readings from a magnetic compass | <b>the ownership of the vessel(s) being towed</b>   |              |
| 1131 | The owner or Master of a towing vessel must evaluate whether the entire towline, or a part of it, is no longer serviceable. The towline should be removed from service in all cases EXCEPT _____.           | when recommended by the manufacturer or an authorized classification society      | in accordance with a replacement schedule   | <b>when the vessel is underway</b>                                       | depending on the mileage or time that the towline has been in service                               |              |
| 1132 | The owner or Master of a towing vessel shall ensure that each person that directs and controls the movement of the vessel can accomplish all of the following EXCEPT _____.                                 | evaluate the danger of each closing visual or radar contact                       | adjust speed with due regard for the weather and visibility                           | <b>reduce speed only where local speed limits are posted</b>             | enter all required test and inspection results in the vessel's log or other record carried on board |              |
| 1133 | The owner or Master of a towing vessel shall ensure that each person that directs and controls the movement of the vessel can accurately fix the vessel's position using all of the following EXCEPT _____. | installed navigational equipment  | <b>buoys alone</b>  | all available aids to navigation   | depths soundings and hydrographic contour lines   |              |
| 1134 | The owner or Master of a towing vessel that tows astern must keep records of the towline(s) that include all of the following information EXCEPT _____.   | the towline's initial minimum breaking strength as determined by the manufacturer | <b>an invoice showing the cost of the towline</b>                                     | the towline's nautical miles of use or time in service                   | the history of loading of the towline   |              |
| 1135 | The owner or Master of a vessel pushing ahead or towing alongside must ensure that each of the following is appropriate for the vessel's horsepower and tow arrangement EXCEPT _____.                       | <b>hydraulic couplings</b>  | face wires  | push gear  | spring lines  |              |



| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration  |
|------|---|---|--|---|--|---------------|
| 1136 | The owner, agent, Master or person-in-charge of a "T-Boat" involved in a marine casualty causing injury that requires professional medical treatment must _____.  | immediately notify the nearest USCG MSO, MIO, or Group Office | keep all voyage records and make them available to Coast Guard investigators | file a written report (CG2692) of the casualty within five days                   | <b>All of the above</b>                          |               |
| 1137 | The owners of the S.S. Short Haul agree to a charter with the Longsplice Steamship Company. The owners stipulate in the charter party that they must approve the Master of the vessel for the entire life of the contract. Which charter has been affected? | <b>Bareboat</b>   | Lease  | Time  | Voyage   |               |
| 1138 | The part of a windlass which physically engages the chain during hauling or paying out is the _____.  | devil's claw  | bull gear  | <b>wildcat</b>  | cat head   |               |
| 1139 | The part of an anchor which takes hold on the bottom is the _____.  | arm   | base   | <b>fluke</b>  | stock  |               |
| 1140 | The part of the anchor indicated by the letter F is the _____.  | <b>shank</b>  | bar  | stock   | shot   | <b>D038DG</b> |
| 1141 | The part of the anchor indicated by the letter G is the _____.  | fluke   | shank  | <b>tripping palm</b>  | crown  | <b>D038DG</b> |
| 1142 | The part of the anchor indicated by the letter H is the _____.  | fluke   | shank  | tripping palm   | <b>crown</b>                                     | <b>D038DG</b> |
| 1143 | The part of the anchor indicated by the letter I is the _____.  | tripping palm   | <b>fluke</b>   | bill  | stock  | <b>D038DG</b> |
| 1144 | The part of the anchor indicated by the letter J is the _____.  | crown   | shank  | <b>bill</b>   | tip  | <b>D038DG</b> |
| 1145 | The part of the anchor indicated by the letter K is the _____.  | crown   | <b>ring</b>  | shank   | bending shot                                     | <b>D038DG</b> |
| 1146 | The pea is indicated by which letter?   | <b>J</b>  | H  | G   | F  | <b>D038DG</b> |
| 1147 | The perforated, elevated bottom of the chain locker, which prevents the chains from touching the main locker bottom and allows seepage water to flow to the drains, is called a _____.  | cradle  | draft  | harping   | <b>manger</b>                                    |               |
| 1148 | The period of roll is the time difference between _____.  | zero inclination to full inclination on one side              | full inclination on one side to full inclination on the other side           | <b>full inclination on one side to the next full inclination on the same side</b> | zero inclination to the next zero inclination    |               |
| 1149 | The periodic weight testing of a vessel's cargo booms may be performed by the _____.  | U.S. Coast Guard  | <b>American Bureau of Shipping</b>   | National Cargo Bureau   | Society of Naval Architects and Marine Engineers |               |
| 1150 | The phenomenon known as a "seiche" is most likely to occur on Lake Erie _____.  | during the passage of a rapidly moving warm front             | <b>when strong winds from the Northeast suddenly diminish</b>                | during the months of May through August   | when the Moon and Sun are in alignment           |               |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration  |
|------|--|--|--|---|---|---------------|
| 1151 | The pillar shape that gives the greatest strength for the least weight is the _____.   | octagonal pillar   | "H" Beam pillar  | "I" Beam pillar   | <b>circular type pillar</b>   |               |
| 1152 | The pipe used to connect two separate piping systems on a tank vessel is known as a _____.   | <b>crossover</b>   | transfer   | connection  | junction  |               |
| 1153 | The piping that routes an oil cargo from the manifold directly to a cargo tank and serves only one tank is known as a _____.         | cargo fill   | filler line  | <b>tank drop</b>  | branch line   |               |
| 1154 | The piping that routes an oil cargo from the manifold to underdeck pipelines is known as a _____.                                    | cargo fill   | <b>line drop</b>   | transfer  | branch line   |               |
| 1155 | The pitch of a propeller is a measure of the _____.  | angle that the propeller makes with a free stream of water | angle that the propeller makes with the surface of the water | <b>number of feet per revolution the propeller is designed to advance in still water without slip</b> | positive pressure resulting from the difference of the forces on both sides of the moving propeller in still water without slip |               |
| 1156 | The pivot pin at the base of a sheath-screw boom davit must be _____.  | inserted each time before the booms are cranked out        | <b>periodically removed for inspection and lubricated</b>    | replaced at each inspection for certification   | in the locked position after the boat is cradled and griped down  |               |
| 1157 | The pivoting point of a fully loaded vessel with normal trim proceeding ahead at sea speed is _____.                                 | right at the bow   | <b>one-third the length of the vessel from the bow</b>       | one-half the length of the vessel from the bow  | two-thirds the length of the vessel from the bow  |               |
| 1158 | The plating indicated by the letter N is known as the _____.   | <b>inner bottom</b>  | floor riders   | tank-top rider plating  | ceiling   | <b>D033DG</b> |
| 1159 | The Plimsoll mark on a vessel is used to _____.  | align the vessel's tail shaft                              | determine the vessel's trim                                  | <b>determine the vessel's freeboard</b>   | locate the vessel's centerline  |               |
| 1160 | The point that is halfway between the forward and after perpendicular and is a reference point for vessel construction is the _____. | half length  | mid-body   | center line   | <b>amidships</b>  |               |
| 1161 | The primary objective of a Ro-Ro vessel is to _____.   | transfer containers without chassis                        | load the vessel with palletized cargo                        | <b>transport vehicles</b>   | be loaded full and down to her marks  |               |
| 1162 | The primary purpose of a load line is to establish required _____.   | <b>minimum freeboard</b>                                   | GM   | transverse stability  | fresh water allowances  |               |
| 1163 | The primary purpose of the stud is to prevent the anchor chain from _____.   | <b>kinking</b>   | distorting   | elongating  | breaking  |               |
| 1164 | The process of lowering a boom to a horizontal position and onto its deck support is called _____.                                   | spotting a boom  | collaring a boom   | <b>cradling a boom</b>  | toppling a boom   |               |
| 1165 | The projecting lugs of the rudderpost which furnish support to the rudder are called _____.  | bases  | <b>gudgeons</b>  | pintles   | rudder lugs   |               |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration  |
|------|---|--|--|---|--|---------------|
| 1166 | The proper way to correct a mistake in the logbook is to _____.   | erase the entry and rewrite  | <b>draw a line through the entry, rewrite, and initial the correction</b>                        | draw several lines through the entry, rewrite, and initial the correction | completely black out the entry, rewrite, and initial the correction                  |               |
| 1167 | The proximity of pack ice may be indicated by _____.  | changes in seawater salinity   | <b>glare on clouds on the horizon</b>  | changes in air temperature  | icebergs   |               |
| 1168 | The purpose of a bilge well is to _____.  | afford access to the shell through the double bottoms                          | <b>collect water to be pumped out</b>  | provide access for the pneumaticator                                      | provide a base line for sounding measurements  |               |
| 1169 | The purpose of a devil's claw is to _____.  | <b>act as a chain stopper</b>  | prevent the windlass from engaging   | prevent the chain from fouling on deck                                    | control the wildcat  |               |
| 1170 | The purpose of item G is to _____.  | distribute the vessel's thrust over a wider area                               | prevent the towboat from capsizing if item I should part   | <b>prevent the knee from shifting when the rudder is put hard over</b>    | keep the barges from shifting fore and aft   | <b>D024DG</b> |
| 1171 | The purpose of sheer in ship construction is to _____.  | <b>allow the ship to ride waves with drier decks</b>                           | eliminate the need for butt straps   | eliminate the need for margin plates                                      | give greater strength at the deck edge   |               |
| 1172 | The purpose of the stripping bar on an anchor windlass is to _____.   | clean off any mud that may have accumulated on the chain                       | engage or disengage the wildcat  | fairlead the chain from the hawsepipe to the wildcat                      | <b>prevent the chain from fouling the wildcat</b>                                    |               |
| 1173 | The ratio of the height of a vessel's rudder to its width is referred to as the _____.  | <b>aspect ratio</b>  | constriction ratio   | rudder ratio  | steering ratio   |               |
| 1174 | The recessed areas on a wildcat are called _____.   | pawls  | sockets  | <b>pockets</b>  | devil's claws  |               |
| 1175 | The regulations require that inspected vessels on an international voyage, other than small passenger vessels, must carry which of the following distress signals on or near the navigating bridge? | 12 hand red flares   | <b>12 rocket parachute flares</b>  | 12 hand combination flares and orange smoke signals                       | 6 hand red flares, and 6 hand orange smoke signals                                   |               |
| 1176 | The responsibility for maintaining the Official Logbook on voyages between the Atlantic and Pacific coasts of the United States rests with the _____.   | Chief Mate of the vessel   | <b>Master of the vessel</b>  | Deck Officer of the watch at the time of the occurrence                   | Purser of the vessel   |               |
| 1177 | The result of two forces acting in opposite directions and along parallel lines, is an example of what type of stress?  | Tensile  | Compression  | <b>Shear</b>  | Strain   |               |
| 1178 | The revolving drum of a winch used to haul lines is called a _____.   | bull gear  | <b>gypsyhead</b>   | spanner   | wildcat  |               |
| 1179 | The riding pawl is _____.   | a safety interlock in a cargo winch that prevents the runner from overspeeding | <b>a stopper that prevents the anchor cable from running free if the cable jumps the wildcat</b> | the device that locks the deck lashings of the Peck and Hale system       | the lug that rides on the eccentric rib and engages the locking ring on the windlass |               |

| ID # | Question  | Choice A                      | Choice B  | Choice C                                   | Choice D  | Illustration  |
|------|---|-------------------------------|---|--|---|---------------|
| 1180 | The rope which is rove from the truck to be used with a bos'n's chair is called a _____.  | <b>gantline</b>               | life line   | strop                                      | whip  |               |
| 1181 | The rope which is the lightest is _____.  | manila                        | nylon   | <b>polypropylene</b>                       | dacron  |               |
| 1182 | The rudders are amidships and both screws are going ahead. What will happen if the starboard screw is stopped?  | The bow will go to port.      | <b>The bow will go to starboard.</b>              | The bow will remain steady.                | The stern will go to starboard.                             |               |
| 1183 | The run of plating labeled A is known as the _____.   | sheer strake                  | <b>stringer plate</b>                             | deck strake                                | deck longitudinal   | <b>D033DG</b> |
| 1184 | The S.S. Hollowpoint has a charter party in which the charterer assumes no responsibility for the operation of the vessel but pays stevedoring expenses. What is the name of the charter party?     | Bareboat                      | Dispatch  | <b>Voyage</b>                              | Demise  |               |
| 1185 | The S.S. Microwave has been chartered to the Longline Steamship Company. The Longline Steamship Company agrees to pay all expenses and employ and pay the crew. Which type of contract is involved? | <b>Bareboat Charter Party</b> | Lease Charter Party                               | Time Charter Party                         | Voyage Charter Party  |               |
| 1186 | The S.S. Ossel Hitch arrives in Capetown, South Africa, and the Master affects a note of protest with the U.S. Consul. Why would the Master affect this document?                                   | Crew misconduct               | Inability of vessel to comply with voyage charter | Suspicion of cargo pilferage by crew       | <b>Suspicion of heavy weather damage to vessel or cargo</b> |               |
| 1187 | The S.S. Sheet Bend arrives in New York after encountering heavy weather on a voyage from Cape Town. Who will note the maritime protest for the Master?   | Collector of Customs          | <b>Notary Public</b>                              | Officer in Charge Marine Inspection        | U.S. Shipping Commissioner                                  |               |
| 1188 | The safe working load (SWL) of wire rope with a safety factor of 6 is what percent of its strength?   | 10%                           | <b>17%</b>  | 50%  | 80%   |               |
| 1189 | The safe working load for the assembled cargo gear and the minimum angle to the horizontal for which the gear is designed shall be marked on the _____.   | deck                          | head of the boom                                  | <b>heel of the boom</b>                    | mast or king post   |               |
| 1190 | The Safety Equipment Certificate shows that the vessel conforms to the standards of the _____.  | U.S. Coast Guard              | American Bureau of Shipping                       | American Salvage Association               | <b>S.O.L.A.S. Convention</b>                                |               |
| 1191 | The Safety of Life at Sea Convention was developed by the _____.  | U.S. Coast Guard              | American Bureau of Shipping                       | <b>International Maritime Organization</b> | American Institute of Maritime Shipping                     |               |
| 1192 | The safety stopper that prevents the anchor cable from running free if the cable jumps the wildcat is the _____.  | <b>riding pawl</b>            | devil's claw                                      | buckler plate                              | spill pipe  |               |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration  |
|------|---|--|--|--|---|---------------|
| 1193 | The Scharnow turn should be used in a man overboard situation only when _____.  | the man can be kept in sight from the bridge while maneuvering | the turn is started immediately when the man goes over | <b>there has been sufficient time elapsed since the man went over to complete the maneuver</b> | the vessel has twin screws to assist in making the turn                             |               |
| 1194 | The scuppers had been plugged as required at the time an oil spill occurs on deck. After shutting down the transfer, the engine room should first be informed and then _____. | rig a fire hose and call for water on deck                     | <b>spread an absorbent material, such as sawdust</b>   | remove the plugs from the scuppers   | sound the general alarm   |               |
| 1195 | The section of each end of a barge which is heavily reinforced to take the pressure of pushing is called the _____.   | <b>headlog</b>   | towhead  | collision bulkhead   | bullnose  |               |
| 1196 | The securing of passenger cars on a Ro-Ro vessel requires _____.  | simple and lightweight equipment                               | low labor intensive equipment                          | specialty designed equipment to avoid vehicle damage   | <b>All of the above</b>   |               |
| 1197 | The securing systems for containers were developed to prevent container movement during which ship motion?  | Surge  | <b>Roll</b>  | Sway   | Yaw   |               |
| 1198 | The shank is indicated by which letter?   | K  | J  | H  | <b>F</b>  | <b>D038DG</b> |
| 1199 | The shearing stresses on a ship's structure are usually greatest at _____.  | the bow  | the stern  | amidships  | <b>the ship's quarter-length points</b>   |               |
| 1200 | The sheave diameter to be used with a 3-inch manila rope is _____.  | 3 inches   | <b>6 inches</b>  | 9 inches   | 12 inches   |               |
| 1201 | The Sheer Plan _____.   | <b>shows a longitudinal side elevation</b>                     | is an endwise view of the ship's molded form           | is usually drawn for the port side only  | has the forebody to the right of centerline and afterbody to the left of centerline |               |
| 1202 | The Shipping Articles shall be signed by each seaman and the _____.   | <b>Master of the vessel</b>                                    | Shipping Commissioner                                  | U.S. Coast Guard   | U.S. Customs Service  |               |
| 1203 | The shipping papers for the products being carried in your tankship are NOT required to contain the _____.  | <b>exact quantity of the cargoes</b>                           | grades of the cargoes                                  | location of the delivery point(s)  | name of the consignee(s)  |               |
| 1204 | The signal man assisting a crane operator has his arm extended with his fingers closed and thumb pointing upward. This is the signal to _____.                                | <b>raise the boom</b>  | raise the hook   | raise the boom and hook  | check the boom stop   |               |
| 1205 | The signal man assisting a crane operator has his arm extended, thumb pointing downwards, flexing fingers in and out. This is the signal to _____.                            | <b>lower the boom and raise the load</b>                       | lower the load and raise the boom                      | raise the boom and lower the load  | raise the load and lower the boom   |               |
| 1206 | The signal man assisting the crane operator first taps his elbow with one hand and then proceeds to use regular signals. This is the signal to _____.                         | use the main hoist   | proceed slowly   | increase speed   | <b>use the whip line</b>  |               |

| ID # | Question  | Choice A                          | Choice B                                 | Choice C                          | Choice D                          | Illustration |
|------|---|-----------------------------------|--|-----------------------------------|-----------------------------------|--------------|
| 1207 | The signal man assisting the crane operator first taps the top of his head with his fist and then proceeds to use regular signals. This is the signal to _____.   | use the whip line                 | <b>use the main hoist</b>                | use the auxiliary line            | proceed slowly                    |              |
| 1208 | The signal man assisting the crane operator has his arm extended and is pointing his finger in the direction to move the boom. This is the signal to _____.   | extend                            | lower                                    | hoist                             | <b>swing</b>                      |              |
| 1209 | The signal man assisting the crane operator has his arm extended downwards, forefinger pointing down, and moves his hand in small horizontal circles. This is the signal to _____.                                    | <b>lower</b>                      | swing                                    | hoist                             | extend                            |              |
| 1210 | The signal man assisting the crane operator has his arm extended with the palm down and holds this position rigidly. This is the signal to _____.   | hoist                             | swing                                    | <b>stop</b>                       | lower                             |              |
| 1211 | The signal man assisting the crane operator has his arm extended, his fingers closed, and his thumb pointing downward. This is the signal to _____.   | hoist the load                    | raise the boom                           | <b>lower the boom</b>             | lower the load                    |              |
| 1212 | The signal man assisting the crane operator has his arm extended, with the thumb pointing up, and is flexing his fingers in and out for as long as the load movement is desired. This is the signal to _____.         | lower the boom and raise the load | <b>raise the boom and lower the load</b> | lower the boom and lower the load | raise the boom and raise the load |              |
| 1213 | The signal man assisting the crane operator has his forearm vertical, forefinger pointing up, and moves his hand in a small horizontal circle. This is the signal to _____.   | swing                             | lower                                    | <b>hoist</b>                      | extend                            |              |
| 1214 | The signal man assisting the crane operator has his hands clasped in front of his body. This is the signal to _____.  | <b>dog everything</b>             | stop                                     | stand-by                          | prepare for signal                |              |
| 1215 | The signal man assisting the crane operator has one hand occupied and one fist in front of his chest with the thumb pointing outward and is tapping his chest with the heel of his fist. This is the signal to _____. | extend the boom                   | lower the boom                           | <b>retract the boom</b>           | hoist the boom                    |              |
| 1216 | The signal man assisting the crane operator uses one hand to give any motion signal and places the other hand motionless in front of the hand giving the motion signal. This is the signal to _____.                  | <b>move slowly</b>                | increase speed                           | proceed with caution              | stop                              |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 1217 | The signal man has both arms extended out, palms down, and is moving his arms back and forth. This is the signal for _____.                                       | keep lifting   | swing right   | swing left  | <b>emergency stop</b>  |              |
| 1218 | The single line located directly above the diamond is the _____.  | load line  | water line  | freeboard line  | <b>deck line</b>   | D031DG       |
| 1219 | The single turn method of returning to a man overboard should be used ONLY if _____.  | the man is reported missing rather than immediately seen as he falls overboard | <b>the vessel is very maneuverable</b>  | the conning officer is inexperienced  | a boat will be used to recover the man                       |              |
| 1220 | The size and material used for towline(s) must meet all of the following requirements, EXCEPT _____.  | be appropriate to the vessel's horsepower or bollard pull                      | be strong enough to handle any static or dynamic loads expected during its service life | <b>fit any spare wire clips carried on board the vessel for repair purposes</b> | be suitable for exposure to the marine environment           |              |
| 1221 | The size of wire rope is determined by the _____.   | number of strands  | number of wires in each strand  | circumference   | <b>diameter</b>  |              |
| 1222 | The space above the engine room is called the _____.  | <b>fidley</b>  | gold locker   | middle hatch  | noble  |              |
| 1223 | The space indicated by the letter J is known as the _____.  | <b>double bottom</b>   | flooding barrier  | floor space   | bilge tank   | D033DG       |
| 1224 | The sprocket teeth on a wildcat are known as the _____.   | pawls  | devil's claws   | <b>whelps</b>   | pockets  |              |
| 1225 | The sprocket wheel in a windlass, used for heaving in the anchor, is called a _____.  | capstan  | dog wheel   | fairlead  | <b>wildcat</b>   |              |
| 1226 | The standard unit of liquid volume used in the petroleum industry, as well as the tanker industry, is a _____.  | <b>barrel</b>  | drum  | gallon  | liter  |              |
| 1227 | The standing part of a tackle is _____.   | all the fall except the hauling part   | the hook that engages the weight to be moved  | that part to which power is applied   | <b>that part of the falls made fast to one of the blocks</b> |              |
| 1228 | The static bollard pull of a tug is measured in tons and consists of the brake horsepower of the tug's engine divided by 100 and multiplied by a factor of _____. | 0.5  | <b>1.3</b>  | 3.0   | 10   |              |
| 1229 | The stowage factor for a cargo is based upon _____.   | one short ton  | one short metric ton  | <b>one long ton</b>   | one long metric ton  |              |
| 1230 | The strake of shell plating indicated by letter H is known as the _____.  | sheer strake   | outboard keel plate   | <b>garboard strake</b>  | bilge strake   | D033DG       |
| 1231 | The strake on each side of the keel is called a _____.  | sheer strake   | gatewood strake   | insulation strake   | <b>garboard strake</b>                                       |              |
| 1232 | The strength of a deck will be increased by adding _____.   | camber   | <b>deck beam brackets</b>   | hatch beams   | sheer  |              |
| 1233 | The strictest load line regulations apply to _____.   | gas carriers   | freighters (break-bulk)   | <b>passenger ships</b>  | tankers  |              |



| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|---|---|---|---|--------------|
| 1234 | The stringer plate is represented by which letter?  | <b>A</b>  | C   | I   | N   | D033DG       |
| 1235 | The strongest method of forming an eye in wire rope is using _____.   | three wire rope clamps  | an eye splice with four or five tucks   | a thimble fastened with four or five tucks          | <b>a wire rope socket attached with zinc</b>  |              |
| 1236 | The strongest of the natural fibers is _____.   | cotton  | hemp  | <b>manila</b>                                       | sisal   |              |
| 1237 | The strongest way to join the ends of two ropes is with a _____.  | back splice   | <b>short splice</b>   | square knot   | carrick bend  |              |
| 1238 | The structural member indicated by the letter F is known as a(n) _____.   | erection  | <b>pillar</b>   | girder  | deck support  | D033DG       |
| 1239 | The structural member indicated by the letter I is the _____.   | garboard strake   | center pillar   | <b>keel</b>   | girder  | D033DG       |
| 1240 | The structural member indicated by the letter K is a _____.   | longitudinal frame  | stringer  | girder  | <b>floor</b>  | D033DG       |
| 1241 | The structural member indicated by the letter K was fitted in segments between continuous longitudinals. It is known as which type of floor?                      | <b>Intercostal</b>  | Open  | Lightened   | Non-watertight  | D033DG       |
| 1242 | The structural member indicated by the letter L is a _____.   | web frame   | bilge keel  | side keel   | <b>longitudinal</b>   | D033DG       |
| 1243 | The supplement to the IOPP Certificate contains what type of data?  | The grades of cargo that an oil tanker is permitted to carry. | <b>A checklist of the equipment installed for controlling the discharge of oil.</b> | The trade routes upon which the vessel may operate. | A list of the underwriters who will assume financial responsibility in the event of an oil spill. |              |
| 1244 | The system of valves and cargo lines in the bottom piping network of a tank vessel that connects one section of cargo tanks to another section is called a _____. | <b>crossover</b>  | runaround   | come-along  | manifold  |              |
| 1245 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability book to determine the hogging numeral.                                   | 98.23 numeral   | <b>95.70 numeral</b>  | 84.46 numeral                                       | 81.37 numeral   | BL-0025      |
| 1246 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.                    | <b>43.19 numeral</b>  | 46.56 numeral   | 49.92 numeral                                       | 55.72 numeral   | BL-0009      |
| 1247 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.                    | <b>49.73 numeral</b>  | 52.76 numeral   | 55.29 numeral                                       | 57.93 numeral   | BL-0004      |
| 1248 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.                    | 91.42 numeral   | 85.60 numeral   | <b>79.23 numeral</b>                                | 74.73 numeral   | BL-0023      |

| ID # | Question   | Choice A                        | Choice B                            | Choice C                                      | Choice D                                       | Illustration |
|------|--|---------------------------------|-------------------------------------|---|--|--------------|
| 1249 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.                     | 86.72 numeral                   | 89.98 numeral                       | <b>91.40 numeral</b>                          | 93.18 numeral                                  | BL-0001      |
| 1250 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the hogging numeral.                     | 101.02 numeral                  | 91.36 numeral                       | 72.43 numeral                                 | <b>52.79 numeral</b>                           | BL-0024      |
| 1251 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the sagging numeral.                     | <b>29.70 numeral</b>            | 33.63 numeral                       | 49.82 numeral                                 | 58.33 numeral                                  | BL-0027      |
| 1252 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the sagging numeral.                     | 72.42 numeral                   | <b>78.98 numeral</b>                | 83.46 numeral                                 | 91.48 numeral                                  | BL-0026      |
| 1253 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the sagging numeral.                     | 29.49 numeral                   | <b>31.97 numeral</b>                | 33.61 numeral                                 | 35.12 numeral                                  | BL-0002      |
| 1254 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the sagging numeral.                     | 81.79 numeral                   | 85.02 numeral                       | 89.68 numeral                                 | <b>91.92 numeral</b>                           | BL-0014      |
| 1255 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference Book to determine the sagging numeral.                     | 89.75 numeral                   | 40.18 numeral                       | 28.62 numeral                                 | <b>22.44 numeral</b>                           | BL-0028      |
| 1256 | The tankship Northland is loaded as shown. Use the salmon colored pages in the Stability Data Reference to determine the sagging numeral.                          | 71.07 numeral                   | 74.95 numeral                       | 77.56 numeral                                 | <b>78.29 numeral</b>                           | BL-0003      |
| 1257 | The tension on an anchor cable increases so that the angle of the catenary to the seabed at the anchor reaches 10°. How will this affect the anchor in sandy soil? | It will have no effect.         | It will increase the holding power. | <b>It will reduce the holding power.</b>      | It will cause the anchor to snag.              |              |
| 1258 | The term "bollard pull" refers to a towing vessel's _____.   | propulsion horsepower available | pulling ability at cruise power     | towing winch capability                       | <b>pulling ability under static conditions</b> |              |
| 1259 | The term "Great Lakes", as defined by the Inland Rules of the Road, does NOT include _____.  | portions of the Chicago River   | portions of the Calumet River       | <b>the St. Lawrence River to Trois Rivers</b> | Saginaw Bay                                    |              |
| 1260 | The term "Great Lakes", as defined by the Inland Rules of the Road, includes part of the _____.  | Calumet River                   | Chicago River                       | St. Lawrence River                            | <b>All of the above</b>                        |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D                                   | Illustration |
|------|---|---|---|---|--|--------------|
| 1261 | The term "inland waters", as defined in the Rules of the Road, includes _____.  | the Great Lakes in their entirety                               | <b>the Mississippi River System</b>               | U.S. waters out to three miles offshore   | the St. Lawrence River to Anticosti Island |              |
| 1262 | The term "lee side" refers to the _____.  | side of the vessel exposed to the wind                          | <b>side of the vessel sheltered from the wind</b> | port side   | starboard side                             |              |
| 1263 | The term "overriding" or "overrunning" when applied to towing, implies that _____.  | there is more crew on board than required                       | <b>the tow has overtaken its tug</b>              | the towing hawser comes out of the water  | the Norman pins are not effective          |              |
| 1264 | The term "pintle" and "gudgeon" are associated with the _____.  | anchor windlass   | jumbo boom  | <b>rudder</b>   | steering engine                            |              |
| 1265 | The term "scantlings" refers to the _____.  | draft of a vessel   | <b>measurements of structural members</b>         | requirements for ship's gear  | placement of a vessel's load line          |              |
| 1266 | The term "strake" is used in reference to _____.  | rudder mountings  | anchor gear                                       | <b>hull plating</b>   | vessel framing                             |              |
| 1267 | The term that indicates how many tons of cargo a vessel can carry is _____.   | bale cubic  | <b>deadweight</b>                                 | gross tonnage   | loaded displacement                        |              |
| 1268 | The term used in levying customs duties when such are fixed at rates proportioned to estimated value of goods concerned is _____.   | <b>ad valorem</b>   | infinite  | secure  | specific                                   |              |
| 1269 | The terminal indicates to you that they are going to use a booster pump to assist the discharging operation. You start the discharge, and in a few minutes the pressure drops sharply. This could be a result of the _____. | <b>booster pump coming on the line and discharging properly</b> | booster pump failing to start                     | booster pump being lined up in the wrong direction  | ship's pump speeding up                    |              |
| 1270 | The terminology "able to understand any order spoken by the officers" refers to all of the following situations EXCEPT _____.   | in response to a fire   | directing the use of lifesaving equipment         | <b>for deck department crew members to understand the terminology used in the engine room</b> | in response to a man overboard             |              |
| 1271 | The terms "cant frame" and "counter" are associated with the vessel's _____.  | cargo hatch   | forecastle  | steering engine   | <b>stern</b>                               |              |
| 1272 | The terms "ceiling" and "margin plate" are associated with the _____.   | crew's quarters   | engine room                                       | main deck   | <b>tank top</b>                            |              |
| 1273 | The thickness of a 30.6 pound plate is _____.   | 3/8"  | 1/2"  | <b>3/4"</b>   | 1"   |              |
| 1274 | The time allowed for loading and discharging cargo in a charter party is referred to as _____.  | charter hire  | demurrage   | dispatch  | <b>lay days</b>                            |              |
| 1275 | The Tonnage Certificate indicates _____.  | deadweight tons   | displacement tons                                 | <b>net tons</b>   | light displacement tons                    |              |

| ID # | Question   | Choice A  | Choice B                | Choice C   | Choice D                                   | Illustration  |
|------|--|---|-------------------------|--|--|---------------|
| 1276 | The total weight of cargo, fuel, water, stores, passengers and crew, and their effects, that a ship can carry, is the _____. | bale cubic  | <b>deadweight</b>       | gross tonnage                                      | loaded displacement                        |               |
| 1277 | The tow makeup that is designed to keep the catenary of the tow hawser to a minimum is called the _____.                     | <b>Christmas tree tow</b>                         | tandem tow              | British tow  | tandem tug tow                             |               |
| 1278 | The trim and stability booklet must be approved by the _____.  | International Maritime Organization               | National Cargo Bureau   | Society of Naval Architects and Marine Engineers   | <b>United States Coast Guard</b>           |               |
| 1279 | The tripping palm is indicated by which letter?  | F   | <b>G</b>                | H  | J  | <b>D038DG</b> |
| 1280 | The turning circle of a vessel is the path followed by the _____.  | tipping center                                    | bow                     | outermost part of the ship while making the circle | <b>center of gravity</b>                   |               |
| 1281 | The turning circle of a vessel making a turn of over 360 degrees is the path followed by the _____.                          | bow   | bridge                  | <b>center of gravity</b>                           | centerline                                 |               |
| 1282 | The turning circle of a vessel making a turn over 360 degrees is the path followed by the _____.                             | <b>center of gravity</b>                          | bow                     | bridge   | centerline                                 |               |
| 1283 | The two courses of action if the underwater hull is severely damaged are to plug the openings or to _____.                   | <b>establish and maintain flooding boundaries</b> | dewater the compartment | secure power to the compartment                    | ballast to maintain even keel              |               |
| 1284 | The two factors which make underwater hull repair difficult are accessibility and the _____.                                 | availability of tools                             | shape of the hull       | <b>pressure exerted by the water</b>               | threat of progressive flooding             |               |
| 1285 | The type of carrier required to file a copy of freight tariffs would be the _____.   | <b>common carrier</b>                             | tramp                   | public vessel                                      | bulk carrier                               |               |
| 1286 | The type of joint formed when a third small plate is riveted over two plates butted together is called a _____.              | butted joint                                      | lap joint               | <b>strap joint</b>                                 | stringer joint                             |               |
| 1287 | The type of joint formed when an edge of one plate is laid over the edge of the plate to which it is riveted is a _____.     | grip joint  | strap joint             | thread joint                                       | <b>lap joint</b>                           |               |
| 1288 | The type of welding employed in shipyards is primarily _____.  | brazing   | <b>electric arc</b>     | pressure welding                                   | thermite welding                           |               |
| 1289 | The ultimate or maximum strength of a wire rope is referred to as the _____.   | operating strength                                | working load            | <b>breaking strength</b>                           | lifting load                               |               |
| 1290 | The upward slope of a ships bottom from the keel to the bilge is known as _____.   | camber  | slope                   | <b>deadrise</b>                                    | keel height                                |               |
| 1291 | The upward slope of a vessels bottom from the keel to the bilge is called _____.   | camber  | sheer                   | rake   | <b>rise of bottom</b>                      |               |
| 1292 | The use of an anchor to assist in turning in restricted waters is _____.   | a last resort                                     | <b>good seamanship</b>  | the sign of a novice shiphandler                   | to be used only with a single-screw vessel |               |

| ID # | Question  | Choice A                                 | Choice B                               | Choice C                                | Choice D  | Illustration  |
|------|---|--|--|---|---|---------------|
| 1293 | The use of liners in riveted construction is eliminated by using _____.   | lapped construction                      | strapped construction                  | <b>joggled construction</b>             | belted construction                               |               |
| 1294 | The usual depth of a beam bracket is _____.   | <b>2 1/2 times the depth of the beam</b> | 5 times the depth of the beam          | 10 times the depth of the beam          | same depth as the beam                            |               |
| 1295 | The usual method of arranging a line on deck so that it will run out easily without kinking or fouling is _____.  | coiling the line                         | <b>faking down the line</b>            | flemishing the line                     | racking the line                                  |               |
| 1296 | The valve on the discharge side of a cargo pump on a tank vessel will usually be a _____.   | gate valve                               | butterfly valve                        | globe valve                             | <b>check valve</b>                                |               |
| 1297 | The vapor pressure of a substance _____.  | decreases as temperature increases       | <b>increases with the temperature</b>  | is not affected by temperature          | may increase or decrease as the temperature rises |               |
| 1298 | The vertical motion of a floating vessel in which the entire hull is lifted by the force of the sea is known as _____.  | surge                                    | sway                                   | <b>heave</b>                            | pitch   |               |
| 1299 | The vertical motion of a floating vessel is known as _____.   | surge                                    | sway                                   | <b>heave</b>                            | yaw   |               |
| 1300 | The vertical reference for all water levels and bench marks on the Great Lakes - St. Lawrence River System is known as _____.   | Mean Sea Level Datum                     | <b>International Great Lakes Datum</b> | Great Lakes Low Water Datum             | North Central Reference Datum                     |               |
| 1301 | The vessel has broken down and you are going to take her in tow. The wind is on her starboard beam. Both vessels are making the same amount of leeway. Where should you position your vessel when you start running lines?  | A  | B                                      | <b>C</b>                                | D   | <b>D025DG</b> |
| 1302 | The vessel shown has broken down and you are going to take her in tow. The wind is on her starboard beam. She is making more leeway than you. Where should you position your vessel when you start running lines?           | A  | B                                      | C                                       | <b>D</b>  | <b>D025DG</b> |
| 1303 | The vessel shown has broken down and you are going to take her in tow. The wind is coming from her starboard beam. You are making more leeway than she. Where should you position your vessel when you start running lines? | <b>A</b>                                 | B                                      | C                                       | D   | <b>D025DG</b> |
| 1304 | The vessel's "quarter" is located _____.  | abeam                                    | dead astern                            | just forward of the beam on either side | <b>on either side of the stern</b>                |               |
| 1305 | The weight of the container and its contents is supported on deck by what part(s)?  | <b>Four lower corner castings</b>        | Bottom, side, and end rails            | Bottom flooring, side, and end rails    | Bottom flooring only                              |               |
| 1306 | The welds used to attach stiffeners to a plate are known as _____.  | butt welds                               | seam welds                             | <b>fillet welds</b>                     | plate welds                                       |               |
| 1307 | The welds used to join shell plates in flush construction are known as _____.   | <b>butt welds</b>                        | seam welds                             | fillet welds                            | continuous welds                                  |               |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|--|--|--|---|--------------|
| 1308 | The wheel on the windlass with indentations for the anchor chain is the _____.   | grabber  | wildcat  | locking ring   | pawl  |              |
| 1309 | The wildcat is linked to the central drive shaft on most windlasses by _____.  | an electromagnetic brake                                     | a hydraulic coupling   | aligning the keyways on both and inserting a key                                   | a mechanical coupling where lugs engage detents                   |              |
| 1310 | 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 _____.   | 32 tons  | 40 tons  | 48 tons  | 64 tons   |              |
| 1311 | The wooden planking that protects the tank top from cargo loading is called _____.   | ceiling  | shores   | frames   | toms  |              |
| 1312 | The wooden plug inserted in the vent of a damaged tank should be removed if you are going to _____.  | pump from the damaged tank                                   | fight a fire   | abandon ship   | use the crossover system  |              |
| 1313 | The York-Antwerp Rules relate to the _____.  | minimum required number of officers and crew                 | settlement of general average claims   | ship owner's responsibilities to provide a well-found vessel in a charter party    | navigation regulations that apply in the English Channel          |              |
| 1314 | There are basically three categories of water level fluctuations on the Great Lakes. What is NOT included as one of these?   | Long range fluctuations                                      | Controlled outflow fluctuations  | Seasonal fluctuations  | Short period fluctuations   |              |
| 1315 | There is a large shipment of case goods available to be loaded on your vessel. You are to load as many tons as possible in a hold which has 32,300 cubic feet left unfilled by cargo. Each case measures 2-feet high by 2-feet wide by 4-feet long and weighs 500 pounds. If you allow a broken stowage allowance of 10% of the 32,300 feet, what is the nearest whole number of tons which may be loaded? | 324 tons   | 360 tons   | 363 tons   | 406 tons  |              |
| 1316 | To "belay" a line means to _____.  | coil it down   | heave it taut  | stow it below  | secure it to a cleat  |              |
| 1317 | To "ease" a line means to _____.   | cast off   | double up so that one line does not take all the strain                      | pay out line to remove most of the tension   | slack it off quickly  |              |
| 1318 | To "shore up" the main deck for the stowage of deck cargo means to _____.  | weld pad eyes on deck in proper position to secure the cargo | strengthen the main deck by placing pillars underneath it in the tween-decks | distribute the weight of the cargo by placing fore-and-aft planks on the main deck | package the cargo in wooden crates so it will not damage the deck |              |
| 1319 | To allow for the rise or fall in tide and for change in draft of a tankship during cargo transfer, cargo hoses must be suspended with _____.   | slings or saddles placed at 25-foot (8 meter) intervals      | enough slack in their bight  | topping lifts and runners tied off to winches                                      | All of the above  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 1320 | To coil a left-hand laid rope, you should coil the line in _____.   | a clockwise direction only   | <b>a counterclockwise direction only</b>                            | an alternating clockwise and counterclockwise direction                          | either a clockwise or a counterclockwise direction                |              |
| 1321 | To coil a right-laid rope, you should coil the line in _____.   | <b>a clockwise direction</b>   | a counterclockwise direction  | alternating clockwise and counterclockwise directions                            | either a clockwise or counterclockwise directions                 |              |
| 1322 | To determine the number of able seamen required on an inspected vessel, you should check the _____.   | Load Line Certificate  | operations manual   | Safety of Life at Sea Certificate  | <b>Certificate of Inspection</b>                                  |              |
| 1323 | To determine the number of inflatable liferafts required on a vessel, you should check the _____.   | Load Line Certificate  | SOLAS Certificate   | Stability Letter   | <b>Certificate of Inspection</b>                                  |              |
| 1324 | To determine the number of portable fire extinguishers required on an inspected vessel, you should check the _____.                           | hot work permit  | <b>Certificate of Inspection</b>                                    | Safety of Life at Sea Certificate  | Muster List ("Station Bill")                                      |              |
| 1325 | To determine the weight capacity of a deck in a cargo hold, you would refer to the _____.   | deadweight scale   | <b>deck capacity plan</b>   | cubic capacity tables  | general arrangement plan  |              |
| 1326 | To ensure the best results during the Mediterranean moor, the chains should _____.  | be crossed around the bow  | tend out at right angles to the bow                                 | tend aft 60°From each bow  | <b>tend forward 30° on either bow</b>                             |              |
| 1327 | To facilitate passing the end of a large rope through a block, you could use a _____.   | gantline   | head line   | <b>reeving line</b>  | sail line   |              |
| 1328 | To find the distance the strands should be unlaid for an eye splice, multiply the diameter of the wire in inches by _____.                    | 12   | 24  | <b>36</b>  | 48  |              |
| 1329 | To insure proper seating when closing a valve on a tank, the valve should be _____.   | closed against the stop and the locking pin inserted                               | <b>closed, opened a half turn, and then closed again</b>            | set up as tight as possible by hand  | set up tight using a valve wrench                                 |              |
| 1330 | To lay out a towing hawser in a fore-and-aft direction so each bight is clear and can run out freely without snagging describes _____.        | flemishing   | <b>faking</b>   | spooling   | worming, parceling and serving                                    |              |
| 1331 | To lead the towing hawser over the center of the stern when not under a strain you could _____.   | fairlead it through a stern roller chock   | lead it through the Norman pins                                     | hold it in the median position by a gob rope                                     | <b>All of the above when so equipped</b>                          |              |
| 1332 | To obtain better steering control when you are towing alongside, your vessel should be positioned with its _____.                             | bow extending forward of the tow   | stern amidships of the tow  | <b>stern extending aft of the tow</b>  | bow even with the bow of the tow                                  |              |
| 1333 | To overcome the effects of static forces between two vessels of vastly different tonnages that may potentially part a line, you should _____. | rig a bridle at both the bow of the disabled vessel and stern of the towing vessel | <b>commence tow at a slow bell and increase speed incrementally</b> | pay out extra towline and increase speed rapidly to "jump start" disabled vessel | at slow bell alter course 30 degrees to both side of disabled tow |              |



| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|---|--|---|--|--------------|
| 1334 | To properly rig the downhaul to your stage for lowering, you must _____.  | take only figure eights around the horns              | <b>take 2 or 3 round turns around the stage and then belay the downhaul around the horns</b> | take 2 round turns around the stage and then dip the third turn to form a clove hitch | pass the downhaul through the bridle formed by the standing part and then take round turns |              |
| 1335 | To reconnect a broken tow line, it is better to use a polypropylene messenger line because it _____.  | has great strength                                    | is very supple   | <b>floats</b>   | absorbs shock by stretching  |              |
| 1336 | To reduce stress on the towing hawser when towing astern (ocean tow), the hawser should be _____.   | secured to the aftermost fitting on the towing vessel | just touching the water  | <b>underwater</b>   | as short as possible   |              |
| 1337 | To reduce the amount of catenary you may _____.   | <b>shorten the hawser or increase the tug's speed</b> | lengthen the hawser or reduce the tug's speed  | place your tug in irons   | make a sharp turn  |              |
| 1338 | To reduce the number of strakes at the bow, two strakes are tapered and joined at their ends by a single plate. This plate is known as a _____.                                 | cover plate   | joiner   | lap strake  | <b>stealer plate</b>   |              |
| 1339 | To reeve a right-angle threefold purchase start with the _____.   | left sheave bottom block                              | left sheave top block  | <b>middle sheave top block</b>  | right sheave bottom block  |              |
| 1340 | To rigidly fasten together the peak frames, the stem, and the outside framing, a horizontal plate is fitted across the forepeak of a vessel. This plate is known as a(n) _____. | apron plate   | <b>breasthook</b>  | intercostal plate   | joiner   |              |
| 1341 | To safely anchor a vessel there must be sufficient "scope" in the anchor cable. Scope is the ratio of _____.  | weight of cable to weight of vessel                   | weight of cable to weight of anchor  | length of anchor to depth of water  | <b>length of cable to depth of water</b>   |              |
| 1342 | To warp a vessel means to _____.  | anchor the vessel                                     | bring the head into the wind   | clean the decks   | <b>move the vessel by hauling on lines</b>   |              |
| 1343 | Tonnage openings must be closed by means of _____.  | press board   | steel hatch boards   | <b>steel plates</b>   | wooden hatch boards  |              |
| 1344 | Tonnage tax is officially based upon the figures obtained from the _____.   | <b>Admeasurement Certificate</b>                      | deadweight scale   | displacement scale  | Load Line Certificate  |              |
| 1345 | Total responsibility for shipping and discharging the seamen is that of the _____.  | <b>Master of the vessel</b>                           | steamship company  | U.S. Custom Service   | U.S. Coast Guard   |              |
| 1346 | Towing a structure using two tugs approximately side by side, each using one hawser, is referred to as a _____.   | tandem tow  | Honolulu tow   | <b>breasted tug tow</b>   | tandem tug tow   |              |
| 1347 | Towlines should be inspected for chafing where the towline _____.   | passes over the stern of the towing vessel            | passes through chocks  | is attached to the disabled vessel  | <b>All of the above</b>  |              |
| 1348 | Transverse frames are more widely spaced on a ship that is designed with the _____.   | centerline system of framing                          | isometric system of framing  | <b>longitudinal system of framing</b>   | transverse system of framing   |              |

| ID # | Question   | Choice A                                     | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|--|---|--|--|--------------|
| 1349 | Tripping defects in anchors frequently occur in _____.   | deep water                                   | shallow water   | stiff soils  | <b>soft soils</b>  |              |
| 1350 | Tugs sometimes shackle a length of chain in the towline in order to _____.   | take the wear should the towline drag bottom | assure that if the towline is overstressed it will part close to the bridle | prevent the towline from whipping should it part     | <b>put spring in the towline</b>                               |              |
| 1351 | Twenty-five hundred (2500) tons of iron ore with a stowage factor of 17 is stowed in a cargo hold. The dimensions of the hold are 55 feet long and 45 feet wide and 35 feet high. What is the height of the center of gravity of the ore above the bottom of the hold? | 7.8 feet                                     | <b>8.6 feet</b>   | 17.1 feet  | 34.6 feet  |              |
| 1352 | Two falls are supporting a 1.5 ton load. The port fall is at an angle of 40° from the vertical. The starboard fall is at an angle of 70° from the vertical. What is the stress on each fall?   | <b>Port 1.5 tons, starboard 1.0 tons</b>     | Port 1.5 tons, starboard 1.5 tons   | Port 1.7 tons, starboard 1.3 tons                    | Port 1.7 tons, starboard 2.0 tons                              |              |
| 1353 | Two mooring lines may be placed on the same bollard and either one cast off first if _____.  | <b>the eye of the second line is dipped</b>  | the mooring lines are doubled   | the bollard has two horns                            | one of the lines is a breast line                              |              |
| 1354 | Two vessels are abreast of each other and passing port to port in a confined waterway. What should you expect as your bow approaches the screws of the other vessel?   | Your speed will significantly increase.      | Your draft will significantly decrease.                                     | <b>Your bow will sheer towards the other vessel.</b> | Your bow will sheer away from the other vessel.                |              |
| 1355 | U.S. Customs, upon boarding a vessel desiring entry into a U.S. port, would inspect which document?  | Cargo Manifest                               | Certified Crew List   | Stores List  | <b>All of the above</b>  |              |
| 1356 | Ullage measurements are taken from the top of the liquid to _____.   | the base of the expansion trunk              | the base of the ullage port   | a line scribed within the ullage port                | <b>an above-deck datum, usually the top of the ullage hole</b> |              |
| 1357 | Ultrasonic testing is used to determine the thickness of a vessel's shell plating and to _____.  | provide tail shaft clearances                | <b>test welds for subsurface defects</b>                                    | check the wear of the rudder carrier bearing         | test the links of the anchor cables while being ranged         |              |
| 1358 | Uncleared crew curios remaining on board during a domestic coastwise voyage after returning from foreign should be _____.  | listed in the Official Logbook               | cleared prior to the next foreign voyage                                    | <b>noted in the Traveling Curio Manifest</b>         | retained under locked security by the owner                    |              |
| 1359 | Uncoiling manila line improperly can result in a(n) _____.   | number of fishhooks                          | <b>kink in the line</b>   | 50% loss of efficiency of the line                   | increase in deterioration of the line                          |              |
| 1360 | Under defense plans, operation of electronic aids may be temporarily suspended with _____.   | one day's notice                             | <b>no notice</b>  | thirty (30) day's notice                             | a week's notice  |              |

| ID # | Question   | Choice A                             | Choice B                                 | Choice C                              | Choice D                       | Illustration |
|------|--|--------------------------------------|--|---------------------------------------|--------------------------------|--------------|
| 1361 | Under defense plans, operation of electronic aids may be temporarily suspended with _____.   | thirty (30) day's notice             | a week's notice                          | one day's notice                      | <b>no notice</b>               |              |
| 1362 | Under defense plans, operation of electronic aids to navigation may be temporarily suspended with _____.   | one day's notice                     | thirty (30) days notice                  | <b>no notice</b>                      | a week's notice                |              |
| 1363 | Under identical load conditions, nylon, when compared with natural fiber line, will stretch _____.   | less and have less strength          | more and have less strength              | <b>more and have greater strength</b> | less and have greater strength |              |
| 1364 | Under Naval Control of Shipping who is responsible for routing and diverting ships and convoys?  | The Maritime Defense Zone Sector     | <b>The Operational Control Authority</b> | The National Shipping Authority       | Any Navy Command               |              |
| 1365 | Under normal operating conditions aboard a ship, who has the overall responsibility in maintaining the Oil Record Book?  | Chief Engineer                       | First Assistant Engineer                 | <b>Master</b>                         | Chief Mate                     |              |
| 1366 | Under normal weather and sea conditions when securing a stack of containers with non-locking fittings, lashings are required when the tier exceeds what height?                                      | <b>Lashings are always required</b>  | One container                            | Two containers                        | Three containers               |              |
| 1367 | Under normal weather and sea conditions when securing a stack of containers with twist locks, lashings are required when the tier exceeds what height?   | Lashings are always required         | One container                            | <b>Two containers</b>                 | Three containers               |              |
| 1368 | Under the Carriage of Goods by Sea Act of 1936, a vessel will be liable for damage to a cargo when the damage arises from _____.   | <b>unseaworthiness when sailing</b>  | insufficient packing                     | quarantine delays                     | mismanagement of the vessel    |              |
| 1369 | Under the Carriage of Goods by Sea Act of 1936, a vessel will be liable for damage to a cargo when the damage arises out of _____.   | delays due to seizure of the vessel  | fire caused by fault of the carrier      | strikes or lockouts                   | <b>improper stowage</b>        |              |
| 1370 | Under the Carriage of Goods by Sea Act of 1936, a vessel will be liable for damage to cargo when the damage arises from _____.   | an act of war                        | <b>lack of ventilation in transit</b>    | perils of the sea                     | an error in navigation         |              |
| 1371 | Under the Carriage of Goods by Sea Act of 1936, a vessel will be liable for damage to cargo when the damage arises out of _____.   | poor stowage of cargo in a container | fire caused by lightning                 | <b>overloading</b>                    | inherent vice                  |              |
| 1372 | Under the federal regulations, what minimum level of Blood Alcohol Content (BAC) constitutes a violation of the laws prohibiting Boating Under the Influence of Alcohol (BUI) on commercial vessels? | .18% BAC                             | .10% BAC                                 | .06% BAC                              | <b>.04% BAC</b>                |              |
| 1373 | Under the forces of its own weight, the suspended length of line will fall into a shape known as a _____.  | polygon                              | holding arc                              | <b>catenary curve</b>                 | parabolic curve                |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|---|---|---|--|--------------|
| 1374 | Under title 46 of the United States Code, the person in charge of a documented vessel who fails to report a complaint of a sexual offense may be _____.            | <b>fined up to \$5,000</b>  | imprisoned for up to one year   | charged with accessory to sexual assault  | All of the above   |              |
| 1375 | Under U.S. law, what is the penalty for assaulting the Master?   | Fine of not more than \$1000  | Fine of not more than \$500 and/or imprisonment for not more than 1 year      | <b>Imprisonment for not more than 2 years</b>   | Revocation of the Merchant Mariner's Document (and license if applicable)                  |              |
| 1376 | Under which condition is a tug likely to be tripped?   | When the tow "jumps" on the line  | While making up to tow a large oil rig  | <b>When the towing hawser leads forward of the quarter</b>  | When the tug exerts maximum bollard pull with the tow close astern                         |              |
| 1377 | Unless extremely flexible wire rope is used, the sheave diameter should always be as large as possible, but should never be less than _____.                       | <b>20 times the rope diameter</b>   | 10 times the rope diameter  | 2 times the rope diameter   | the rope diameter  |              |
| 1378 | Upon completion of a voyage, the official logbook shall be filed with the _____.   | nearest Regional Exam Center (REC)  | <b>the Officer in Charge, Marine Inspection (OCMI)</b>                        | Captain of the Port (COTP)  | None of the above  |              |
| 1379 | Upon receipt of a distress message, a merchant vessel is bound to proceed to the scene of the distress. Under which of the following cases would this NOT be true? | The vessel would arrive at the distress scene more than 36 hours after the receipt of the initial distress message. | There are vessels closer to the distress scene that are proceeding to assist. | <b>The Master of the vessel in distress has requisitioned another vessel, and that vessel has accepted the requisition.</b> | You are on a tank vessel and the distress involves a major fire on board the other vessel. |              |
| 1380 | Using a safety factor of 6, determine the safe working load of a line with a breaking strain of 30,000 pounds.   | 4,000 lbs.  | <b>5,000 lbs.</b>   | 20,000 lbs.   | 100,000 lbs.   |              |
| 1381 | Using a safety factor of 6, determine the safe working load of manila line with a breaking stress of 8 tons.   | 0.75 tons   | 1.25 tons   | <b>1.33 tons</b>  | 8.00 tons  |              |
| 1382 | Using a safety factor of five, determine the safe working load of a line with a breaking strain of 20,000 pounds.  | <b>4,000</b>  | 5,000   | 20,000  | 100,000  |              |
| 1383 | Using a safety factor of five, determine what is the safe working load for 3-1/2 inch manila line with a breaking stress of 4.9 tons.                              | 0.82 ton  | <b>0.98 ton</b>   | 2.45 tons   | 12.25 tons   |              |
| 1384 | Using a scope of 5, determine how many feet of cable you should put out to anchor in 5 fathoms of water.   | 100 feet  | <b>150 feet</b>   | 200 feet  | 250 feet   |              |
| 1385 | Using a scope of 6, determine how many feet of anchor cable you should put out to anchor in 12 feet (3.7 meters) of water.   | 2 feet (0.6 meters)   | 18 feet (5.5 meters)  | 48 feet (14.6 meters)   | <b>72 feet (21.9 meters)</b>   |              |

| ID # | Question   | Choice A            | Choice B            | Choice C                     | Choice D              | Illustration |
|------|--|---------------------|---------------------|------------------------------|-----------------------|--------------|
| 1386 | Using a scope of 6, how much cable would have to be used in order to anchor in 24 feet of water?   | 4 feet              | 18 feet             | 30 feet                      | <b>144 feet</b>       |              |
| 1387 | Using a scope of five, determine how many feet of chain you should put out to anchor in 12 fathoms of water.   | 60 feet (18 meters) | 72 feet (22 meters) | <b>360 feet (110 meters)</b> | 450 feet (137 meters) |              |
| 1388 | Using a scope of five, determine how many shots of chain you should put out to anchor in 5 fathoms of water?   | 1                   | <b>2</b>            | 3                            | 5                     |              |
| 1389 | Using the available references, determine the dew point when the dry bulb temperature is 74°F (23°C) and the wet bulb temperature is 60°F (16°C).                      | 14°F                | 20°F                | 28°F                         | <b>50°F</b>           |              |
| 1390 | Using the available references, if the dry bulb temperature is 55°F (13°C) and the wet bulb is 50°F (10°C), what is the relative humidity?                             | 55%                 | <b>70%</b>          | 75%                          | 82%                   |              |
| 1391 | Using the available references, if the dry bulb temperature is 58°, and the wet bulb temperature is 53°, what is the relative humidity in a cargo hold?                | 56%                 | 61%                 | 66%                          | <b>72%</b>            |              |
| 1392 | Using the available references, if the dry bulb temperature is 68°, and the wet bulb temperature is 65°, what is the relative humidity in a cargo hold?                | 66%                 | 74%                 | <b>85%</b>                   | 90%                   |              |
| 1393 | Using the available references, if the dry bulb temperature is 76° and the wet bulb temperature is 59°, what is the relative humidity in a cargo hold?                 | <b>35%</b>          | 47%                 | 76%                          | 79%                   |              |
| 1394 | Using the available references, if the dry bulb temperature is 76°, and the wet bulb temperature is 58°, what is the relative humidity in a cargo hold?                | <b>31%</b>          | 47%                 | 61%                          | 76%                   |              |
| 1395 | Using the available references, if the dry bulb temperature is 77° and the wet bulb temperature is 69°, what is the relative humidity in a cargo hold?                 | <b>67%</b>          | 70%                 | 77%                          | 81%                   |              |
| 1396 | Using the available references, if the dry bulb temperature is 80°F (27°C) and the wet bulb temperature is 70°F (21°C), what is the relative humidity in a cargo hold? | 45%                 | 52%                 | <b>61%</b>                   | 65%                   |              |
| 1397 | Using the available references, if the dry bulb temperature is 84°, and the wet bulb temperature is 81°, what is the relative humidity in a cargo hold?                | 71%                 | 79%                 | 81%                          | <b>88%</b>            |              |

| ID # | Question  | Choice A   | Choice B                                  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 1398 | Using the available references, if the dry bulb temperature is 85°, and the wet bulb temperature is 73°, what is the relative humidity in a cargo hold? | 42%  | <b>56%</b>                                | 67%  | 85%   |              |
| 1399 | Using the available references, if the dry bulb temperature is 91°, and the wet bulb temperature is 87°, what is the relative humidity in a cargo hold? | 79%  | <b>85%</b>                                | 91%  | 98%   |              |
| 1400 | Using the available references, if the dry bulb temperature is 92°, and the wet bulb temperature is 85°, what is the relative humidity in a cargo hold? | <b>75%</b>   | 81%                                       | 84%  | 88%   |              |
| 1401 | Using the available references, if the dry bulb temperature is 98°, and the wet bulb temperature is 87°, what is the relative humidity in a cargo hold? | 87%  | 84%                                       | 79%  | <b>64%</b>  |              |
| 1402 | Usually the most gentle way of riding out a severe storm on a larger vessel is _____.   | head on at slow speeds   | hove to                                   | <b>running before the seas</b>   | to rig a sea anchor   |              |
| 1403 | Vertical structural members attached to the floors that add strength to the floors are called _____.  | boss plates  | buckler plates                            | <b>stiffeners</b>  | breast hooks  |              |
| 1404 | Wages due a seaman may be attached by the court for the _____.  | payment of any fines imposed by the court  | payment of back taxes to the IRS          | <b>support of a spouse</b>   | All of the above  |              |
| 1405 | Wages due a seaman may be attached by the court for the _____.  | payment of monthly bills   | payment of creditors                      | <b>support of a minor child</b>  | All of the above  |              |
| 1406 | Wale shores would be used when dry docking a vessel with _____.   | tumble home  | <b>excessive deadrise</b>                 | excessive trim   | a list  |              |
| 1407 | Water may boil up around the stern of a vessel in a channel due to _____.   | slack water when upbound   | <b>shallow water</b>                      | a cross current  | a head current  |              |
| 1408 | Weight concentration in which area will cause a vessel's bottom to be subjected to tension stresses?  | Aft  | <b>Amidships</b>                          | At both ends   | Forward   |              |
| 1409 | What accident situation is considered a Serious Marine Incident?  | An injury to a crewmember that renders that person unfit to continue working on the vessel | Damage to property in excess of \$100,000 | A discharge of 10,000 gallons or more of oil into navigable waters of the U.S. | <b>All of the above</b>   |              |
| 1410 | What affect does shallow water have on a vessel's stopping distance?  | The stopping distance is shorter.  | <b>The stopping distance is longer.</b>   | There is no difference in the stopping distance.                               | The propeller is more effective when going astern in shallow water. |              |
| 1411 | What are reef points used for?  | <b>Reduce the area of a sail</b>   | Keep the sail taut in light airs          | Reduce the draft if the boat runs aground                                      | Increase the strength of the mast                                   |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D  | Illustration  |
|------|--|---|---|--|---|---------------|
| 1412 | What best describes an anchor buoy?  | A black ball that is hoisted when the ship anchors                  | <b>A buoy attached to the anchor</b>                                | A buoy attached to the scope of an anchor chain                        | A mark of the number of fathoms in an anchor chain                                      |               |
| 1413 | What characterizes a Ro-Ro vessel?   | May carry up to 24 passengers                                       | <b>High freeboard and sail area</b>                                 | Long port stays required for cargo securing                            | Lightweight securing equipment trailers   |               |
| 1414 | What could be used as fairleads on a towed vessel?   | Chocks  | Double bitts  | Roller chocks  | <b>All of the above</b>   |               |
| 1415 | What describes a tandem crane lift?  | Single crane hoisting 30 tons                                       | Two cranes on a single pedestal hoisting 60 tons                    | <b>Two sets of twin cranes hoisting 120 tons</b>                       | All of the above  |               |
| 1416 | What describes a twin crane lift?  | Single crane hoisting 30 tons                                       | <b>Two cranes on a single pedestal hoisting 60 tons</b>             | Two sets of twin cranes hoisting 120 tons                              | All of the above  |               |
| 1417 | What descriptive term indicates that the dimension is measured from the inner face of the shell or deck plating? | <b>Molded</b>   | Register  | Tonnage  | Effective   |               |
| 1418 | What does "end for end" mean in regard to a towing hawser?   | To take the kinks out of the hawser                                 | To fake it down in figure eights                                    | To increase the catenary   | <b>To swap ends of the hawser to minimize wear</b>                                      |               |
| 1419 | What does "in step" refer to in regards to towing?   | The towed vessel follows exactly in the wake of the towing vessel.  | There is no catenary in the towing hawser.                          | When turning, both the towed and towing vessels turn at the same time. | <b>Both the towed and towing vessels reach a wave crest or trough at the same time.</b> |               |
| 1420 | What does "level-luffing" accomplish during crane operations?  | It prevents the load from swinging when the boom level is adjusted. | Less power is needed when topping the boom with a load on the hook. | It maintains the height of the load above the deck.                    | <b>All of the above</b>   |               |
| 1421 | What does a jib refer to on a crane?   | <b>Boom</b>   | Topping lift  | Control cab  | Liftline  |               |
| 1422 | What does a Visaed Alien Crew List which is made and submitted to the U.S. Consul for visa show?                 | All aliens aboard   | All crew members  | <b>Nonresident aliens aboard</b>                                       | Registered aliens aboard  |               |
| 1423 | What does item "A" refer to in this illustration of a 30-ton pedestal crane?                                     | Boom luffing falls  | <b>Cargo hoist falls</b>  | Remote block tagline system  | Slewing cable   | <b>D045DG</b> |
| 1424 | What does item "C" refer to in this illustration of a 30-ton pedestal crane?                                     | Equalizing beam   | Hoist fall spreader   | <b>Rider block</b>   | Block/hook assembly   | <b>D045DG</b> |
| 1425 | What does item "D" refer to in this illustration of a 30-ton pedestal crane?                                     | Heel block  | Gin block   | Rider block  | <b>Hook block</b>   | <b>D045DG</b> |
| 1426 | What does item "E" refer to in this illustration of a 30-ton pedestal crane?                                     | <b>Tagline</b>  | Electric cable  | Cargo snaking wire   | Hook release cable  | <b>D045DG</b> |
| 1427 | What does item "G" refer to in this illustration of a 30-ton pedestal crane?                                     | Mast  | Pillar  | <b>Turntable</b>   | Pedestal  | <b>D045DG</b> |



| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration  |
|------|---|--|---|--|---|---------------|
| 1428 | What does item "K" refer to in this illustration of a 30-ton pedestal crane?                            | Manual slewing cables  | <b>Rider block taglines</b>   | Jib luffing cables   | Cargo snaking cables  | <b>D045DG</b> |
| 1429 | What does the helm command "shift the rudder" mean?   | <b>Put the rudder over to the opposite side, the same number of degrees it is now.</b> | Put the rudder amidships and hold the heading steady as she goes.             | Shift the rudder control to the alternate steering method.   | Stop the swing of the ship.   |               |
| 1430 | What does the line labeled "MS" denote on the Great Lakes load line model shown?                        | Mean sea level   | Midseason   | Maximum submergence  | <b>Midsummer</b>  | <b>D031DG</b> |
| 1431 | What does the proof test load of an anchor chain demonstrate?   | Breaking strength of the chain   | <b>Strength of the chain to a specified limit</b>                             | Adequate holding power for new bottom conditions   | Safe working load of the chain  |               |
| 1432 | What does the term "end-for-end" refer to in regard to a wire towing hawser?                            | Cutting off the bitter and towing ends of the wire rope                                | Splicing two wire ropes together  | <b>Removing the wire rope from the drum and reversing it so that the towing end becomes the bitter end</b> | Removing the wire rope from the drum and turning it over so that the wire bends in the opposite direction when rolled on a drum |               |
| 1433 | What equipment is customarily used when seamen are working on a stage rigged over the side of a vessel? | Jacob's ladder   | Manropes  | Heaving lines  | <b>All of the above</b>   |               |
| 1434 | What equipment is NOT used to protect a towing hawser?  | Hawser boards and chafing gear   | <b>Halyards and snaphooks</b>   | Seizing wire, rope yarn and marline  | Norman pins and tow spans   |               |
| 1435 | What form of ice is of land origin?   | Shuga  | Floe  | Spicule  | <b>Bergy bit</b>  |               |
| 1436 | What imminent danger results from tripping?   | The barge(s) collide with the stern  | <b>Capsizing your tug</b>   | Your tug being pulled backwards by your tow  | The stern of the tug submerges causing flooding into engine room  |               |
| 1437 | What is a characteristic of all centrifugal cargo pumps?  | They are self-priming.   | <b>Decreasing the speed of rotation will decrease the discharge pressure.</b> | Opening the discharge valve wider will increase the discharge pressure.                                    | All of the above  |               |
| 1438 | What is a cofferdam?  | Tube fitted to an ullage hole  | Area the product is loaded into   | <b>Void or empty space separating two tanks</b>  | Opening in the deck used for cleaning a tank  |               |
| 1439 | What is a correct reply to a pilot's request, "How's your head"?  | "Steady"   | "Checked"   | <b>"Passing 200°"</b>  | "Eased to 10° rudder"   |               |
| 1440 | What is a CORRECT reply to a pilot's request, "How's your head"?  | "Steady"   | "Eased to 10° rudder"   | "Checked"  | <b>"Passing 50°"</b>  |               |
| 1441 | What is a proper size block to use with a 3-inch circumference Manila line?                             | At least a 12-inch sheave  | <b>9-inch cheek, 6-inch sheave</b>  | 8-inch cheek, any size sheave  | 6-inch cheek, 4-inch sheave   |               |
| 1442 | What is a solid at ambient temperature?   | Aniline  | Formic acid   | Methyl chloride  | <b>Napthalene</b>   |               |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|---|--|---|--|--------------|
| 1443 | What is a spill pipe?  | A drainage pipe that carries rain or spray from an upper deck to a lower deck       | <b>A pipe under the anchor windlass leading to the chain locker</b>                            | A chute, usually over the stern, to lead dumped garbage clear of the hull | An opening in the deck leading outside the hull  |              |
| 1444 | What is a step in attaching a poured metal socket to a wire rope?  | <b>Etch the wire with acid.</b>   | Install a wire seizing on the wire that will be inside the socket.                             | Ensure the fiber core is well lubricated.                                 | Pour molten babbitt metal into the socket.   |              |
| 1445 | What is a wet cargo?   | A liquid cargo carried in the deep tanks  | <b>A canned or bottled liquid such as beer</b>   | A cargo that contains hygroscopic moisture                                | A cargo particularly susceptible to damage by moisture                                 |              |
| 1446 | What is an advantage in the use of a towing hook?  | To prevent the tug from becoming tripped  | To quickly connect or release a tow, especially a sinking tow                                  | To facilitate berthing maneuvers  | <b>All of the above</b>  |              |
| 1447 | What is an advantage of a gate valve over a butterfly valve?   | <b>Less frequent maintenance</b>  | Faster operation   | Cheaper   | More compact   |              |
| 1448 | What is an advantage of having wire rope with a fiber core over that of a wire rope of the same size with a wire core? | Fiber core rope offers greater strength.  | <b>Fiber core rope offers greater flexibility.</b>   | Fiber core rope can be used at higher operating temperatures.             | Fiber core rope is the only type authorized for cargo runners.                         |              |
| 1449 | What is an advantage of the 6X19 class of wire rope over the 6X37 class of wire rope of the same diameter?             | Greater holding power   | Better for towing  | More resistance to elongation   | <b>More resistance to corrosion</b>  |              |
| 1450 | What is an advantage of the 6X37 class of wire rope over the 6X19 class of wire rope of the same diameter?             | <b>Greater flexibility</b>  | More resistance to corrosion   | More resistance to elongation   | Lower weight per foot  |              |
| 1451 | What is an example of a fundamental objective of cargo stowage?  | Load so the trim does not exceed 3 feet by the stern.                               | Make maximum use of existing dunnage.  | Separate wet and dry cargoes into separate holds.                         | <b>Prevent overcarriage by block stowage.</b>  |              |
| 1452 | What is an example of the term "Restraint of Rulers, Princes, or Peoples" in a marine insurance policy?                | <b>A prohibition from loading a cargo from a country's government interference.</b> | Arrest of a vessel by legal authorities to satisfy claims through exercise of a maritime lien. | Damage caused by riot of the population of a port.                        | Losses caused by fines from polluting the harbor after malfunction of a piping system. |              |
| 1453 | What is an explosion hazard when exposed to flame?   | Formic acid   | Nitrous oxide  | Tallow  | <b>Toluene</b>   |              |
| 1454 | What is another description for a tandem crane lift?   | Single crane hoisting 30 tons   | Twin cranes hoisting 60 tons   | <b>Quad lift hoisting 120 tons</b>  | All of the above   |              |
| 1455 | What is another name for the boom of a crane?  | Lift  | Rider  | <b>Jib</b>  | All of the above   |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|--|---|---|---|--------------|
| 1456 | What is considered a Serious Marine Incident?  | an allision that results in \$500 damage to a boat dock    | <b>an injury to a crewmember, passenger, or other person which requires professional medical treatment beyond first aid</b> | grounding of a vessel on a sandbar that does not result in injuries and/or any damage to the vessel | None of the above   |              |
| 1457 | What is LEAST likely to be used to strip a cargo tank?   | <b>Centrifugal pump</b>                                    | Eductor   | Rotary pump   | Reciprocating pump  |              |
| 1458 | What is likely to occur when you are surging synthetic mooring lines on the gypsyhead during mooring operations? | The lines may jam and then jump off the gypsyhead.         | If there is sudden strain on the line, the man tending the line may be pulled into the gypsyhead.                           | The lines' surging may cause the vessel to surge.   | <b>The heat generated may cause the lines to temporarily fuse to the gypsyhead.</b> |              |
| 1459 | What is meant by "spotting the boom"?  | Lowering it into a cradle                                  | <b>Placing it in a desired position</b>   | Spotting it with wash primer and red lead   | Two-blocking it   |              |
| 1460 | What is meant by "thieving" a petroleum cargo?   | Siphoning off a few barrels of petroleum for shipboard use | <b>Determining the amount of water (if any) in each cargo tank</b>  | Adjusting the cargo figures to coincide with the draft  | Reducing the gross cargo calculations to net amounts                                |              |
| 1461 | What is meant by the term "broaching to"?  | Having the vessel head toward the sea                      | Running before a sea  | <b>Being turned broadside to the sea</b>  | Having the vessel filled with water   |              |
| 1462 | What is meant by the term "level-luffing" a crane?   | <b>Luffing while the load remains at a constant height</b> | Maintaining the boom at a constant height   | Slewing the boom left or right in a level plane   | None of the above   |              |
| 1463 | What is meant by the term "luffing the boom" of a crane?   | Stopping the boom  | <b>Topping or lowering the boom</b>   | Moving the boom left or right   | All of the above  |              |
| 1464 | What is meant by the term "topping the boom"?  | Lowering the boom  | <b>Raising the boom</b>   | Spotting the boom over the deck   | Swinging the boom athwartships  |              |
| 1465 | What is meant by the term "two-blocked"?   | <b>The bottom block touches the top block.</b>             | The line has jumped the sheaves.  | There are turns in the fall.  | You have two blocks.  |              |
| 1466 | What is meant by veering the anchor chain?   | Bringing the anchor to short stay                          | Heaving in all the chain  | Locking the windlass to prevent more chain from running out   | <b>Paying out more chain</b>  |              |
| 1467 | What is normally used to pass a mooring line to a dock?  | Distance line  | Gantline  | <b>Heaving line</b>   | Tag line  |              |
| 1468 | What is NOT a basic shiphandling rule for navigating in ice concentrations on the Great Lakes?                   | Keep moving - even very slowly, but keep moving.           | Work with the ice movement, not against.  | <b>Transit ice along pressure ridges when possible.</b>   | Excessive speed means ice damage.   |              |
| 1469 | What is NOT a form used by ice support services to disseminate information?                                      | Ice Analyses   | Ice Forecasts   | Ice Outlooks  | <b>Ice Bulletins</b>  |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|---|---|--|---|--------------|
| 1470 | What is NOT a precaution to be taken when topping off?   | Reduce the loading rate.  | <b>Notify the engine room of the procedure.</b>   | Maintain communications with the dock man.   | Give the operation your undivided attention.                          |              |
| 1471 | What is NOT a primary function of the freight forwarder?   | To book cargo space in advance                                      | To execute, approve, and submit all shipping documents necessary to the particular shipment | <b>To provide financial assistance to the shipper when required</b>                              | Clear the goods through customs                                       |              |
| 1472 | What is NOT a problem when carrying coal?  | <b>The requirement for through-ventilation</b>                      | The corrosion some types of coal will cause to the ship                                     | Spontaneous heating  | Generation of methane gas   |              |
| 1473 | What is NOT a requirement for a salvage claim?   | The property saved must be "maritime property."                     | <b>The salvors must save or attempt to save any life in peril.</b>                          | The salvage service must be voluntary.   | The property must be in peril.  |              |
| 1474 | What is NOT a requirement for the preparation of used, gasoline-propelled cars if they are to be carried as ordinary cargo and not as hazardous cargo? | The engine must be run until it dies from lack of fuel.             | <b>The fuel tank must be inerted with CO2.</b>  | The ignition key may not be in the ignition.   | The vehicle must be inspected for fuel leaks.                         |              |
| 1475 | What is NOT a requirement for the safe and effective use of a crude oil washing system?  | Strip all tanks and remove the bottom residue.                      | Use an inert gas system while washing tanks.  | <b>Use portable washing machines to reach areas obscured by structural members in the tanks.</b> | Decant one meter from the source tank for the tank cleaning machines. |              |
| 1476 | What is NOT a securing system used on a containership?   | Lashing system  | <b>Stacking system</b>  | Locking system   | Buttress system   |              |
| 1477 | What is NOT accepted as the required shipping papers on a manned and loaded tank barge?  | Bill of Lading  | Manifest  | Shipping document  | <b>Logbook entry</b>  |              |
| 1478 | What is NOT an advantage of a wire towing hawser?  | Easy to handle when properly spooled on the drum of a towing winch. | <b>Has more spring and shock resistance than synthetic.</b>                                 | Can be used to tow heavier loads because of its smaller diameter and more manageable size.       | Subject to less deterioration than synthetic if properly maintained.  |              |
| 1479 | What is NOT an advantage of centrifugal pumps over reciprocating pumps?  | They pump more cargo in less time.                                  | They are smaller for equivalent pumping ability.  | They are less expensive.   | <b>They require priming for stripping.</b>                            |              |
| 1480 | What is NOT an advantage of containership operations over conventional break-bulk operations?  | <b>Flexibility of operation</b>                                     | Greater operational safety  | Lower stevedoring costs  | Reduction of cargo damage   |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|--|---|--|--|--------------|
| 1481 | What is NOT an advantage of double bottom ships?   | The tank top forms a second skin for the vessel.                                     | The center of gravity of a loaded bulk cargo ship may be raised to produce a more comfortable roll. | The floors and longitudinals distribute the upward push of the water on the ship's bottom. | <b>They are less expensive to construct because of increased access space.</b> |              |
| 1482 | What is NOT an advantage of filler cargo?  | <b>Overcarriage is reduced or eliminated.</b>  | Dunnage costs are reduced.  | Voids in the cargo stow are filled.  | The hold space has maximum utilization.  |              |
| 1483 | What is NOT an advantage of ship construction methods using welded butt joints in the shell plating?   | Keeps practically 100% of tensile strength at the joints                             | Reduces frictional resistance   | <b>Reduces plate stress</b>  | Reduces weight   |              |
| 1484 | What is NOT an indication that pack ice may be nearby?   | <b>The presence of icebergs</b>  | Ice blink   | Absence of wave motion   | Sighting a walrus in the Arctic  |              |
| 1485 | What is NOT characteristic of the conditions which would be experienced by a vessel located southeast of an approaching eastward-moving storm center on the Great Lakes? | <b>Falling barometer</b>   | A westerly wind   | Lowering clouds  | Rain or snow   |              |
| 1486 | What is NOT considered "jewelry"?  | Steamboat ratchets   | Manila lines  | <b>Buttons</b>   | Shackles   |              |
| 1487 | What is NOT considered maritime property in a salvage claim?   | <b>buoys</b>   | semi-submerged shipwreck  | sea plane  | cargo  |              |
| 1488 | What is NOT considered maritime property in a salvage claim?   | tug boat   | rafts   | <b>light-vessels</b>   | cargo  |              |
| 1489 | What is NOT required as special safety equipment on a tankship carrying hazardous cargoes in bulk?   | Shower and eyewash fountain  | Equipment to lift an injured person from a pumproom   | <b>Two portable vapor detectors suitable for the cargoes carried</b>                       | A safety locker adjacent to the emergency shutdown station                     |              |
| 1490 | What is NOT required on an uninspected towing vessel?  | Certificate of Documentation   | <b>Certificate of Inspection</b>  | Operators Merchant Marine license  | FCC Station License  |              |
| 1491 | What is NOT required to be approved or certified by the U.S. Coast Guard before being used on inspected vessels?   | Lifesaving equipment that is in excess of the regulatory minimum                     | Ship's stores that are Class A poisons or Class A explosives  | <b>Steel plate used in hull construction</b>   | EPIRBs   |              |
| 1492 | What is NOT suitable for use in making up the towing rig for a heavy, long ocean tow?  | Chain  | <b>Ring</b>   | Solid thimble  | A fishplate  |              |
| 1493 | What is NOT surveyed at an annual load line survey?  | The overall structure and layout of the vessel for alterations to the superstructure | <b>The bilge pumping system</b>   | Main deck hatch covers   | Portholes and deadlights in the side plating                                   |              |
| 1494 | What is NOT true regarding a Lloyd's Open Form (LOF) Salvage Agreement?  | The agreement between vessels can be made via VHF                                    | If salvage is not successful, vessel owes salvor nothing  | There is a bonus to the salvage award if environmental casualty is averted                 | <b>The LOF is subject to the law of the country the two parties agree upon</b> |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|--|---|--|---|--------------|
| 1495 | What is required to be entered into the Official Logbook?  | <b>Opening a sideport at sea to renew a gasket</b>   | The annual required stripping and cleaning of the lifeboats         | The biennial weight test of the lifeboats and falls          | The drafts on entering port   |              |
| 1496 | What is required to be posted in the pilothouse of a vessel?   | Certificate of Inspection  | Officer's licenses  | Company Mission Statement                                    | <b>Muster List ("Station Bill")</b>   |              |
| 1497 | What is required to be posted in the pilothouse of a vessel?   | Official Crew List   | Company Mission Statement   | Certificate of Inspection                                    | <b>Maneuvering Characteristics</b>  |              |
| 1498 | What is required to be stenciled at the heel of a cargo boom?  | Maximum angle of elevation permitted   | Date of the last quadrennial test                                   | <b>Safe working load</b>                                     | Maximum load when doubled up  |              |
| 1499 | What is required to launch a boat stowed in a crescent davit?  | Hoist the boat clear of the cradle.  | Release the outboard part of the cradle.                            | Rig the tricing lines.                                       | <b>Crank the crescent out.</b>  |              |
| 1500 | What is the accepted standard for wire rope falls used in connection with the lifeboat gear?                       | Six by seven galvanized wire rope  | Six by twenty-four improved plow steel wire rope                    | Six by thirty-seven preformed fiber-core wire rope           | <b>Six by nineteen regular-lay filler wire rope</b>                                 |              |
| 1501 | What is the advantage of the tandem working arrangement of pedestal cranes when operating cargo?                   | The cranes enable the handling of heavy cargos without shoreside assistance                    | The cargo discharge can be accomplished with controlled pendulation | The cargo discharge can be performed in port or at anchor    | <b>All of the above</b>   |              |
| 1502 | What is the best guide for determining the proper scope of anchor chain to use for anchoring in normal conditions? | One shot of chain for every ten feet of water  | <b>One shot of chain for every fifteen feet of water</b>            | One shot of chain for every thirty feet of water             | One shot of chain for every ninety feet of water                                    |              |
| 1503 | What is the best splice for repairing a parted synthetic fiber mooring line?                                       | Liverpool splice   | Locking long splice   | Long splice  | <b>Short splice</b>   |              |
| 1504 | What is the breaking strain of steel wire rope with a 5/8" diameter?   | 1.0 tons   | 6.6 tons  | <b>9.6 tons</b>  | 15.6 tons   |              |
| 1505 | What is the chief hazard encountered when surging synthetic mooring lines on the gypsyhead during operations?      | If there is sudden strain, the man tending the line may be pulled into the gypsyhead.          | The lines may jam and then jump off the gypsyhead.                  | The lines' surging may cause the vessel to surge.            | <b>The heat generated may cause the lines to temporarily fuse to the gypsyhead.</b> |              |
| 1506 | What is the computed breaking strength of a 4-inch manila line?  | 5,280 lbs.   | 7,700 lbs.  | 12,200 lbs.  | <b>14,400 lbs.</b>  |              |
| 1507 | What is the difference between net tonnage and gross tonnage?  | <b>Net tonnage is the gross tonnage less certain deductions for machinery and other areas.</b> | Net tonnage is tonnage of cargo compared to tonnage of whole ship.  | Net tonnage is the net weight of the ship.                   | There is no difference.   |              |
| 1508 | What is the difference between net tonnage and gross tonnage?  | <b>Net tonnage is the gross tonnage less certain deductible spaces.</b>                        | Net tonnage is tonnage of cargo compared to tonnage of whole ship.  | Net tonnage is gross tonnage minus engine and bunker spaces. | Net tonnage is the net weight of the ship.  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C                                       | Choice D  | Illustration  |
|------|---|--|--|--|---|---------------|
| 1509 | What is the effect of releasing the towline in a tripping situation?  | <b>It disconnects the capsizing force and allows the tug to recover from its list.</b> | It frees the tug from its towing responsibilities.   | There is no effect other than relief.          | Yawing  |               |
| 1510 | What is the greatest danger of an overriding tow?   | Fouling of the towing hawser   | Loss of steering                                     | Tripping                                       | <b>Collision between the tow and the stern of the towing vessel</b> |               |
| 1511 | What is the main purpose of dunnage?  | To act as ballast for light vessels  | <b>To provide ventilation and drainage for cargo</b> | To secure the tarpaulins in place              | To support weakened bulkheads                                       |               |
| 1512 | What is the main reason to slush a wire rope?   | Keep the wire soft and manageable  | <b>Lubricate the inner wires and prevent wear</b>    | Prevent kinking                                | Prevent rotting   |               |
| 1513 | What is the meaning of a flag hoist consisting of the code letters "WM" (Whiskey Mike) when displayed by an icebreaker? | "I am going ahead; follow me."   | "You should stop your vessel instantly."             | <b>"Icebreaker support is now commencing."</b> | "Icebreaker support is finished."                                   |               |
| 1514 | What is the meaning of the term tare weight?  | Pounds of force necessary to damage a container  | Total weight of a container and contents             | <b>Weight of a container</b>                   | Weight of the contents of a container                               |               |
| 1515 | What is the mechanical advantage of a threefold purchase when rove to disadvantage and neglecting friction?             | 3  | 4  | 5  | <b>6</b>  |               |
| 1516 | What is the mechanical advantage of tackle number 1?  | 0.5  | <b>1.0</b>   | 1.5  | 2.0   | <b>D029DG</b> |
| 1517 | What is the mechanical advantage of tackle number 10?   | 4.0  | 4.5  | <b>5.0</b>                                     | 5.5   | <b>D029DG</b> |
| 1518 | What is the mechanical advantage of tackle number 11?   | 7.0  | <b>6.0</b>   | 5.5  | 5.0   | <b>D029DG</b> |
| 1519 | What is the mechanical advantage of tackle number 2?  | 0.5  | 1.0  | <b>2.0</b>                                     | 3.0   | <b>D029DG</b> |
| 1520 | What is the mechanical advantage of tackle number 3?  | 1  | 2  | <b>3</b>                                       | 4   | <b>D029DG</b> |
| 1521 | What is the mechanical advantage of tackle number 6?  | <b>6.0</b>   | 5.5  | 5.0  | 3.0   | <b>D029DG</b> |
| 1522 | What is the mechanical advantage of tackle number 7?  | 0.0  | 0.5  | 1.0  | <b>2.0</b>  | <b>D029DG</b> |
| 1523 | What is the mechanical advantage of tackle number 8?  | <b>3.0</b>   | 1.5  | 1.0  | 0.5   | <b>D029DG</b> |
| 1524 | What is the mechanical advantage of tackle number 9?  | 1  | 2  | 3  | <b>4</b>  | <b>D029DG</b> |
| 1525 | What is the mechanical advantage, neglecting friction, of tackle number 12?   | 3.0  | 5.5  | 6.0  | <b>7.0</b>  | <b>D029DG</b> |
| 1526 | What is the mechanical advantage, neglecting friction, of tackle number 4?  | 1  | 2  | 3  | <b>4</b>  | <b>D029DG</b> |



| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D  | Illustration |
|------|---|---|--|---|---|--------------|
| 1527 | What is the mechanical advantage, neglecting friction, of tackle number 5?                | 2.0   | 4.0  | <b>5.0</b>  | 5.5   | D029DG       |
| 1528 | What is the minimum size required before a vessel can be documented?                      | <b>5 net tons</b>   | 100 gross tons   | 26 feet length  | 65 feet length  |              |
| 1529 | What is the minimum size required before a vessel can be documented?                      | 26 feet; end-to-end over the deck excluding sheer   | 100 gross tons   | <b>5 net tons</b>   | 26 feet between perpendiculars  |              |
| 1530 | What is the minimum standard for making an eye splice in a wire to be used as cargo gear? | <b>Make three tucks with full strands, remove half the wires from each strand, and make two more tucks.</b> | Make four tucks in each strand, cut away every other strand, and make two more tucks with each remaining strand. | Make four tucks with each full strand.  | Make six tucks with each strand, removing a few wires from each strand as each additional tuck is made. |              |
| 1531 | What is the MOST irritating to the skin?  | Carbon disulfide  | Ethyl alcohol  | Isoprene  | <b>Oleum</b>  |              |
| 1532 | What is the name of tackle number 1?  | <b>Whip</b>   | One-fold purchase  | Gun tackle  | Runner  | D029DG       |
| 1533 | What is the name of tackle number 11?   | Three-two purchase  | <b>Double luff tackle</b>  | Gun tackle  | Topping lift  | D029DG       |
| 1534 | What is the name of tackle number 12?   | <b>Threefold purchase</b>   | Davit tackle   | Deck tackle   | Gin tackle  | D029DG       |
| 1535 | What is the name of tackle number 2?  | Whip  | Onefold purchase   | Single purchase   | <b>Gun tackle</b>   | D029DG       |
| 1536 | What is the name of tackle number 3?  | 1-2 purchase  | Gun tackle   | <b>Single luff tackle</b>   | Double whip   | D029DG       |
| 1537 | What is the name of tackle number 4?  | Double whip   | Luff tackle  | <b>Two-fold purchase</b>  | 2-2 tackle  | D029DG       |
| 1538 | What is the name of tackle number 5?  | 3-2 purchase  | <b>Double luff tackle</b>  | Two-fold purchase   | Four-fold whip  | D029DG       |
| 1539 | What is the name of tackle number 6?  | Triple purchase   | Clew garnet tackle   | Boat falls  | <b>Threefold purchase</b>   | D029DG       |
| 1540 | What is the name of tackle number 7?  | <b>Runner</b>   | Inverted whip  | Whip  | Single purchase   | D029DG       |
| 1541 | What is the name of tackle number 8?  | Parbuckle   | <b>Gun tackle</b>  | Single purchase   | Single luff tackle  | D029DG       |
| 1542 | What is the name of tackle number 9?  | Single purchase   | One-two tackle   | Double whip   | <b>Luff tackle</b>  | D029DG       |
| 1543 | What is the name of the mark indicated by the letter A?                                   | Winter North Atlantic load line   | Fresh Water load line  | <b>Deck line</b>  | Plimsoll line   | D003DG       |
| 1544 | What is the name of the mark indicated by the letter B in the diagram?                    | Timber summer load line   | <b>Tropical fresh water load line</b>  | Tropical load line  | Summer load line  | D003DG       |
| 1545 | What is the name of the mark indicated by the letter C?                                   | <b>Fresh water line</b>   | Tropical water line  | Summer water line   | Winter North Atlantic water line  | D003DG       |
| 1546 | What is the name of the mark indicated by the letter D?                                   | <b>Tropical load line</b>   | Summer load line   | Fresh load line   | Winter load line  | D003DG       |
| 1547 | What is the name of the mark indicated by the letter E?                                   | Fresh water line  | Winter water line  | Tropical water line   | <b>Summer water line</b>  | D003DG       |
| 1548 | What is the name of the mark indicated by the letter F?                                   | Fresh water load line   | Summer load line   | <b>Winter load line</b>   | Tropical load line  | D003DG       |
| 1549 | What is the penalty for desertion?  | Fine of not more than 2000 dollars and forfeiture of wages  | Imprisonment for not more than 2 years and/or a fine of not more than 2000 dollars                               | Revocation of Merchant Mariner's Document (and license if applicable) and forfeiture of wages due | <b>Forfeiture of money and property left on the vessel, and wages due</b>                               |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|--|--|--|--|--------------|
| 1550 | What is the penalty for willfully damaging cargo?   | <b>Forfeiture of wages equal to the value of the damage and, if ordered by the court, imprisonment for not more than 12 months</b> | Fine equal to the value of the damage plus a 1000 dollar penalty and/or imprisonment not to exceed 2 years | Fine not to exceed the value of the damage and/or imprisonment not to exceed 18 months                   | Revocation of Merchant Mariner's Document (and license if applicable), fine equal to the value of the damage or imprisonment for not more than 2 years |              |
| 1551 | What is the period of validity of a Cargo Ship Safety Equipment Certificate?                                | 72 months  | <b>60 months</b>   | 48 months  | 42 months  |              |
| 1552 | What is the period of validity of a Cargo Ship Safety Radio Certificate?                                    | 6 months   | 12 months  | 24 months  | <b>60 months</b>   |              |
| 1553 | What is the period of validity of a De-Rat certificate?   | Specific voyage  | <b>6 months</b>  | 1 year   | 2 years  |              |
| 1554 | What is the period of validity of a Safety Management Certificate?  | <b>60 months</b>   | 48 months  | 42 months  | 36 months  |              |
| 1555 | What is the period of validity of the SOLAS required Cargo Ship Safety Construction Certificate?            | 12 months  | 24 months  | 48 months  | <b>60 months</b>   |              |
| 1556 | What is the principal danger in attempting to swing a barge on a hawser in order to slow the barge's speed? | Dangerous wakes may result from the swinging barge and capsize the tug.  | The barge may swing too quickly and run over the tug.  | Free surface effect of liquid inside the barge may rupture the barge bulkheads if the turn is too quick. | <b>The barge may pass under the hawser and capsize the tug.</b>  |              |
| 1557 | What is the purpose of cant frames in steel vessels?  | To support the overhang of the stern   | <b>To provide strength to shell plating at the stern</b>   | To add strength to the deck beams which support the weather decks  | To support the plating of a cylindrical tank   |              |
| 1558 | What is the purpose of pressure-vacuum relief valves?   | Regulation of discharge pressure from cargo pumps  | Maintaining constant velocity in cargo lines   | Regulation of suction head on cargo pumps  | <b>Automatic regulation of pressure or vacuum in enclosed spaces</b>   |              |
| 1559 | What is the purpose of the equalizing beam aboard a crane vessel?   | It allows for rotation of the hook in the single mode.   | <b>It is required to "twin-up" 30-ton pedestal cranes.</b>   | It is used to pick up light loads.   | It is used to rigidly connect two cranes.  |              |
| 1560 | What is the purpose of the freeing ports on a vessel with solid bulwarks?                                   | <b>Allow water which may be shipped on deck to flow off rapidly</b>  | Permit easy jettisoning of deck cargo in an emergency  | Prevent the formation of any unusual stress concentration points   | Lighten the above deck weight caused by a solid bulwark  |              |
| 1561 | What is the purpose of the relief valve of a cargo pump?  | Provides for the removal of vapors   | Allows two or more tanks to be filled at the same time   | Provides for the emergency shutdown of the pump  | <b>Permits the return of cargo to the suction side of the pump</b>   |              |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|--|--|---|---|--------------|
| 1562 | What is the stowage factor of a commodity whose density is 15 pounds per cubic foot?   | 15   | 45   | 133   | <b>149</b>  |              |
| 1563 | What is the stress on the hauling part when lifting a 4,200 lbs. weight using a threefold purchase rove to advantage? (Allow 10 percent of the weight per sheave for friction.)    | 571.4  | 715.2  | <b>960.0</b>  | 1066.7  |              |
| 1564 | What is the stress on the hauling part when lifting a 4900 lbs. weight using a twofold purchase rove to least advantage? (Allow 10 percent of the weight per sheave for friction.) | 980 lbs.   | 1225 lbs.  | <b>1715 lbs.</b>  | 1837 lbs.   |              |
| 1565 | What is TRUE of pressure/vacuum valves?  | They are designed to provide for the flow of small volumes of tank atmospheres caused by thermal variations in a cargo tank. | They should operate in advance of the pressure/vacuum breakers.  | They should be kept in good working order by regular inspection and cleaning.                         | <b>All of the above</b>                                 |              |
| 1566 | What is used to power modern pedestal cranes?  | Steam  | Water  | <b>Hydraulics</b>   | All of the above  |              |
| 1567 | What is used to prevent accidental flooding of a double bottom or peak tanks in the event of a pipe rupture due to collision?  | Separate lines are provided for filling and pumping these tanks.   | Pipe lines must run vertically from the tank to a point above the margin line before turning fore or aft towards the pump. | All tanks must be served by the fewest possible number of pipes to reduce the possibility of rupture. | <b>Suction lines are fitted with a non-return valve</b> |              |
| 1568 | What is used to prevent twisting of a towing bridle?   | A bitt   | A bulkhead   | A V-spring  | <b>A fishplate</b>                                      |              |
| 1569 | What is used to prevent wear on towlines that bear on hard surfaces?   | <b>Chafing gear</b>  | Chocks   | Grease  | Boots   |              |
| 1570 | What is used when securing heavy vehicles aboard Ro-Ro vessels?  | Buckle or ratchet tensioner  | Webbing  | Manila rope   | <b>None of these</b>                                    |              |
| 1571 | What is used when securing light vehicles aboard Ro-Ro vessels?  | <b>Buckle or ratchet tensioner</b>   | Chain  | Wire  | Manila rope   |              |
| 1572 | What is used when securing light vehicles aboard Ro-Ro vessels?  | Chain lever or turnbuckle  | Chain  | Wire  | <b>None of these</b>                                    |              |
| 1573 | What is usually NOT required in preparing a hold for reception of a bulk grain cargo?  | Remove residue of previous cargo.  | Remove loose rust and scale.   | <b>Steam clean areas obstructed by structural members.</b>  | Spray or fumigate any insect colonies.                  |              |
| 1574 | What is/are the advantage(s) of cranes over conventional cargo booms?  | Cranes are able to pick up and drop loads over a greater spotting area   | Increased safety because the deck is clear of running and standing rigging   | Simplicity of operation of the crane by its operator  | <b>All of the above</b>                                 |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|--|---|---|--|--------------|
| 1575 | What is/are the advantage(s) of using web lashing on light vehicles aboard Ro-Ro vessels?                            | Good working life                                      | Light and easy to handle  | Flexible  | <b>All of the above</b>                                  |              |
| 1576 | What material may be substituted for zinc when making a poured metal socket ending to a wire rope?                   | Lead   | Babbitt   | Solder  | <b>Nothing</b>   |              |
| 1577 | What may NOT be used when securing heavy vehicles aboard Ro-Ro vessels?  | Chain lever  | Turnbuckle  | <b>Webbing</b>  | Chain  |              |
| 1578 | What may prevent a tug from tripping or capsizing when towing a large vessel?  | Surge lines  | <b>Norman Pins</b>  | Under riders  | Safety shackles  |              |
| 1579 | What minimum size manila line is required to hold a weight of 932 pounds, if you use a safety factor of six?         | 2.0"   | <b>2.5"</b>   | 3.0"  | 3.5"   |              |
| 1580 | What must be accurately determined to assess the potential for progressive flooding after a vessel has been damaged? | <b>The integrity of the water tight boundaries</b>     | The capacity of the water sprinkler systems                             | The operation of the machinery space bilge level alarms | All of the above   |              |
| 1581 | What part of the ground tackle is the most likely to develop fractures due to extensive anchor use?                  | Anchor shank   | Swivel  | <b>Jews' harp</b>                                       | Fluke  |              |
| 1582 | What produces the MOST dangerous vapors?   | <b>Anhydrous ammonia</b>                               | Camphor oil   | Methyl alcohol  | Pentane  |              |
| 1583 | What provides little or no indication that a vessel is dragging anchor?  | <b>Changing range to an object abeam</b>               | Drift lead with the line tending forward                                | The cable alternates between slack and heavy tension    | Changing bearing to a fixed distant object abeam         |              |
| 1584 | What provides little or no indication that a vessel is dragging anchor?  | Increasing radar range to a fixed object ahead         | <b>Drift lead with the line leading perpendicular to the centerline</b> | Vibrations felt by placing a hand on the anchor cable   | Changing bearings to distant fixed objects abeam         |              |
| 1585 | What provides the majority of strength to an aluminum-sided container?   | Corner fittings  | <b>Framework, primarily the corner posts</b>                            | Framework and siding acting as a girder                 | Aluminum side and end panels                             |              |
| 1586 | What purpose does a bridge fitting serve when lashing containers?  | Ties a container stack to the deck                     | Ties a container to the container below it                              | Restrains racking loads                                 | <b>Restrains the container against horizontal motion</b> |              |
| 1587 | What purpose does a tow hook serve?  | <b>To quickly connect or release the towing hawser</b> | To help pick up the towing hawser from the water                        | To prevent the towing hawser from fouling the propeller | To recover the towing hawser from a barge                |              |
| 1588 | What requires a Report of Marine Accident, Injury or Death?  | Collision with a bridge                                | Injury beyond first aid   | loss of life  | <b>All of the above</b>                                  |              |
| 1589 | What safety precautions must you take when maneuvering on a towing hook?   | The engines must be operated on the slow bell.         | <b>Clear the afterdeck and fantail of personnel.</b>                    | Lash the hook closed so it does not open accidentally.  | The towing winch engine must be running.                 |              |
| 1590 | What shape barge offers the least resistance in river towing?  | A square ended barge                                   | <b>Barges with raked shaped bows</b>                                    | Ship-shaped barges                                      | Hopper barges  |              |

| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|---|--|---|--|--------------|
| 1591 | What should be done after putting down the ramp on a Ro-Ro vessel, prior to loading or discharging cargo?                   | Turn on red cargo light.  | <b>Turn on ventilation for cargo holds.</b>                          | Call out the deck department for all hands.                         | None of the above  |              |
| 1592 | What should be done before energizing the cargo hold ventilation on a Ro-Ro vessel, prior to loading or discharging cargo?  | Call out the deck department for all hands.                               | Notify the boarding agent.   | <b>Notify the engine room.</b>                                      | All of the above   |              |
| 1593 | What should be done immediately after putting down the stern ramp on a Ro-Ro vessel, prior to loading or discharging cargo? | Turn on the red cargo light.  | Turn on pumproom ventilation.  | Call out the deck department for all hands.                         | <b>Raise/open the stern door.</b>  |              |
| 1594 | What should be given, as a minimum, to personnel who are involved in crane cargo handling?                                  | <b>Protective head gear, gloves, and steel-toed safety shoes</b>          | A survival suit for work on the stern or side port                   | A life preserver for going aloft to work on the crane               | All of the above   |              |
| 1595 | What should be readily available on deck while seamen are working over the side on a stage?                                 | <b>Ring buoy</b>  | Fire extinguisher  | First aid kit   | Stokes basket  |              |
| 1596 | What should look-outs report?   | Discolored water  | Shoals   | Floating objects  | <b>All of the above</b>  |              |
| 1597 | What should NOT be used as an indicator that ice may be nearby?   | <b>A dark appearance of the sky</b>                                       | A gradual drop in sea water temperature to below 32°F                | A yellowish glare in the sky  | The presence of seals or certain type birds                                |              |
| 1598 | What should you be concerned with when loading and securing vehicles aboard a Ro-Ro vessel?                                 | That all fuel is drained from the vehicles' tanks to prevent fire hazard  | <b>The size, weight, and center of gravity of vehicle/cargo unit</b> | The preferred stowage of vehicles is athwartships wherever possible | The vehicles' brakes should not be set to allow for adjusting the lashings |              |
| 1599 | What should you be concerned with when loading and securing vehicles on a Ro-Ro?  | <b>Number, position and angle of lashes</b>                               | Number of axles  | Disconnecting the battery cables to prevent fire hazard             | Minor air pressure changes in the tires                                    |              |
| 1600 | What should you do to a line to prevent fraying where it passes over the side of the vessel?                                | Worm that part of the line.   | Splice that part of the line.  | <b>Cover it with chafing gear.</b>                                  | Install a cleat.   |              |
| 1601 | What should you inspect to be sure that it is safe to go aloft in a bosun's chair?  | The gantline  | The tail block   | The chair and bridle  | <b>All of the above</b>  |              |
| 1602 | What size block shell should be used with a 4-inch manila line?   | 8"  | <b>12"</b>   | 16"   | 24"  |              |
| 1603 | What statement is true regarding a Contract Salvage Agreement?  | Lloyd's Open Form (LOF) Salvage Agreement is a Contract Salvage Agreement | <b>There cost of the salvage is set at a fixed price</b>             | The crew is allotted the largest percentage of the salvage award    | There is a "no cure-no pay" agreement                                      |              |
| 1604 | What term indicates a curvature of the decks in a longitudinal direction?   | Deadrise  | Camber   | <b>Sheer</b>  | Flare  |              |
| 1605 | What term indicates an inward curvature of the ship's hull above the waterline?   | Camber  | <b>Tumble home</b>   | Deadrise  | Flare  |              |
| 1606 | What term indicates the immersed body of the vessel aft of the parallel mid-body?   | <b>Run</b>  | Stern  | Counter   | Flow   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|--|--|--|---|--------------|
| 1607 | What term indicates the immersed body of the vessel forward of the parallel mid-body?   | Run  | Flare  | <b>Entrance</b>                                    | Sheer   |              |
| 1608 | What term indicates the length measured along the summer load line from the intersection of that load line with the foreside of the stem and the intersection of that load line with the aft side of the rudder post? | Length overall   | Register length  | <b>Length between perpendiculars</b>               | Length on the waterline   |              |
| 1609 | What term indicates the line drawn at the top of the flat plate keel?   | <b>Base line</b>   | Molded line  | Designer's waterline                               | Keel line   |              |
| 1610 | What term indicates the amidships portion of a vessel that has a constant cross section?  | Half length  | Amidships  | <b>Middle body</b>                                 | Molded length   |              |
| 1611 | What term indicates the outward curvature of the hull above the waterline?  | sheer  | tumble home  | deadrise   | <b>flare</b>  |              |
| 1612 | What type of line melts easiest?  | Wire   | Dacron   | Nylon  | <b>Polypropylene</b>  |              |
| 1613 | What type of stopper would you use on a nylon mooring line?   | Chain  | <b>Nylon</b>   | Manila   | Wire  |              |
| 1614 | What welding pattern is NOT used to permanently attach a stiffener to a plate?  | Chain intermittent   | <b>Tack</b>  | Continuous   | Staggered intermittent  |              |
| 1615 | What will be accepted as the shipping papers for an unmanned tank barge but will not be accepted if the tank barge is manned?   | Bill of Lading   | <b>Logbook entry</b>   | Manifest   | Shipping document   |              |
| 1616 | What will cause wire rope to fail?  | Operating the winch too fast                                   | Using a sheave 9 times the wire's diameter                         | Kinking  | <b>All of the above</b>   |              |
| 1617 | What will NOT be found on the Certificate of Inspection of an ocean going tankship?   | Manning requirements   | <b>Minimum freeboard permitted</b>                                 | Grade(s) of cargoes that the vessel may carry      | Waters upon which the vessel may be operated                              |              |
| 1618 | What will NOT increase friction of a liquid flowing in a pipe and cause a loss of suction head?   | Bends in the piping  | <b>Slowing the pumping rate</b>                                    | Pipeline valves                                    | Backing rings for pipe welds  |              |
| 1619 | What will NOT reduce yawing of a tow?   | Increasing the length of the towing hawser                     | Trimming the tow by the stern                                      | <b>Stowing deck loads forward</b>                  | Drogues put over the stern  |              |
| 1620 | What would be prima facie evidence of unseaworthiness?  | <b>Overloading</b>   | Overstowage  | Overbooking  | Overcarriage  |              |
| 1621 | What would have the greatest affect on a vessel's longitudinal strength?  | Collision damage to the bow, forward of the collision bulkhead | <b>Grounding damage to the bilge strake, just aft of amidships</b> | Extensive corrosion to the centerline deck plating | Damage to the side shell, midway between the bilge and the stringer plate |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 1622 | What would NOT require that a detailed report of the release of hazardous cargo be made to the Department of Transportation?                  | The valve on an empty portable tank that contained acetone is accidentally opened and some of the residue escapes to the open sea. | A carboy of nitric acid is broken on deck while loading and is flushed overboard with no injury or damage.  | <b>Part of your deck cargo of five gallon cans of paint is damaged and leaking so you jettison them to eliminate the fire hazard.</b> | Heavy weather causes damage to packages of a hazardous liquid that is subsequently pumped out at sea through the bilge pumping system. |              |
| 1623 | What would you use to adjust the height of a cargo boom?  | Lizard   | Spanner guy   | <b>Topping lift</b>   | Working guy  |              |
| 1624 | When "checking down" a barge using a check line you should use _____.   | one round turn and at least two figure-eights around the timber heads  | at least three figure-eights around the timber heads  | a clove hitch around one timber head  | <b>at least three round turns around one timber head</b>   |              |
| 1625 | When a boat turns broadside to heavy seas and winds, thus exposing the boat to the danger of capsizing, the boat has _____.                   | <b>broached</b>  | pitchpoled  | trimmed   | yawed  |              |
| 1626 | When a cargo boom or crane is rated at varying capacities, there will be a table at the controls which relates safe working load to _____.    | winch speed  | boom strength   | <b>load radius</b>  | cable strength   |              |
| 1627 | When a deck cargo is secured with chain or wire lashings and grab (pear) links, which statement is FALSE?                                     | <b>The amount of take-up is limited by the length of the turnbuckle.</b>   | At the grab (pear) link, the slack end of chain should be led back and secured to the chain above the link. | The lashings should be inspected each day and any slack taken up.   | The turnbuckle should be secured with a stick or lock nuts.  |              |
| 1628 | When a helmsman receives the command "Right 15 degrees rudder," the helmsman's immediate reply should be _____.                               | <b>"Right 15 degrees rudder"</b>   | "Aye Aye Sir"   | "Rudder is right 15 degrees"  | No reply is necessary, just carry out the order.   |              |
| 1629 | When a line is laid down in loose, looping figure-eights, it is said to be _____.   | <b>faked</b>   | flemished   | coiled  | chined   |              |
| 1630 | When a line is spirally coiled about its end and lying flat on deck, it is said to be _____.  | coiled   | faked   | <b>flemished</b>  | seized   |              |
| 1631 | When a line is subject to wear where it passes through a mooring chock, it should be _____.   | wormed, parceled, and served   | wrapped with heavy tape   | <b>wrapped with chafing gear</b>  | wrapped in leather   |              |
| 1632 | When a man who is conscious has fallen overboard is being picked up by a lifeboat, the boat should approach with the wind _____.              | astern and the victim just off the bow   | ahead and the victim just off the bow   | just off the bow and the victim to windward   | <b>just off the bow and the victim to leeward</b>  |              |
| 1633 | When a merchant vessel is under the Naval Control of Shipping Organization in wartime, naval authorities may give orders pertaining to _____. | minimum manning standards  | <b>regulations about darkening ship</b>   | the stowage of explosives   | the types of cargoes permitted on board  |              |



| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|---|---|---|--|--------------|
| 1634 | When a small craft's anchor fouls in a rocky bottom, the first attempt to clear it should be made by _____.   | hauling vertically on the line  | making the line fast to the bitt and bringing the vessel further forward  | <b>reversing the angle and direction of pull, with moderate scope</b>   | increasing the scope and running slowly in a wide circle with the anchor line taut |              |
| 1635 | When a tow is trimmed by the stern it is said to _____.   | hog   | sag   | <b>drag</b>   | list   |              |
| 1636 | When a tug is "in irons", she _____.  | is made fast to the dock with engines secured   | is in dry dock  | <b>may be in danger of being overrun by her tow</b>   | should pay out more towline  |              |
| 1637 | When a tug is pulling on a hawser at right angles to the ship, and the pilot wants to come ahead or astern on the ship's engine, care must be taken that the pilot _____. | does not break the towline  | <b>does not get too much way on the vessel</b>  | keeps a steady course so the towline will remain tight  | turns the ship toward the direction of pull  |              |
| 1638 | When a tug makes up to a large vessel, the spring line should lead from the forward most part of the tug so that _____.   | friction on the spring line is minimized  | the length of the spring line is minimized  | the head line and spring line can be worked simultaneously  | <b>the tug can pivot freely</b>  |              |
| 1639 | When a two-leg sling is used to lift a load, a sling 40 feet long is better than one of 30 feet because the _____.  | <b>tension in the sling legs is less</b>  | load can be lifted higher   | sling will be easier to attach  | sling will be easier to remove   |              |
| 1640 | When a vessel is entering or leaving a port, a record of engine speeds is kept in the _____.  | <b>bell book</b>  | deck rough log  | Official Logbook  | engine rough log   |              |
| 1641 | When a vessel is on autopilot steering, the "weather" control is adjusted to compensate for which severe weather effect on a vessel?                                      | <b>Yaw</b>  | Roll  | Pitch   | Leeway   |              |
| 1642 | When a vessel is swinging from side to side off course due to quartering seas, the vessel is _____.   | broaching   | pitchpoling   | rolling   | <b>yawing</b>  |              |
| 1643 | When a vessel with a single right-hand propeller backs to port the _____.   | <b>bow falls off to starboard</b>   | vessel moves to port without changing heading   | bow swings to port  | vessel moves to starboard without changing heading                                 |              |
| 1644 | When a wedge of water builds up between the head of the barge and the bank it is referred to as _____.  | <b>bank cushion</b>   | bank suction  | bow wave  | veering cushion  |              |
| 1645 | When accepting vehicles for shipment, the Master should ensure that _____.  | all decks intended for the stowage of vehicles are, in so far as is practicable, free from oil and grease | the ship has on board an adequate supply of cargo securing gear, which is maintained in sound working condition | vehicles are in apparent good order and condition suitable for sea transport, particularly with regards to securing | <b>All of the above</b>  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 1646 | 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 _____. | in the vessel's Official Logbook   | on the compass deviation card   | <b>in the compass deviation log</b>  | on a Napier diagram   |              |
| 1647 | When an Official logbook is not required, an unofficial logbook is required to be kept aboard for review by a marine inspector for _____.                 | one month  | six months  | <b>12 months</b>   | None of the above   |              |
| 1648 | When anchored, increasing the scope of the anchor chain normally serves to _____.   | prevent fouling of the anchor  | decrease swing of the vessel  | <b>prevent dragging of the anchor</b>  | reduce strain on the windlass   |              |
| 1649 | When anchoring a vessel under normal conditions, which scope of chain is recommended?   | Four times the depth of water  | Two and one-half times the depth of water                               | <b>Five to seven times the depth of water</b>                                | Fifteen times the depth of water  |              |
| 1650 | When anchoring a vessel, it is best to release the anchor when _____.   | going full astern  | going full ahead  | <b>going slow astern</b>   | dead in the water   |              |
| 1651 | When anchoring in a clay bottom, what is one hazard that may cause the anchor to drag?  | The flukes may dig in unevenly and capsize the anchor when under stress. | The flukes may not dig in.  | <b>The anchor may get shod with clay and not develop full holding power.</b> | The anchor will tend to dig in and come to rest near the vertical.          |              |
| 1652 | When anchoring in a current, you should _____.  | drop the anchor with the bow headed downstream                           | back your vessel into the current                                       | <b>anchor while stemming the current</b>                                     | All of the above  |              |
| 1653 | When anchoring in calm water, it is best to _____.  | maintain slight headway when letting go the anchor                       | wait until the vessel is dead in the water before letting go the anchor | <b>have slight sternway on the vessel while letting go the anchor</b>        | let the anchor go from the stern with the anchor cable leading from the bow |              |
| 1654 | When anchoring, good practice requires 5 to 7 fathoms of chain for each fathom of depth. In deep water you should use _____.                              | the same ratio   | more chain for each fathom of depth                                     | <b>less chain for each fathom of depth</b>                                   | two anchors with the same ratio of chain                                    |              |
| 1655 | When anchoring, it is a common rule of thumb to use a length of chain _____.  | <b>five to seven times the depth of water</b>                            | seven to ten times the depth of water                                   | twice the depth of water   | twice the depth of water plus the range of tide                             |              |
| 1656 | When anyone voluntarily deposits his/her license or document with a Coast Guard investigating officer _____.  | he/she permanently gives up rights to the license or document            | <b>it may be for reasons of mental or physical incompetence</b>         | it must be for reason of addiction to narcotics                              | All of the above  |              |
| 1657 | When attempting to free an anchor jammed in the hawsepipe, the simplest method of freeing it may be _____.  | <b>starting the disengaged windlass at high speed</b>                    | rigging a bull rope to pull it out                                      | to grease the hawsepipe  | to pry it loose with a short piece of pipe                                  |              |
| 1658 | When backing down with sternway, the pivot point of a vessel is _____.  | at the bow   | about one-third of the vessel's length from the bow                     | aft of the propellers  | <b>about one-quarter of the vessel's length from the stern</b>              |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|---|---|---|---|--------------|
| 1659 | When barge headlogs do not meet or are not even with one another, the void or opening between them is called a _____.   | <b>notch</b>  | hole  | spacing   | gap   |              |
| 1660 | When being towed by one tug, the towing bridle should be connected to towing _____.   | <b>bitts with figure eights</b>   | pad eyes with pelican hooks   | pad eyes with safety hooks  | All of the above  |              |
| 1661 | When being towed, a fairlead is a _____.  | <b>fabricated shape used to change the direction of a flexible member of the tow hookup</b> | fabricated shape used to secure the tow hookup to the towed vessel                                | line connecting the fishplate to the bridle legs  | line connecting the tow bridle to the towed vessel                  |              |
| 1662 | When bunkering at a dock which of the following signals must be displayed?  | A yellow flag by day, red light by night  | <b>A red flag by day, red light by night</b>  | A green flag by day, green light by night   | A red flag by day, a blue light by night                            |              |
| 1663 | When bunkering at anchorage which of the following signals must be displayed?   | A red flag by day, red light by night   | <b>A red flag by day ONLY</b>   | A red light by night ONLY   | No signal required at anchorage                                     |              |
| 1664 | When bunkering is complete, the hoses should be _____.  | cleaned internally with a degreaser   | washed out with hot soapy water   | <b>drained, blanked off, and stored securely</b>  | stowed vertically and allowed to drain                              |              |
| 1665 | When can the US citizenship requirement for the Master of a US-flag uninspected towing vessel be waived?  | When US-licensed Masters are not readily available  | When it costs too much to hire a US-licensed Master   | When the towing vessel operates shoreward of the boundary line                                    | <b>Never, under any circumstances</b>                               |              |
| 1666 | When caring for natural-fiber line, you should NEVER _____.   | dry the line before stowing it  | <b>lubricate the line</b>   | protect the line from weather   | slack off taut lines when it rains                                  |              |
| 1667 | When carrying a cargo of asphalt or molten sulfur, which are carried at temperatures of over 300°F, one of the biggest dangers is _____.  | <b>water in the tanks or pipelines</b>  | having the cargo too cool   | explosion of vapors after discharge   | inadequate ullage space   |              |
| 1668 | When carrying a full or nearly full load of bulk ore in a general cargo type vessel which has engine spaces amidships, the cargo in each hold should be trimmed so that the bulk of the cargo lies _____. | along the centerline  | toward the forward bulkhead of the forward holds and toward the after bulkhead of the after holds | <b>toward the after bulkhead of the forward holds and the forward bulkhead of the after holds</b> | toward the after bulkhead of all holds                              |              |
| 1669 | When carrying out a parallel track search pattern, the course of the search units should normally be which of the following?  | <b>In the same direction as the anticipated drift</b>                                       | In the opposite direction of the anticipated drift  | Perpendicular to the line of anticipated drift  | Downwind  |              |
| 1670 | When casting a heaving line to a disabled vessel, cast the line _____.  | <b>well over vessel's center to drop on deck</b>  | directly at the most forward positioned crewmember  | on the windward side of the cockpit   | with a float attached   |              |
| 1671 | When checking a mooring line, you should _____.   | ensure the bight is not fouled between the ship and the dock by taking up slack             | pay out slack smartly and keep free for running   | secure more turns to hold the line against any strain, then clear the area                        | <b>surge the line so that it maintains a strain without parting</b> |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|--|---|---|--|--------------|
| 1672 | When cleaning a tank by the Butterworth process, you should begin to pump out the slops _____.   | at the end of the drop schedule  | <b>when the process is started</b>  | when the process is finished  | when the tank is clean   |              |
| 1673 | When cleaning cargo tanks with portable machines, how is the machine grounded?   | Bonding wires are secured from the machine to a convenient location on deck. | The machines must maintain physical contact with the deck at the Butterworth opening. | <b>The water supply hoses contain internal wires that act as conductors</b> | The water jets impinging on the vessel's structure form a pathway to ground. |              |
| 1674 | When clearing a vessel for a foreign voyage, the original crew list is duly certified by proper authority. In a U.S. port, this authority is the U.S. _____.   | Coast Guard  | <b>Customs</b>  | Immigration Service   | Public Health Service  |              |
| 1675 | When clearing customs for a foreign voyage, which of the following is processed at the custom's house and returned to the vessel?  | <b>Shipping Articles</b>   | Traveling Curio Manifest  | Official Logbook  | Cargo Gear Register  |              |
| 1676 | When commencing cargo operations on a container ship, one cell at a hatch is generally discharged completely (to the bottom of the ship) before removing any containers from the adjoining cells to _____. | remove an existing list that would slow down cargo operations                | <b>initiate loading in conjunction with unloading at the hatch</b>                    | improve stability during cargo operations                                   | allow longshoremen easy access to the hatch                                  |              |
| 1677 | When comparing twin screw tug to single-screw tugs, which statement about a twin-screw tug is FALSE?   | If one engine fails, you do not lose control of the tow.                     | It is more maneuverable.  | <b>It develops more bollard pull for the same horsepower.</b>               | It is generally subject to more propeller damage from debris in the water.   |              |
| 1678 | When connecting the tow bridle to a tug, the end of the bridle is passed with a _____.   | heaving line   | shot line   | high line   | <b>messenger line</b>  |              |
| 1679 | When considering a vessel's stability, which spaces in a general cargo vessel are the best locations for the carriage of bulk grain?   | <b>Deep tanks</b>  | Lower holds   | Lower holds at the ends of the vessel                                       | Tween-decks  |              |
| 1680 | When cutting regular-lay wire rope, what is the minimum number of seizings to be placed on each side of the cut?   | One  | Two, and three on rope diameters over 1 inch  | <b>Three, and more on larger diameter wire ropes</b>                        | Four   |              |
| 1681 | When cutting wire rope, seizings are put on each side of the cut. The seizings prevent the wire from unlaying and also _____.  | <b>maintain the original balance of the tension in the wires and strands</b> | prevent moisture from entering between the wires at the cut end                       | forces lubricant from the core to protect the raw, cut end                  | All of the above   |              |
| 1682 | When discharging an oil cargo, the first consideration is to _____.  | <b>get the bow up</b>  | discharge from the wings first  | discharge from the centerline tanks first                                   | discharge from amidships first   |              |
| 1683 | When dropping anchor, you are stationed at the windlass brake. The most important piece(s) of gear is(are) _____.  | a hard hat   | a long sleeve shirt   | gloves  | <b>goggles</b>   |              |
| 1684 | When evacuating a seaman by helicopter lift, the vessel should be _____.   | stopped with the wind dead ahead   | stopped with the wind on the beam   | <b>underway with the wind 30° on the bow</b>                                | underway on a course to provide no apparent wind                             |              |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration  |
|------|--|--|--|--|--|---------------|
| 1685 | When evacuating a seaman by helicopter lift, which course should the ship take?  | Downwind so that the apparent wind is close to nil.                                  | <b>A course that will keep a free flow of air, clear of smoke, over the hoist area.</b>              | A course that will have the hoist area in the lee of the superstructure.   | With the wind dead ahead because the helicopter is more maneuverable when going into the wind.                       |               |
| 1686 | When evacuating a seaman by helicopter lift, which statement is TRUE?  | The vessel should be stopped with the wind dead ahead during the hoisting operation. | <b>Flags should be flown to provide a visual reference as to the direction of the apparent wind.</b> | The drop line should be grounded first then secured as close to the hoist point as possible.                       | The hoist area should be located as far aft as possible so the pilot will have a visual reference while approaching. |               |
| 1687 | When evacuating a seaman by helicopter lift, which statement is TRUE?  | Evacuation should be from an area forward of the bridge.                             | The vessel should be slowed to bare steerageway.   | If the hoist is at the stern, booms extending aft at the stern should be cradled with the topping lifts hove taut. | <b>The litter should not be touched until it has been grounded.</b>  |               |
| 1688 | When fruit is carried as refrigerated cargo, the most frequent cause of its being infected at the discharge port is _____. | leaks in the ship's refrigeration system   | <b>improper cleaning of the cargo spaces</b>   | carriage at the wrong temperature  | improper precooling of the cargo spaces  |               |
| 1689 | When handling cargo, the majority of cargo gear breakdowns is due to _____.  | compression bending of the boom  | extension failure of the boom  | <b>guy failures</b>  | topping lift failures  |               |
| 1690 | When hip towing, a line led from the bow of the towing vessel aft to the vessel being towed would be a _____.              | backing line   | <b>towing line</b>   | stern line   | breast line  |               |
| 1691 | When hip towing, a line led from the stern of the towboat forward to the barge provides the towing pull when _____.        | going ahead  | dead in the water  | in a following current   | <b>backing</b>   |               |
| 1692 | When hooking up a cargo hose to your vessel's manifold, you should use a(n) _____.   | international shore connection   | <b>insulating flange or single length of non-conducting hose</b>                                     | self-contained breathing apparatus   | oxygen analyzer  |               |
| 1693 | When hugging a bank in a narrow channel, you should take precautions against _____.  | bank suction, squat and the effects of vessels passing close aboard                  | clogged sea chests, plugged sea strainers and overheated machinery                                   | striking underwater obstructions close to the bank   | <b>All of the above</b>  |               |
| 1694 | When improperly tied, which knot shown is called a granny or thief's knot?   | F  | M  | R  | <b>W</b>   | <b>D030DG</b> |
| 1695 | When inspecting ground tackle, fractures are most frequently found in the _____.   | anchor shank   | <b>end links</b>   | swivel   | fluke  |               |
| 1696 | When inspecting wire rope before a hoisting operation, one must look for _____.  | fishhooks  | kinks  | worn spots   | <b>All of the above</b>  |               |
| 1697 | When inspecting wire rope that has been in use for some time, one must look for _____.                                     | fishhooks  | kinks  | worn spots   | <b>All of the above</b>  |               |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 1698 | When loading a cargo of taconite, proper sequencing of loading by hatch number is necessary to _____.  | provide the proper trim                                    | prevent negative stability from developing   | <b>prevent excessive longitudinal stresses</b>  | control list   |              |
| 1699 | When loading a container vessel, the operation is basically that of vertical loading. The important factors to be considered when loading containers are port of discharge, _____. | available dunnage, and chocking                            | crushability, and inherent vice  | sweat, and weight   | <b>weight, and refrigeration</b>   |              |
| 1700 | When loading a tanker, you should _____.   | load only one tank at a time                               | keep the seamen on watch on standby in the mess room                               | keep a strain on the loading hoses  | <b>close valves by closing them down, reopening one or two turns, and re-closing</b>           |              |
| 1701 | When loading bulk liquid cargo, what is the FIRST action you should take if a cargo valve jammed open?   | Trip the pump relief valve.                                | <b>Order the dock man to shut down.</b>  | Call the owner, operator, or terminal supervisor.   | Run out the vessel's or terminal's fire hose.  |              |
| 1702 | When loading containers into the cell guides in the hold of a container ship, which statement is TRUE?   | <b>No further securing is usually required.</b>            | Containers must have vertical lashings if they do not have twist lock securing.    | All containers must have vertical and horizontal lashings.  | The container must be locked into the cell guide.  |              |
| 1703 | When lowering manropes alongside a stage rigged over the side of a vessel, they should be allowed to trail in the water _____.   | to easily remove the kinks that form in the lines          | to allow the seamen on the stage to know the direction and strength of the current | <b>to provide the seaman something to hold onto if he or she falls from the stage into the water</b>        | only for short periods of time since they will become waterlogged and be very heavy to pull up |              |
| 1704 | When making a Scharnow turn, the _____.  | rudder must be put over towards the side the man went over | initial turn direction is away from the side the man went over                     | <b>rudder is put hard over and the initial turn is maintained until about 240° from the original course</b> | man overboard must be not more than 300 feet astern when starting the turn                     |              |
| 1705 | When making a short splice in wire rope _____.   | <b>all tucks go against the lay</b>                        | all tucks go with the lay  | the first three wires are tucked against the lay and the last three go with the lay                         | the first three wires are tucked with the lay and the last three go against the lay            |              |
| 1706 | When making a wire fast to bitts it is recommended that you _____.   | use only figure eights                                     | take 2 round turns around one bitt, then make figure eights                        | <b>take 3 round turns around both bitts, then make figure eights</b>  | alternate round turns and figure eights around both bitts                                      |              |
| 1707 | When making up a long, large coastwise tow, which of the following procedures is INCORRECT?  | A chain towing bridle is generally preferred               | Safety shackles should be used when connecting to the fishplate                    | Rig tripping ropes (retrieving lines)   | <b>Back-up wires are left slack</b>  |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 1708 | When making up a tow connection, you should use _____.  | safety hooks  | plain eye hooks  | round pin shackles   | <b>screw pin shackles</b>  |              |
| 1709 | When making way in heavy seas you notice that your vessel's screw is being lifted clear of the water and racing. One way to correct this would be to _____.   | increase speed  | <b>decrease speed</b>  | move more weight forward   | shift the rudder back and forth several times  |              |
| 1710 | When maneuvering a heavy barge up a wide channel with a tug, the tow may be most closely controlled by making up to the barge _____.  | with a short tow astern   | nearly bow to bow, at a small angle  | amidships, parallel to the barge   | <b>nearly stern to stern, at a small angle to the barge</b>  |              |
| 1711 | When maneuvering from pull towing to breasted (alongside) towing, a twin-screw vessel is more likely than a single-screw vessel of equal horsepower to _____.   | trip or capsize   | <b>foul the towline</b>  | go into irons  | part the towing strap  |              |
| 1712 | When may a seaman on a vessel engaged in foreign trade be paid before earning the wages?  | <b>The seaman may only draw an advance on earned wages.</b>   | Wages up to fifty percent of the seaman's base wage maybe advanced upon proof of serious family illness. | Wages equivalent to three days base wage may be advanced upon arrival in a foreign port. | The advance of wages is at the discretion of the master; however, a seaman cannot be in an overpaid status at signoff. |              |
| 1713 | When may foreign licensed or documented personnel be employed on a US-flag towing vessel?   | <b>While on a foreign voyage and outside US jurisdiction, in order to meet manning requirements</b> | While operating above the US outer continental shelf   | On vessels operating on domestic voyages only  | Never, under any circumstances   |              |
| 1714 | When measuring the oxygen content of the cargo tanks prior to loading cargoes requiring vapor recovery, check it _____.   | one meter from the tank bottom and one meter below the tank top                                     | <b>one half the ullage of the tank and one meter below the tank top</b>                                  | one half the ullage of the tank and one meter above the tank bottom                      | at three meter intervals from the tank top to the bottom   |              |
| 1715 | When moored with a Mediterranean moor, the ship should be secured to the pier by having _____.  | <b>a stern line and two quarter lines crossing under the stern</b>                                  | a stern line, 2 bow lines, and 2 quarter lines leading aft to the pier                                   | all regular lines leading to the pier in opposition to the anchor                        | two bow lines and two midship lines leading aft to the pier  |              |
| 1716 | 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? | Four short blast on the whistle   | A flag hoist consisting of the code figure "4"   | <b>A flag hoist consisting of the code figure "5"</b>                                    | A flag hoist consisting of the code letters "FE" (Foxtrot-Echo)  |              |
| 1717 | When must the Master of a vessel log the position of load line marks in relation to the surface of the water in the Official Logbook?   | Once a day  | At the change of every watch   | Only when in fresh or brackish water   | <b>Prior to getting underway</b>   |              |



| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 1718 | When must the owner or Master of a towing vessel retest a towline or remove it from service?   | <b>When the record of its material condition lapses for 3 months or more.</b>  | After it jams on the towing winch.   | After it drags on the bottom.   | When it has not been used for over 60 days.  |              |
| 1719 | When natural fiber rope gets wet, the _____.   | overall strength of the line will decrease   | <b>line shrinks in length</b>  | line will become more elastic   | line will be easier to handle  |              |
| 1720 | When oil is discharged overboard, an entry is required in the _____.   | engine rough log   | <b>Oil Record Book</b>   | Official Logbook  | deck rough log   |              |
| 1721 | When oily ballast has been pumped overboard, an entry must be made in the _____.   | <b>Oil Record Book</b>   | Official Logbook   | deck rough log  | engine rough log   |              |
| 1722 | When operating in an area where sea ice and icebergs are present, which statement is TRUE?   | <b>Icebergs may travel in a direction many degrees different from the sea ice.</b>                                     | Both icebergs and sea ice will move in approximately the same direction and at the same speed. | Icebergs and sea ice will move in the same direction, but at different speeds due to the sail effect of the berg. | Icebergs and sea ice will move in the same direction, but the iceberg will move slower because of its underwater bulk. |              |
| 1723 | When passing a hawser to the dock you would first use what line?   | Gantline   | <b>Heaving line</b>  | Preventer   | Warp   |              |
| 1724 | When patching holes in the hull, pillows, bedding, and other soft materials can be used as _____.  | shores   | <b>gaskets</b>   | strongbacks   | wedges   |              |
| 1725 | When paying off seamen in a foreign port, where a United States consul is not available, the release must be executed by the seamen and the _____. | representative of the foreign country  | local port authority representative  | <b>Master of the vessel</b>   | ship's union delegate  |              |
| 1726 | When paying out nylon line from around the bitts _____.  | <b>stand clear of the bitts and use two or more round turns under your figure eights</b>                               | you can surge the line even with a single turn   | no extra turns are necessary since nylon has a high coefficient of friction                                       | stand in the bight of the line   |              |
| 1727 | When picking up your mooring at the buoy, the correct method is to _____.  | approach the buoy with the wind and current astern   | <b>approach the buoy with the wind and current ahead</b>                                       | approach the buoy with wind and sea abeam   | stop upwind and up current and drift down on the buoy  |              |
| 1728 | When piloting a vessel, how are visual references used to establish a constant rate of turn?   | <b>Fixed objects that stay on the same relative bearing when the ship is turning indicate a constant rate of turn.</b> | Visual references cannot be used to maintain a constant rate of turn.                          | Begin the turn when the fixed object is on the beam.  | Keep the fixed object's relative bearing opening, for a constant rate of turn.   |              |
| 1729 | When planning the loading or discharging of a VLCC (100,000 DWT+) what is the most important consideration?  | Draft and trim   | <b>Limits of the bending moments</b>   | Rate of discharging   | Rate of loading  |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|--|---|---|---|--------------|
| 1730 | When plugging holes below the waterline you should _____.  | eliminate all water entering the hole  | only plug holes in machinery or other vital spaces                            | <b>reduce the entry of water as much as possible</b>  | plug the largest holes first  |              |
| 1731 | When preparing to hoist the anchor, you should FIRST _____.  | <b>engage the wildcat</b>  | put the brake in the off position   | take off the chain stopper  | take the riding pawl off the chain  |              |
| 1732 | When referring to dry bulk cargoes, the term "flow state" _____.   | designates the state of a commodity when the ship is heeled past the angle of repose | relates to the suitability of loading a cargo by flowing down inclined chutes | <b>refers to the saturation of a dry bulk product with water to the point where it acts as a liquid</b> | relates to the minimum granule size of a particular product where it will flow like a liquid at an angle of 30° |              |
| 1733 | When relieving the helm, the new helmsman should find it handy to know the _____.  | <b>amount of helm carried for a steady course</b>                                    | variation in the area   | leeway  | deviation on that heading   |              |
| 1734 | When relieving the helm, the new helmsman should find it handy to know the _____.  | leeway   | variation in the area   | <b>amount of helm carried for a steady course</b>   | deviation on that heading   |              |
| 1735 | When relieving the helm, the new helmsman should know the _____.   | <b>course per magnetic steering compass</b>  | gyro error  | variation   | maximum rudder angle previously used  |              |
| 1736 | When rigging a bosun's chair, a tail block or lizard is used to _____.   | guide the bosun's chair down a stay when applying a protective coating               | run paint or tools up to a sailor in a chair with a heaving line              | keep a bosun's chair from swinging with the ship's motion   | <b>reeve the gantline through</b>   |              |
| 1737 | When rigging a stage, the standing part should be fastened to the horns of a stage with which of the following hitches?  | Clove hitch  | Timber hitch  | <b>Marlinespike hitch</b>   | Double blackwall hitch  |              |
| 1738 | When riveted joints occur at the ends of plating they are called _____.  | trailers   | terminals   | seams   | <b>butts</b>  |              |
| 1739 | When running before a heavy sea, moving weights aft will affect the handling of a vessel by _____.   | reducing rolling   | increasing rolling  | <b>reducing yawing</b>  | increasing yawing   |              |
| 1740 | When securing a hook to the end of a wire rope you should use _____.   | a bowline knot   | a long splice   | an overhand knot with a wire rope clip  | <b>wire rope clips with a thimble eye</b>   |              |
| 1741 | When securing a manila line to a bitt what is the minimum number of round turns you should take before figure-eighting the line?                                 | None   | <b>1</b>  | 2   | 3   |              |
| 1742 | When securing a synthetic line to a bitt what is the minimum number of round turns you should take before figure-eighting the line?                              | None   | 1   | <b>2</b>  | 3   |              |
| 1743 | When selecting the fuel oil tanks for the "burn-out" of bunkers during a voyage consideration of all of the following must be taken with the EXCEPTION of _____. | <b>flashpoint</b>  | stability   | trim  | list  |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|--|---|--|--|--------------|
| 1744 | When several salvors are on-scene at the same time to assist a vessel that has not been abandoned, which principal governs the decision as to which one's services will be accepted? | <b>The Master of the ship needing assistance has the absolute right to decide.</b> | The first salvor on-scene has the prior claim providing he has adequate facilities to assist the vessel needing assistance. | The salvors must agree to a division of any salvage among themselves with the major share allotted to those doing the most work. | The first salvor on-scene has the absolute right to provide assistance; however, he is liable if the ship is lost due to his lack of experience, equipment, etc. |              |
| 1745 | When shoring a damaged bulkhead, effort should be taken to spread the pressure over the _____.   | <b>maximum possible area</b>   | minimum possible area   | nearest watertight door  | nearest longitudinal girder  |              |
| 1746 | When should a crane boom-up so high that the boom hits the stops?  | Only if the load has not exceeded the limit at that angle                          | Only if the load contains non-hazardous materials   | Only if necessary to perform a given lift  | <b>Never</b>   |              |
| 1747 | When should you conduct a visual inspection of your towline?   | Whenever its serviceability is in doubt.   | In accordance with the manufacturer's recommendation.   | At least once a month.   | <b>All of the above</b>  |              |
| 1748 | When steaming through an anchorage, a shipmaster should _____.   | avoid crossing close astern of the anchored ships                                  | <b>avoid crossing close ahead of the anchored ships</b>   | keep the ship moving at a good speed to reduce set   | transit only on a flood tide   |              |
| 1749 | When steering by hand, which of the following may be a functional input to the steering gear as a result of turning the wheel?   | <b>Non-followup</b>  | Rudder adjustment   | Weather adjustment   | All the above may be activated   |              |
| 1750 | When steering a vessel, a good helmsman does NOT _____.  | consider steering a vessel a highly responsible job                                | <b>use as much rudder as possible to keep the vessel on course</b>  | use as little rudder as possible to keep the vessel on course  | advise his relief of the course being steered  |              |
| 1751 | When steering a vessel, a good helmsman will _____.  | use as much rudder as possible to keep the vessel on course                        | apply rudder to move the compass card towards the lubbers line when off course  | <b>repeat back to the watch officer any rudder commands before executing them</b>  | keep the rudder amidships except when changing course  |              |
| 1752 | When steering on autopilot which of the following input conditions may NOT have an effect on the control of the steering gear?   | <b>Non-followup</b>  | Rudder adjustment   | Weather adjustment   | All the above may be activated   |              |
| 1753 | When stowing hazardous materials on deck, lashing of such cargo is permitted if _____.   | a wooden bin is constructed of at least 2-inch dunnage and bolted together         | the cargo is lashed to the adjacent guard rails   | <b>the lashings are secured to deck pad eyes</b>   | there is at least 3 inches of dunnage on deck  |              |
| 1754 | When stripping a tank, excessive air in the suction line may cause _____.  | an over pressurized line   | back pressure   | <b>loss of suction</b>   | increase of suction  |              |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|---|--|---|--|--------------|
| 1755 | When taking a length of new manila rope from the coil, you should _____.   | mount the coil so it will turn like a spool and unreel from the outside | roll the coil along the deck and allow the rope to fall off the coil | <b>lay the coil on end with the inside end down, then pull the inside end up through the middle of the coil</b> | lay the coil on end with the inside end up then unwind the rope from the outside of the coil |              |
| 1756 | 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? | Bow to the sea and no way on your vessel                                | Sea on the lee quarter with ship moving ahead slowly                 | <b>Sea on the weather bow and ship moving ahead slowly</b>  | Sea on the quarter with sternway on the ship   |              |
| 1757 | When talking about wire rope, the lay of the wire is the _____.  | <b>direction wires and strands are twisted together</b>                 | number of strands in the wire  | direction the core is twisted   | material used in the core  |              |
| 1758 | When tandem tug towing, the more powerful of the two tugs should be _____.   | the lead tug  | <b>behind the lead tug</b>   | towing at a right angle to the smaller tug  | towing at a faster speed than the smaller tug  |              |
| 1759 | When tank cleaning with a portable machine, the weight of the machine is suspended from _____.                                   | solid iron bars clamped to the Butterworth opening                      | <b>the supply hose</b>   | the suspension line, usually manila or natural fiber line   | a wire rope suspension line  |              |
| 1760 | When the anchor is brought to and holding, the horizontal component of anchor cable tensions should equal the _____.             | displacement tonnage  | weight forces  | buoyancy forces   | <b>environmental forces</b>  |              |
| 1761 | When the dew point of the outside air is higher than the dew point of the air in the cargo hold, you should _____.               | energize the exhaust blowers  | energize the intake blowers  | <b>not ventilate the cargo holds</b>  | ventilate the cargo holds  |              |
| 1762 | When the dew point of the outside air is lower than or equal to the dew point of the air in the cargo hold, you should _____.    | secure all ventilation  | shut down the exhaust blowers  | shut down the intake blowers  | <b>ventilate the cargo holds</b>   |              |
| 1763 | When the gyro-pilot is used for steering, what control is adjusted to compensate for varying sea conditions?                     | Rudder control  | Sea control  | Lost motion adjustment  | <b>Weather adjustment</b>  |              |
| 1764 | When the longitudinal strength members of a vessel are continuous and closely spaced, the vessel is _____.                       | transversely framed   | <b>longitudinally framed</b>   | intermittently framed   | web framed   |              |
| 1765 | When the period of beam seas equals the natural rolling period of a vessel, what will most likely occur?                         | Excessive pitching  | Excessive yawing   | <b>Excessive rolling</b>  | No change should be evident  |              |
| 1766 | When the pilot is embarked he or she _____.  | relieves the officer of the watch                                       | relieves the Master of his duties                                    | is solely responsible for the safe navigation of the vessel   | <b>is a specialist hired for his or her local navigational knowledge</b>                     |              |
| 1767 | When the vessel is on coastwise articles, the original certificate of the seaman's certificate of discharge is _____.            | <b>given to the seaman</b>  | retained on board  | sent to Commandant, U.S. Coast Guard  | sent to the shipping company   |              |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|---|--|---|--|--------------|
| 1768 | When the wave period and the apparent rolling period are the same _____.   | <b>synchronous rolling occurs</b>   | roll period decreases  | roll period increases   | roll amplitude is dampened                         |              |
| 1769 | When towing a small trailer-able boat, the sturdiest fitting available to attach a tow rig is the _____.                                 | towing cleat on the bow   | most forward handrail stanchion  | <b>trailer eye</b>  | chock  |              |
| 1770 | When towing another vessel astern, the length of the towline should be _____.  | as long as possible   | such that one vessel will be on a crest while the other is in a trough     | <b>such that the vessels will be "in step"</b>                              | not over two wave lengths in seas up to 10 feet    |              |
| 1771 | When towing another vessel, the length of the towing line should be _____.   | as long as possible   | as short as possible under the circumstances and not over two wave lengths | such that one vessel will be on a crest while the other is in a trough      | <b>such that the vessels will be in step</b>       |              |
| 1772 | When towing astern what equipment should be stowed ready for use near the towline?   | First aid kit   | <b>Axe or cutting torch</b>  | Fire extinguisher   | Chafing gear                                       |              |
| 1773 | When towing astern, chafing gear should NOT be used on a hawser which is _____.  | attached to an "H" bitt   | <b>attached to an automatic towing engine</b>                              | held amidships by a gob rope  | connected to a swivel                              |              |
| 1774 | When towing astern, each towline must meet all of these requirements, EXCEPT _____.  | <b>being suitable for use as soon as it is removed from its normal stowage location</b> | having wire clips for other than a temporary repair                        | having the end either spliced with a thimble or fitted with a poured socket | being free of knots                                |              |
| 1775 | When towing astern, increased catenary will _____.   | increase control of the tow   | prevent the towing vessel from going in irons                              | make the towing vessel less maneuverable                                    | <b>reduce shock stress on the towing hawser</b>    |              |
| 1776 | When towing astern, one way to reduce yawing of the tow is to _____.   | <b>trim the tow by the stern</b>  | trim the tow by the head   | have the tow on an even keel  | list the tow on the side it is yawing              |              |
| 1777 | When towing astern, you notice that another vessel is about to pass between the towing vessel and the tow. You should immediately _____. | turn away from the approaching vessel   | shine a spotlight in the direction of the approaching vessel               | sever the towline   | <b>slow down and pay out the main tow hawser</b>   |              |
| 1778 | When towing in an open seaway, it is important to use a towing line _____.   | made only of wire rope, due to possible weather conditions                              | that will have the tow on a crest while your vessel is in a trough         | <b>that will have the tow on a crest while your vessel is on a crest</b>    | with little dip to gain maximum control of the tow |              |
| 1779 | When towing, a tow hook is used to _____.  | <b>provide quick release of the hawser</b>  | pull a tow alongside   | attach a hawser to a tow which has no bits or pad eyes                      | join two hawsers for lengthening a tow             |              |
| 1780 | When towing, the least amount of tension will be on each bridle leg when the two legs _____.   | form a large angle with each other  | <b>form a small angle with each other</b>                                  | are of unequal length   | are joined by a fishplate                          |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration  |
|------|---|--|--|--|---|---------------|
| 1781 | When towing, what is the main reason for using a chain bridle on a wire hawser?                                     | It makes for an easy connection.   | <b>It gives a spring effect to cushion the shock.</b>  | It eliminates the necessity of a swivel.                                   | It does not chafe.  |               |
| 1782 | When turning a ship in restricted space with a strong wind, it is normally best to _____.                           | go ahead on both engines with the rudder hard to one side, if on a twin-screw vessel | back down with the rudder hard to one side, if on a single-screw vessel                                  | take advantage of the tendency to back to port, if on a twin-screw vessel  | <b>turn so that the tendency to back into the wind can be used, if on a single-screw vessel</b> |               |
| 1783 | When turning a vessel in shallow water, which statement is TRUE?  | The rate of turn is increased.   | The rate of turn is decreased.   | <b>The turning diameter increases.</b>                                     | The turning diameter remains the same.  |               |
| 1784 | When underway and proceeding ahead, as the speed increases, the pivot point tends to _____.                         | move aft   | <b>move forward</b>  | move lower   | remain stationary   |               |
| 1785 | When underway with a tow, you are required to notify the Coast Guard in which casualty situation?                   | Damage to property amounting to \$12,500   | <b>Accidental stranding or grounding</b>   | Loss of bridge-to-bridge radio capability                                  | An injury requiring first aid treatment   |               |
| 1786 | When underway with a tow, you are required to notify the Coast Guard in which casualty situation?                   | An injury requiring first aid treatment  | Damage of bridge-to-bridge radio capability  | <b>Accidental stranding or grounding</b>                                   | Damage to property amounting to \$12,500  |               |
| 1787 | When using a Mediterranean Moor, the vessel is moored with her _____.   | bow to the pier  | anchors crossed  | anchor chains forward, side to the pier                                    | <b>stern to the pier</b>  |               |
| 1788 | When using natural-fiber rope, you should NEVER _____.  | dry the line before stowing it   | reverse turns on winches periodically to keep out kinks  | <b>try to lubricate the line</b>   | use chafing gear  |               |
| 1789 | When using the anchor to steady the bow while approaching a dock you must be aware of the fact that _____.          | the vessel will tend to take a large sheer towards the side where the anchor is down | steering control is ineffective in trying to turn to the side opposite to that of the anchor being used  | the anchor cable must never lead under the hull                            | <b>using an offshore anchor decreases the chances of the anchor holding</b>                     |               |
| 1790 | When using the term "limber system" one is referring to a _____.  | cleaning system  | <b>drainage system</b>   | strengthening system   | weight reduction system   |               |
| 1791 | When using two tugs to assist in mooring a large, deeply laden ship, the most powerful tug is usually placed _____. | <b>forward to control the bow</b>  | amidships to move the entire vessel evenly   | aft to assist the ship's rudder and propeller                              | anywhere, since the maneuverability of the tug governs the placement not the power              |               |
| 1792 | When using wire rope clips to form a temporary eye in wire rope, you should _____.                                  | <b>place the U-bolt of the wire rope clips on the dead end of the rope</b>           | check the clips after an hour of operation to determine if the clips loosened due to wire rope expansion | replace the entire wire rope if broken wires are detected around the clips | wire rope clips should never be used to form a temporary eye splice                             | <b>D058DG</b> |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 1793 | When weighing anchor in a rough sea, how would you avoid risk of damaging the bow plating?                            | Heave it home as fast as you can.                                     | Heave it home intermittently, between swells.                      | <b>Leave the anchor under foot, until the vessel may be brought before the sea.</b>                  | Wait for a calm spot between seas, then house it.  |              |
| 1794 | When working with wire rope, which must be considered?  | Metal sheaves should be lined with wood or leather.                   | <b>It needs better care than hemp or manila.</b>                   | It should be lubricated annually.  | The diameter of a sheave over which a rope is worked should be ten times that of the rope.       |              |
| 1795 | When you "end for end" a wire rope, you _____.  | cut off the free end and bitter end of the rope                       | splice two wire ropes together                                     | <b>remove the wire rope from the drum and reverse it so that the free end becomes the bitter end</b> | remove the wire rope from the drum and turn it over, so the wire bends in the opposite direction |              |
| 1796 | When you enter shallow water, you would expect your rudder response to _____.   | <b>be sluggish and your speed to decrease</b>                         | be sluggish and your speed to increase                             | improve and your speed to decrease   | improve and your speed to increase   |              |
| 1797 | When you have a tow alongside, your stern should extend aft of the tow in order to _____.                             | avoid obscuring your stern light                                      | provide a better lead for your lines                               | <b>obtain better steering control</b>  | let the barge deflect floating objects from your propeller                                       |              |
| 1798 | When your tug reduces speed to shorten tow, the _____.  | length of the tow gets shorter as the strain is reduced               | tow may continue its momentum and overtake the tug                 | towing hawser may drag the bottom and put the tug in irons   | <b>All of the above</b>  |              |
| 1799 | Where are the test certificates, for wire rope used as cargo runners, and loose gear certificates usually maintained? | <b>With the Cargo Gear Register on the ship</b>                       | In the Official Log  | At the Coast Guard Marine Safety Office with the vessel's inspection records                         | At the central records center of the agency testing the cargo gear                               |              |
| 1800 | Where are the towing bits best placed for towing purposes?  | Near the centerline and over the rudders                              | On each side of the vessel near the stern                          | <b>Forward of the rudder post and close to the tug's center of pivot</b>                             | As far aft as possible   |              |
| 1801 | Where is a surge line placed in the towing hookup?  | <b>Connected between the main towing hawser and the towing bridle</b> | Connected between the "H" towing bits and the main towing hawser   | End of line fastened directly to the drum of the towing winch  | As both legs of the towing bridle  |              |
| 1802 | Where is the best location to install a towing hook?  | Forward of the towing bits  | On the fantail   | Near the Norman Pins   | <b>Just aft of amidships</b>   |              |
| 1803 | Where should a vessel being towed alongside be positioned for increased maneuverability?                              | Stern of the towed vessel aft of the stern of the towing vessel       | Stern of the towed vessel even with the stern of the towing vessel | <b>Stern of the towed vessel forward of the stern of the towing vessel</b>                           | Bow of the towed vessel even with the bow of the towing vessel                                   |              |



| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|--|--|---|---|--------------|
| 1804 | Where should the foundation supports for towing bits terminate?  | Forward of the towing winch  | <b>In the frames or other substantial structural members below decks</b>                     | On the deck plates in the engine room   | On deck, aft of the towing winch  |              |
| 1805 | Where, due to the arrangement of the vessel, lifejackets may become inaccessible, additional lifejackets shall be carried _____.                 | for the people on bridge watch   | for the forward lifeboats  | <b>as determined by the OCMI</b>  | for 50% of the crew of the vessel, not including those assigned to engineering duties |              |
| 1806 | Which act would be considered barratry?  | A criminal act committed by a crew member ashore in a foreign port                                     | <b>A criminal act committed by the ship Master in violation of his duty to the shipowner</b> | Theft of cargo by longshoremen  | Smuggling with the connivance of the shipowner  |              |
| 1807 | Which action reduces the yawing of a vessel in a following sea?  | Increasing GM  | Pumping out tanks aft  | Shifting weights to the bow   | <b>Shifting weights to the stern</b>  |              |
| 1808 | Which action should be taken FIRST if your tow is sinking in shallow water?  | <b>Pay out the towline until the sunken tow reaches bottom.</b>  | Sever the towline.   | Immediately head for the nearest shoreline.                                       | Contact the Coast Guard.  |              |
| 1809 | Which action will take place if a crew member is replaced in a U.S. port after foreign articles have been signed, and the ship proceeds foreign? | The Master will remove the replaced man's name from the Certified Crew List but not from the articles. | <b>The name of the new man is added to the articles but not to the Certified Crew List.</b>  | The U.S. Consul will remove the replaced man's name from the Certified Crew List. | The U.S. Consul will add the new man's name to the Certified Crew List.               |              |
| 1810 | Which action(s) is/are included in crane operations?   | Normal boom stowage and shutdown operations  | Emergency shutdown operation   | Removing booms from stowage   | <b>All of the above</b>   |              |
| 1811 | Which action(s) is/are included in crane operations?   | Pre-operation checks and start-up  | Removing booms from stowage  | Luff, slew, and hoist operations  | <b>All of the above</b>   |              |
| 1812 | Which action(s) should the operator of a pedestal crane take if crane control is lost?   | Let go of both control levers and return to neutral position.  | Press the emergency stop.  | Notify the mate on watch.   | <b>All of the above</b>   |              |
| 1813 | Which agency is authorized to assist the Coast Guard in the inspection of vessels for the suitability of loading hazardous materials?            | American Bureau of Shipping  | Environmental Protection Agency  | <b>National Cargo Bureau, Inc.</b>  | U.S. Navy explosive loading details   |              |
| 1814 | Which agency issues a certificate of loading that is evidence that the rules and regulations concerning bulk grain cargoes have been observed?   | American Bureau of Shipping  | Department of Agriculture  | <b>National Cargo Bureau</b>  | Public Health Service   |              |
| 1815 | Which arrangement of shell plating is used most in modern shipbuilding?  | Clinker  | <b>Flush</b>   | In-and-Out  | Joggled   |              |
| 1816 | Which basic category of water level fluctuations on the Great Lakes is the most regular?   | <b>Seasonal fluctuations</b>   | Outflow fluctuations   | Short-term fluctuations   | Long-term fluctuations  |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|---|---|--|--|--------------|
| 1817 | Which bend or knot is used to tie a small line to a larger one?   | <b>Becket bend</b>  | Bowline   | Clove hitch  | Lark's head  |              |
| 1818 | Which best describes a "fishplate" used in towing?  | <b>A triangular-shaped heavy steel plate with a round hole inset from each corner</b> | A steel plate in the shape of a flat fish                               | A rectangular-shaped piece of heavy steel plate with four holes    | A circular piece of heavy steel with three holes forming an equilateral triangle |              |
| 1819 | Which can be prevented only by segregating two lots of cargo into separate holds?   | Contamination of dry cargo by a wet cargo   | Contamination of a clean cargo by a dirty cargo                         | <b>Contamination of a food cargo by an odorous cargo</b>           | Overcarriage, overstowage, and short landing                                     |              |
| 1820 | Which cargo would require a dangerous cargo manifest?   | <b>Cotton</b>   | Wheat   | Sugar  | Lumber   |              |
| 1821 | Which cargoes require strips of common building lathe as dunnage in order to carry away heat generated by the cargo?      | Canned soups packaged in crates   | Cardboard cartons of shoes  | Paper products packaged in rolls                                   | <b>Refrigerated fruit that is ripening</b>                                       |              |
| 1822 | Which category of able seaman is not authorized to be counted as an able seaman on a seagoing tug of over 100 gross tons? | Unlimited   | Limited   | Special  | <b>Special (OSV)</b>   |              |
| 1823 | Which certificate is issued by the American Bureau of Shipping?   | Certificate of Inspection   | <b>Load Line Certificate</b>  | Safety Equipment Certificate                                       | Permit to Proceed for repairs  |              |
| 1824 | Which certificate is NOT issued by the Coast Guard?   | Award of official number  | Certificate of Inspection   | <b>Classification of Hull and Machinery</b>                        | Safety Equipment Certificate   |              |
| 1825 | Which characteristic is a disadvantage of a controllable- pitch propeller as compared to a fixed-pitch propeller?         | Slightly higher fuel consumption  | Lack of directional control when backing                                | Inefficient at high shaft RPM                                      | <b>Some unusual handling characteristics</b>                                     |              |
| 1826 | Which characteristic is an advantage of a butterfly valve as compared to a gate valve?                                    | Precise control over cargo flow   | <b>Quick operation</b>  | No resistance to cargo flow when open                              | Less maintenance required  |              |
| 1827 | Which condition would NOT entitle a vessel to carry goods on deck?  | The shipper agrees to deck stowage  | <b>The cargo will damage other cargoes by tainting or contamination</b> | Deck stowage is required by law or regulation                      | Deck stowage is customary in the trade (i.e. timber cargoes)                     |              |
| 1828 | Which data can NOT be found on a moisture equilibrium chart?  | Dry bulb temperature  | Moisture content  | Vapor pressure   | <b>Wet bulb temperature</b>  |              |
| 1829 | Which device is designed to automatically hold the load if power should fail to an electric winch?                        | Pneumatic brake   | <b>Electromagnetic brake</b>  | Hand brake   | Motor controller   |              |
| 1830 | Which document is NOT required by law to be posted aboard a vessel?   | <b>Official Crew List</b>   | Certificate of Inspection   | Officer's licenses   | Muster List  |              |
| 1831 | Which document lists all the lifesaving equipment required for a vessel?  | <b>Certificate of Inspection</b>  | American Bureau of Shipping Classification Certificate                  | International Convention for the Safety of Life at Sea Certificate | Certificate of Registry  |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|---|--|--|--|--------------|
| 1832 | Which document shows details of a tank vessel, cargoes it may carry, manning and safety equipment required?                                  | Safety Construction Certificate   | Cargo Gear Certificate   | <b>Certificate of Inspection</b>   | Declaration of Inspection  |              |
| 1833 | Which document shows the minimum required crew a vessel must have to navigate from one port in the United States to another?                 | Articles  | <b>Certificate of Inspection</b>   | Crew List  | Register   |              |
| 1834 | Which effect does speed through the water have on a vessel which is underway in shallow water?   | A decrease in the speed results in a decrease in steering response and maneuverability. | <b>An increase in speed results in the stern sucking down lower than the bow.</b>                              | An increase in speed results in the vessel rising on an even plane.          | A decrease in speed results in the vessel sucking down on an even plane.   |              |
| 1835 | Which effects listed below does NOT influence stability of a towing vessel?  | Free surface  | Load heights   | <b>Towline length</b>  | Ice  |              |
| 1836 | Which element(s) should be taken into account in the preparation of the "Cargo Securing Manual"?   | Weight of the vehicles  | Geographical area of the voyage  | Dynamic forces under adverse weather conditions                              | <b>All of the above</b>  |              |
| 1837 | Which ending is NOT acceptable in a wire rope that is free to rotate when hoisting?  | Poured socket   | <b>Liverpool eye splice</b>  | Eye formed with a pressure clamped sleeve                                    | Eye formed by clips  |              |
| 1838 | Which entry is NOT required in the Official Logbook?   | Steering gear tests   | Position of the load line and freeboard upon sailing   | <b>Commencement and termination of cargo operations</b>                      | Closure of hatches and sideports upon sailing                              |              |
| 1839 | Which entry on a dangerous cargo manifest concerning the classification of a cargo is NOT correct?   | Class 8   | <b>Division 3.1</b>  | Division 2.3   | All of the above are incorrect   |              |
| 1840 | Which entry on a dangerous cargo manifest concerning the classification of a cargo is correct?   | <b>Class 8</b>  | Class 3 - flammable liquid   | Division 2.2 - nonflammable gas  | All of the above are correct   |              |
| 1841 | Which factor does NOT affect the required freeboard of a cargo vessel?   | Season of the year  | Geographic zone of operation   | Density of the water   | <b>Condition of trim in normal operation</b>                               |              |
| 1842 | Which factor is MOST important in preventing sweat damage within a cargo hold?   | <b>Dew point of the cargo hold</b>  | Dew point of the outside atmosphere  | Outside air temperature  | Temperature of the cargo   |              |
| 1843 | Which factor is most likely to impair the strength and durability of synthetic line?   | Dry rot   | Mildew   | <b>Sunlight</b>  | Washing with mild soap   |              |
| 1844 | Which factor must be considered when determining the order of loading of dissimilar products through the same piping system aboard a tanker? | <b>Contamination of the cargo</b>   | Flash points   | Reid vapor pressures   | Specific gravities   |              |
| 1845 | Which factor would NOT lead to removing a towline from service?  | An excessive number of miles of towing service.   | Failing a tensile strength test that proved the towline was no longer appropriate for expected sea conditions. | <b>When heavy grease on the towline saturates the core of the wire rope.</b> | Its surface condition is noted, including its corrosion and discoloration. |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration  |
|------|--|---|--|--|---|---------------|
| 1846 | Which factor(s) affect lashing requirements aboard Ro-Ro vessels?  | <b>Ship's characteristics and motion in a seaway</b>                    | Trim of the vessel   | Wide variations of air temperature   | All of the above  |               |
| 1847 | Which factor(s) can affect the performance of a river towboat?   | The draft of the towboat and the draft of the barges under tow          | The placement of the barges within the tow   | The presence of flanking rudders and Kort nozzles                            | <b>All of the above</b>                                     |               |
| 1848 | Which factor(s) might indicate that a towline should be removed from service?  | Visible damage to the towline, including fishhooks.                     | Measurements showing a decrease in diameter.                                       | A surface condition of corrosion and discoloration.                          | <b>All of the above</b>                                     |               |
| 1849 | Which factor(s) must you consider when making up a towing bridle?  | The horsepower of the tug   | The beam of the barge  | The weight of the tow  | <b>All of the above</b>                                     |               |
| 1850 | Which factor(s) should be considered when loading vehicles or trailers aboard Ro-Ro vessels?                                 | Layout of decks   | Vertical clearances  | Tie-down and lashing   | <b>All of the above</b>                                     |               |
| 1851 | Which form of navigation may be suspended without notice under defense planning?   | <b>electronic</b>   | celestial  | piloting   | None of the above   |               |
| 1852 | Which illustration represents a carrick bend?  | H   | J  | L  | <b>M</b>  | <b>D030DG</b> |
| 1853 | Which information MUST be entered on the muster list?  | Names of all crew members   | Use and application of special equipment   | Listing of approved emergency equipment                                      | <b>Duties and station of each person during emergencies</b> |               |
| 1854 | Which is a correct reply to a Pilot's request, "How's your head"?  | <b>"Passing 040°"</b>   | "Steady"   | "Checked"  | "Eased to 15° rudder"                                       |               |
| 1855 | Which is a negotiable document?  | <b>Bill of Lading</b>   | Cargo Manifest   | Export Declaration   | Receiving Report  |               |
| 1856 | Which is a negotiated charter?   | <b>Fixture</b>  | Bill of Lading   | Conference agreement   | All of the above  |               |
| 1857 | Which is a TRUE statement concerning the examining of cargo equipment at the time of a vessels Inspection for Certification. | Cargo booms must be weight tested at this time by the U.S. Coast Guard. | Cargo booms must be weight tested at this time by the American Bureau of Shipping. | Cargo booms must be weight tested at this time by the National Cargo Bureau. | <b>No test at this time is required.</b>                    |               |
| 1858 | Which is an advantage of using watertight longitudinal divisions in double bottom tanks?                                     | <b>Cuts down free surface effect</b>                                    | Increases the rolling period   | Decreases weight because extra stiffeners are unneeded                       | Lowers the center of buoyancy without decreasing GM         |               |
| 1859 | Which is an example of cargo damage caused by inherent vice?   | Sublimation of chemicals  | <b>Heating of grain</b>  | Stevedore damage   | Wear and tear   |               |
| 1860 | Which is an example of failure to exercise due diligence?  | <b>Overloading</b>  | Sailing short of union manning requirements  | Sailing with less than 30% reserve fuel oil supply                           | Sailing short of being full and down                        |               |
| 1861 | Which is characteristic of a "special cargo"?  | The cargo gives off toxic gases when heated.                            | Periodic inspection is required while in transit to prevent spoilage.              | <b>It is of high value or easily pilferable.</b>                             | It must be stowed on deck.                                  |               |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration  |
|------|---|--|---|--|--|---------------|
| 1862 | Which is normally used to hold wire rope for splicing?  | Come along   | Jigger  | <b>Rigger's screw</b>  | Sealing clamp  |               |
| 1863 | Which is NOT a duty of a look-out?  | Refuse to talk to others, except as required by duty.  | Remain standing during your watch.  | Report every sighting.   | <b>Supervise any deck work going on in the area.</b>   |               |
| 1864 | Which is NOT a part of an anchor?   | Bill   | <b>Devil's claw</b>   | Palm   | Crown  |               |
| 1865 | Which is NOT a potential hazard of approaching close to an iceberg?                           | <b>The brash ice in the vicinity may clog sea intakes.</b>   | The berg may calve with the bergy bit hitting the vessel.   | There may be underwater rams extending out from the berg.  | The berg may suddenly tilt or capsize due to uneven melting and hit the vessel.                            |               |
| 1866 | Which is NOT a recommended practice when handling nylon line?                                 | Nylon lines which become slippery because of oil or grease should be scrubbed down.                      | <b>Manila line stoppers should be used for holding nylon hawsers.</b>                               | When easing out nylon line, keep an extra turn on the bitt to prevent slipping.                    | Iced-over nylon lines should be thawed and drained before stowing.   |               |
| 1867 | Which is NOT a required entry in the ship's Official Logbook?                                 | Sale of effects of a deceased crew member  | Medical treatment of an injury  | Inspections of cargo gear  | <b>Dry docking of the vessel</b>   |               |
| 1868 | Which is NOT a type of seizing?   | Flat seizing   | Racking seizing   | Throat seizing   | <b>Tube seizing</b>  |               |
| 1869 | Which is NOT an advantage of the flush method of welded shell plating?                        | Reduces weight   | Reduces frictional resistance   | Keeps practically 100% of tensile strength at the joints   | <b>Reduces plate stress</b>  |               |
| 1870 | Which is NOT required on a tankship carrying hazardous liquid cargoes in bulk?                | A copy of 46 CFR parts 35 and 150  | <b>Certificate of Adequacy for the hazardous cargoes carried</b>                                    | Certificate of Inspection issued under the Tank Vessel Regulations                                 | Cargo piping plan showing loading rates for all applicable cargo lines                                     |               |
| 1871 | Which is part of the ground tackle?   | Charlie noble  | <b>Devil's claw</b>   | Gooseneck  | Rat's tail   |               |
| 1872 | Which is supplied to the vessel by the U.S. Coast Guard?                                      | Bell book  | Cargo gear register   | <b>Official Logbook</b>  | Rough Logbook  |               |
| 1873 | Which is the correct procedure for anchoring a small to medium size vessel in deep water?     | Let the anchor fall free from the hawsepipe, but apply the brake at intervals to check the rate of fall. | Back the anchor slowly out of the hawsepipe a few feet, and then let it fall in the normal fashion. | Let the anchor fall off the brake right from the hawsepipe, but keep a slight strain on the brake. | <b>Under power, back the anchor out until it is near, but clear, of the bottom before letting it fall.</b> |               |
| 1874 | Which item is rigged to transmit the thrust from one barge to another barge when going ahead? | I  | H   | <b>E</b>   | B  | <b>D024DG</b> |
| 1875 | Which item is rigged to transmit the thrust from one barge to another when backing down?      | I  | H   | <b>C</b>   | B  | <b>D024DG</b> |
| 1876 | Which item must be entered in the official log?   | All engine orders  | <b>Drafts upon leaving port</b>   | Names of night mates and engineers   | Number of cargo gangs on board   |               |

| ID # | Question   | Choice A                        | Choice B              | Choice C                              | Choice D                | Illustration  |
|------|--|---------------------------------|-----------------------|---------------------------------------|-------------------------|---------------|
| 1877 | Which kind of hitch should you use to secure a spar?   | Blackwall hitch                 | Stage hitch           | <b>Timber hitch</b>                   | Two half hitches        |               |
| 1878 | Which knot is secure only when there is a strain on the line?                                    | H                               | I                     | <b>L</b>                              | P                       | <b>D030DG</b> |
| 1879 | Which knot is suitable for hoisting an unconscious person?                                       | Bowline in a bight              | <b>French bowline</b> | Fisherman's loop                      | Spider hitch            |               |
| 1880 | Which knot is suitable for hoisting an unconscious person?                                       | Bowline on a bight              | Fisherman's loop      | <b>French bowline</b>                 | Spider hitch            |               |
| 1881 | Which knot is used to attach two different sized lines together?                                 | Granny knot                     | <b>Sheet bend</b>     | Square knot                           | Thief knot              |               |
| 1882 | Which knot reduces the strength of a line by the LEAST amount?                                   | Carrick bend                    | Square knot           | Sheet bend                            | <b>Bowline</b>          |               |
| 1883 | Which knot represents a double blackwall hitch?  | F                               | G                     | <b>L</b>                              | R                       | <b>D030DG</b> |
| 1884 | Which knot represents a double sheet bend?   | F                               | L                     | <b>R</b>                              | T                       | <b>D030DG</b> |
| 1885 | Which knot represents a single becket bend?  | E                               | F                     | G                                     | <b>H</b>                | <b>D030DG</b> |
| 1886 | Which knot should be used to secure a line to a spar when the pull is parallel to the spar?      | G                               | F                     | <b>P</b>                              | Q                       | <b>D030DG</b> |
| 1887 | Which knot should be used to secure a line to a spar when the pull is perpendicular to the spar? | E                               | <b>F</b>              | N                                     | P                       | <b>D030DG</b> |
| 1888 | Which knot should be used to send a man over the side when he may have to use both hands?        | Bowline                         | <b>French bowline</b> | Bowline on a bight                    | Running bowline         |               |
| 1889 | Which knot shown is a French bowline?  | L                               | <b>T</b>              | Q                                     | W                       | <b>D030DG</b> |
| 1890 | Which knot would serve best as a safety sling for a person working over the side?                | Bowline on a bight              | <b>French bowline</b> | Jug sling                             | Lifting hitch           |               |
| 1891 | Which lashing device(s) would be used in securing heavy vehicles aboard Ro-Ro vessels?           | Buckle or ratchet tensioner     | Webbing               | <b>Chain</b>                          | All of the above        |               |
| 1892 | Which lashing gear used aboard Ro-Ro vessels should be painted or soaked in oil when not in use? | Wire rope.                      | <b>Chain</b>          | Webbing                               | All of the above        |               |
| 1893 | Which lashing material is preferred when securing new cars aboard Ro-Ro vessels?                 | Chain lever or turnbuckle       | <b>Webbing</b>        | Wire                                  | None of the above       |               |
| 1894 | Which lashing materials would be used in securing light vehicles aboard Ro-Ro vessels?           | Chain lever or turnbuckle       | <b>Webbing</b>        | Chain                                 | None of the above       |               |
| 1895 | Which letter in illustration D030DG represents a plain whipping?                                 | E                               | F                     | <b>J</b>                              | V                       | <b>D030DG</b> |
| 1896 | Which letter indicates a longitudinal?   | C                               | E                     | <b>L</b>                              | M                       | <b>D033DG</b> |
| 1897 | Which letter represents a bowline on a bight?  | H                               | <b>I</b>              | M                                     | W                       | <b>D030DG</b> |
| 1898 | Which letter shown represents a clove hitch?   | <b>X</b>                        | U                     | T                                     | R                       | <b>D030DG</b> |
| 1899 | Which lien against a vessel would be settled FIRST?  | Maintenance and cure            | Vessel mortgage       | <b>Salvage lien</b>                   | Ship repairer's lien    |               |
| 1900 | Which line cannot be spliced?  | Braided line with a hollow core | Double-braided line   | <b>Braided line with a solid core</b> | Any line can be spliced |               |
| 1901 | Which line is two-stranded, left-handed small stuff?   | Houseline                       | <b>Marline</b>        | Ratline                               | Lagline                 |               |
| 1902 | Which line would be least likely to kink?  | <b>Braided</b>                  | Left-handed laid      | Right-handed laid                     | Straight laid           |               |



| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|---|---|--|--|--------------|
| 1903 | Which log includes a statement of the conduct, ability, and character of each crew member on the completion of a voyage? | <b>Official Logbook</b>   | Department Logbook  | Crew Logbook   | Smooth Logbook   |              |
| 1904 | Which logbook is required to be submitted to the Coast Guard?  | <b>Official Log</b>   | Smooth log  | Rough log  | Bell log   |              |
| 1905 | Which material makes the strongest mooring line?   | Sisal   | Manila  | <b>Nylon</b>   | Polypropylene  |              |
| 1906 | Which material should NOT be used to secure cargo on deck for a voyage?  | Steel chain   | Wire rope   | Steel strapping  | <b>Fiber rope</b>  |              |
| 1907 | Which measure should NOT be taken to reduce the pounding of a vessel in a head sea?                                      | <b>Add ballast in the after peak.</b>   | Add ballast forward.  | Alter course.  | Reduce speed.  |              |
| 1908 | Which method is used to detect rot in manila lines?  | Feeling the surface of the line for broken fibers                                       | Measuring the reduction in circumference of the line                          | Observing for the appearance of mildew on the outer surface  | <b>Opening the strands and examining the inner fibers</b>      |              |
| 1909 | Which method of adjusting mooring lines is MOST useful for leaving a boat free to rise and fall with the tide?           | <b>Crossing the spring lines</b>  | Slacking all forward running lines while keeping all after running lines taut | Doubling up on spring or breast lines                        | Slacking bow and stern lines                                   |              |
| 1910 | Which method should be used to secure a manila line to bitts?  | A round turn on the bitt farthest from the strain and then figure eights                | <b>A round turn on the bitt closest to the strain and then figure eights</b>  | Figure eights and then a round turn at the top of both bitts | Only figure eights are necessary on both bitts                 |              |
| 1911 | Which method should be used to secure a synthetic fiber line to two bitts?   | <b>Two round turns on the bitt closest to the strain and then figure eights</b>         | Two round turns on the bitt farthest from the strain and then figure eights   | Figure eights and then a round turn at the top of both bitts | Only figure eights are necessary on both bitts                 |              |
| 1912 | Which method should be used to warm up the pump turbines prior to discharge?   | Lock the turbine rotor and slowly bleed in steam until operating temperature is reached | Run the pump at high speed with the discharge valves closed                   | Run the turbine at slow speed with the pump disconnected     | <b>Shut the discharge valve and run the pump at slow speed</b> |              |
| 1913 | Which molten substance is poured into the basket of a wire rope socket being fitted to the end of a wire rope?           | Babbitt   | Bronze  | Lead   | <b>Zinc</b>  |              |
| 1914 | Which mooring line has the least elasticity?   | <b>Dacron</b>   | Nylon   | Esterlene  | Polypropylene  |              |
| 1915 | Which mooring line is likely to undergo the most strain when docking a ship under normal conditions?                     | Bow line  | Breast line   | <b>Spring line</b>   | Stern line   |              |
| 1916 | Which mooring line prevents sideways motion of a vessel moored to a pier?  | A line led forward from the bow   | A line led aft from the bow   | A line led in the same direction as the keel                 | <b>A line led at a right angle to the keel</b>                 |              |



| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|---|---|---|---|--------------|
| 1917 | Which Naval Control of Shipping publication should be aboard your vessel?   | <b>ATP-2 Vol. II - Allied Control of Shipping Manual</b>                                    | NWP-II - Underway Replenishment Guide   | Warship Recognition Cards   | ATP-1 - Allied Tactical Signals   |              |
| 1918 | Which Naval Control of Shipping publication should be aboard your vessel?   | <b>ATP-2, Volume II "Allied Control of Shipping Manual - Guide to Masters"</b>              | ATP-1, Volume II "Allied Tactical Signals"  | NWP-14, "Amphibious Operations"   | PUB 102, "International Code of Signals"  |              |
| 1919 | Which of the following actions are stated in the correct order prior to loading or discharging cargo on a Ro-Ro vessel?                     | <b>Lower the stern ramp, raise/open the stern door, turn on ventilation for cargo holds</b> | Turn on ventilation for cargo holds, raise/open the stern door, lower the stern ramp    | Turn on ventilation for cargo holds, lower the stern ramp, raise/open the stern door        | Raise/open the stern door, lower the stern ramp, turn on ventilation for cargo holds        |              |
| 1920 | Which of the following actions are stated in the correct order prior to loading or discharging cargo on a Ro-Ro vessel?                     | Raise/open stern door, lower the stern ramp, turn on ventilation for cargo holds            | <b>Lower the stern ramp, raise/open stern door, turn on ventilation for cargo holds</b> | Turn on ventilation for cargo holds, lower the stern ramp, raise/open stern door            | Turn on ventilation for cargo holds, raise/open stern door, lower the stern ramp            |              |
| 1921 | Which of the following actions are stated in the correct order prior to loading or discharging cargo on a Ro-Ro vessel?                     | Turn on ventilation for cargo holds, lower the stern ramp, raise/open the stern door        | Turn on ventilation for cargo holds, raise/open the stern door, lower the stern ramp    | <b>Lower the stern ramp, raise/open the stern door, turn on ventilation for cargo holds</b> | Raise/open the stern door, lower the stern ramp, turn on ventilation for cargo holds        |              |
| 1922 | Which of the following actions are stated in the correct order prior to loading or discharging cargo on a Ro-Ro vessel?                     | Raise/open stern door, lower the stern ramp, turn on ventilation for cargo holds            | Turn on ventilation for cargo holds, raise/open the stern door, lower the stern ramp    | Turn on ventilation for cargo holds, lower the stern ramp, raise/open the stern door        | <b>Lower the stern ramp, raise/open the stern door, turn on ventilation for cargo holds</b> |              |
| 1923 | Which of the following are considered to be "road vehicles" that can be carried on Ro-Ro vessels?   | <b>Semi-trailer</b>   | Train   | Articulated train   | All of the above  |              |
| 1924 | Which of the following are considered to be "road vehicles" that can be carried on Ro-Ro vessels?   | Semi-trailer  | Road train  | Articulated road train  | <b>All of the above</b>   |              |
| 1925 | Which of the following grade classifications is assigned to camphor oil?  | A   | C   | <b>D</b>  | E   |              |
| 1926 | Which of the following is a characteristic of a Ro-Ro vessel?   | Passenger tours available upon docking  | Long port stays necessary to secure vehicles  | <b>Short in port turnaround times</b>   | Heavy vehicles only require lightweight securing equipment                                  |              |
| 1927 | Which of the following is an inherent advantage possessed by a twin-screw vessel in opposition to a single-screw vessel?                    | The correct trim will be obtained more easily   | The drag effect will be cancelled out   | <b>The side forces will be cancelled out</b>  | The vessel's speed will be increased  |              |
| 1928 | Which of the following is considered auxiliary securing equipment that provides extra reliability to lashing in Ro-Ro transport operations? | Trailer trestles  | Pedestals   | Wheel chocks  | <b>All of the above</b>   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration  |
|------|---|---|---|--|---|---------------|
| 1929 | Which of the following is not a loading or transfer feature aboard a Ro-Ro vessel?                                  | Stern ramp and/or side ramp   | Cargo lift  | Hatch opening designed as a lift   | <b>Stuelcken boom</b>   |               |
| 1930 | Which of the following is not an acceptable unit of measure to be used consistently through out an Oil Record Book? | cubic meters  | gallons   | <b>tons</b>  | barrels   |               |
| 1931 | Which of the following is NOT necessary, prior to loading or discharging cargo on a Ro-Ro vessel?                   | Turn on ventilation for cargo holds.  | Lower the stern ramp.   | <b>Turn on the red cargo light.</b>  | Raise/open the stern door.  |               |
| 1932 | Which of the following is the stated proper sequence before commencing cargo operations aboard Ro-Ro vessels?       | Start ventilation, lower the ramp, notify engine room   | Lower the ramp, start ventilation, notify engine room   | <b>Notify engine room, lower the ramp, start ventilation</b>   | Start ventilation, notify engine room, lower the ramp   |               |
| 1933 | Which of the following is/are the component(s) of a twin crane set as shown?  | Foundation assembly   | Turntable assembly  | Crane house assembly   | <b>All of the above</b>   | <b>D047DG</b> |
| 1934 | Which of the following is/are the component(s) of a twin crane set as shown?  | Boom assembly   | Hook block assembly   | Operator's cab   | <b>All of the above</b>   | <b>D047DG</b> |
| 1935 | Which of the following is/are the optional component(s) of a twin crane set as shown?                               | Boom assembly   | Hook block assembly   | <b>Rider block tagline system</b>  | All of the above  | <b>D047DG</b> |
| 1936 | Which of the following is/are TRUE regarding lashing requirements to secure vehicles aboard Ro-Ro vessels?          | The securing of cargo on flats and trailers and in containers must be adequate to withstand both road and sea motions | The generally recommended lash angle cannot be greater than 45 degrees relative to the deck in any direction. | It is necessary for an adequate number of securing points on the vehicles themselves in order that lashings may be properly and safely utilized. | <b>All the above</b>  |               |
| 1937 | Which of the following lashing gear used aboard Ro-Ro vessels should be maintained when not in use?                 | Chain   | Wire rope   | Webbing  | <b>All of the above</b>   |               |
| 1938 | Which of the following lashing gear used aboard Ro-Ro vessels should be stowed when not in use?                     | Chain   | Wire rope   | Webbing  | <b>All of the above</b>   |               |
| 1939 | Which of the following lashing materials would be used in securing heavy vehicles aboard Ro-Ro vessels?             | <b>Chain lever or turnbuckle</b>  | Webbing   | Buckle or ratchet tensioner  | All of the above  |               |
| 1940 | Which of the following requires the vessel to be dry-docked?  | Verification of load line measurements  | Inspection of the double bottoms  | <b>Inspection of tail shaft liner</b>  | Cleaning of the hull  |               |
| 1941 | Which of the following responsibilities should you assume once you have agreed to assist a disabled vessel?         | <b>All personnel on the disabled vessel don life jackets</b>  | All passengers move to the highest point on the disabled vessel to remain clear of towing gear                | Operator of disabled vessel on the bow with a lifejacket and emergency tow disconnect equipment  | Operator of disabled vessel to dump fuel and ballast to improve disabled vessel's towing movement |               |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 1942 | Which of the following statement(s) is/are FALSE regarding a twin pedestal crane set?                                   | The cranes may be operated independently.  | The cranes may be interconnected for twin operation.  | <b>The cranes are powered by independent internal combustion power units.</b>  | All of the above   |              |
| 1943 | Which of the following statement(s) is/are TRUE regarding a twin pedestal crane set?                                    | The cranes may be operated independently.  | The cranes may be interconnected for twin operation.  | When twinned, the crane rotation on the foundation assembly is unlimited.  | <b>All of the above</b>  |              |
| 1944 | Which of the following statement(s) is/are TRUE regarding lashing requirements to secure vehicles aboard Ro-Ro vessels? | It is imperative that the securing of cargo on flats and trailers and in containers be adequate for both road and sea motions. | The movements experienced by road borne cargo differ significantly from the roll and sway movements of a ship at sea. | It is necessary for adequate number and strength of securing points on the vehicles themselves in order that lashings may be properly and safely utilized. | <b>All the above</b>   |              |
| 1945 | Which of the following statement(s) is/are TRUE regarding twin pedestal cranes?   | Each single boom is of the partial-level luffing type and is capable of limited rotation.                                      | A slew drive system provides for rotation of each crane.  | An independent slew drive system rotates the turntable.  | <b>All of the above</b>  |              |
| 1946 | Which of the following statement(s) is/are TRUE regarding twin pedestal cranes?   | A slew drive system provides for rotation of each crane.   | An independent slew drive system rotates the turntable.   | Each crane is supplied with luff, hoist, and slew functions for crane load handling.   | <b>All of the above</b>  |              |
| 1947 | Which of the following statement(s) is/are TRUE regarding twin pedestal cranes?   | Each single boom is of the partial-level luffing type and is capable of limited rotation.                                      | A slew drive system provides for rotation of each crane.  | Maintenance logs and records are to be kept for each crane.  | <b>All of the above</b>  |              |
| 1948 | Which of the following statements concerning the rigging and use of bosun's chairs is TRUE?                             | When riding a stay, make sure that the bow of the shackle passes through the becket of the bridle.                             | <b>Always have the chair hoisted manually.</b>  | The lowering hitch should always be made before getting into the chair.  | Always secure the gantline to the chair with a clove hitch.  |              |
| 1949 | Which of the following statements concerning the rigging of bosuns' chairs and their use is TRUE?                       | Always secure the gantline to the chair with a bowline.  | Always have the chair hoisted with at least three turns on a winch drum.  | <b>Any tools, paint pots etc. should be secured by lanyards.</b>   | When riding a stay, make sure that the bow of the shackle passes through the becket of the bridle. |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|--|--|--|--|--------------|
| 1950 | Which of the following statements is FALSE concerning cranes being installed on the centerline of vessels?                  | <b>A centerline crane can never be operated in tandem.</b>   | One crane is able to work one end of two adjacent hatches.   | These cranes are more economical and weigh less than outboard-mounted cranes.                                    | One crane is able to work both sides of the ship.  |              |
| 1951 | Which of the following statements is TRUE regarding crane operations?   | Radio communications allow the crane operator to disregard the use of hand signals.  | <b>The crane operators and signalman must be familiar with the correct hand signals.</b>                                 | The forward cranes can be operated from the bridge.  | The aft cranes can be operated from the aft steering station.  |              |
| 1952 | Which of the following statements is TRUE regarding lashing requirements to secure vehicles aboard Ro-Ro vessels?           | It is NOT imperative that the securing of cargo on flats and trailers and in containers be adequate for BOTH road and sea motions. | <b>The generally recommended lash angle should not be greater than 45 degrees relative to the deck in any direction.</b> | For effective securing vehicles should be stowed athwartships whenever possible.                                 | It is not necessary to lash automobiles since setting the brakes is sufficient to keep them from moving.                         |              |
| 1953 | Which of the following statements is TRUE regarding lashing requirements to secure vehicles aboard Ro-Ro vessels?           | The securing of cargo on flats and trailers must be adequate to withstand road motions only.                                       | The movements experienced by road borne cargo are the same as the movements of a ship at sea.                            | <b>The generally recommended lash angle is no greater than 45 degrees relative to the deck in any direction.</b> | It is not necessary for an adequate number of securing points on the vehicles themselves since setting the brakes is sufficient. |              |
| 1954 | Which of the following statements is/are FALSE concerning cranes being installed on the centerline of vessels?              | One crane is able to work both sides of the ship.  | One crane is able to work one end of two adjacent hatches.   | <b>A centerline crane can never work more than one hatch.</b>  | All of the above   |              |
| 1955 | Which of the following statements is/are TRUE concerning cranes being installed on the centerline of vessels?               | One crane is able to work both sides of the ship.  | One crane is able to work one end of two adjacent hatches.   | They are more economical and weigh less.   | <b>All of the above</b>  |              |
| 1956 | Which of the following tensioning devices is used with webbing to secure light vehicles aboard Ro-Ro vessels?               | Chain lever  | <b>Buckle tensioner</b>  | Adjust-a-matic tensioner   | Turnbuckle   |              |
| 1957 | Which of the Great Lakes experiences the least amount of water level fluctuation between seasonal high and low water marks? | Lake Huron   | Lake Erie  | <b>Lake Superior</b>   | Lake Michigan  |              |
| 1958 | Which of the Great Lakes generally has the shortest navigation season?  | Lake Erie  | Lake Huron   | Lake Michigan  | <b>Lake Superior</b>   |              |
| 1959 | Which of the Great Lakes is generally the last to reach its seasonal low and seasonal high water marks?                     | <b>Lake Superior</b>   | Lake Michigan  | Lake Huron   | Lake Ontario   |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration  |
|------|--|---|--|--|---|---------------|
| 1960 | Which of the Great Lakes is most affected by short-term Lake level fluctuations?   | Lake Superior   | Lake Michigan  | Lake Huron   | <b>Lake Erie</b>                                    |               |
| 1961 | Which of the Great Lakes lies entirely within the United States?   | Lake Ontario  | Lake St. Clair                                       | <b>Lake Michigan</b>   | Lake Superior                                       |               |
| 1962 | Which of the knots, bends, or hitches shown in the illustration would you use to properly secure a bosun's chair to a gantline?  | I   | P  | <b>R</b>   | X   | <b>D030DG</b> |
| 1963 | Which of the knots, bends, or hitches shown in the illustration would you use to properly secure a bosun's chair to a gantline?  | G   | I  | Q  | <b>R</b>  | <b>D030DG</b> |
| 1964 | Which of the signals listed is required to be displayed at night while bunkering at a dock?  | <b>One red light</b>  | Two red lights                                       | One red light over a yellow light                                  | One red light over a white light                    |               |
| 1965 | Which of the signals listed is required to be displayed during the day while bunkering?  | <b>A red flag</b>   | A yellow flag  | A red and yellow flag  | A red light   |               |
| 1966 | Which operating procedure(s) should be adhered to on a Ro-Ro vessel?   | One officer assigned to oversee the initial loading and lashing | All lashings should be completed before leaving port | Periodic inspection and retensioning of lashings during the voyage | <b>All of the above</b>                             |               |
| 1967 | Which organization would conduct a survey of the insulation in a reefer compartment prior to loading cargo?  | U.S. Customs Service  | OSHA   | <b>American Bureau of Shipping</b>                                 | National Cargo Bureau                               |               |
| 1968 | Which part of a cargo boom has the greatest diameter?  | Head  | <b>Middle</b>  | Heel   | It has the same diameter along its complete length. |               |
| 1969 | Which part of a conventional cargo gear rig provides for vertical control and positioning of a boom?   | Cargo whip  | Gooseneck fitting                                    | Spider band  | <b>Topping lift</b>                                 |               |
| 1970 | Which part of an anchor actually digs into the bottom?   | Stock   | <b>Fluke</b>   | Shank  | Crown   |               |
| 1971 | Which part of the patent anchor performs the same function as the stock of an old fashioned anchor; that is, forces the flukes to dig in?  | Bill or pea   | Arm  | Shank  | <b>Tripping Palm</b>                                |               |
| 1972 | Which party must ensure that legal work hour limitations (for both officers and crew members), rest periods and regulations governing work on Sundays and holidays are followed when the vessel is in a safe harbor? | The owner of the vessel   | The company operating the vessel                     | <b>The Master of the vessel</b>                                    | The company chartering the vessel                   |               |
| 1973 | Which picture represents a barrel hitch?   | <b>O</b>  | U  | E  | P   | <b>D030DG</b> |
| 1974 | Which picture represents a timber hitch?   | <b>E</b>  | F  | N  | U   | <b>D030DG</b> |
| 1975 | Which picture in illustration D030DG represents a half hitch?  | <b>U</b>  | S  | K  | H   | <b>D030DG</b> |
| 1976 | Which picture represents a blackwall hitch?  | F   | H  | P  | <b>S</b>  | <b>D030DG</b> |
| 1977 | Which picture represents a bowline?  | G   | H  | L  | <b>Q</b>  | <b>D030DG</b> |
| 1978 | Which picture represents a stopper hitch?  | M   | <b>N</b>   | R  | L   | <b>D030DG</b> |
| 1979 | Which picture shown represents a square knot?  | <b>W</b>  | R  | P  | H   | <b>D030DG</b> |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration  |
|------|---|--|--|---|--|---------------|
| 1980 | Which piece(s) of equipment is/are required to "twin-up" 30-ton pedestal cranes aboard a crane vessel?  | <b>Equalizing beam</b>   | Portable power swivel  | 20-foot container spreader  | All of the above   |               |
| 1981 | Which position shown is the most dangerous when tying up?   | I  | II   | III   | IV   | <b>D019DG</b> |
| 1982 | Which product is most likely to accumulate static electricity?  | Crude oil  | Hard asphalt   | <b>Lubricating oil</b>  | Residual fuel oil  |               |
| 1983 | Which publication is NOT carried on board U.S. merchant vessels operating under Naval Control of Shipping?  | Allied Control of Shipping Manual - Guide to Masters                           | Communications Supplement  | <b>Tactical Control and Routing of Merchant Vessels</b>                   | All of the above are carried on board  |               |
| 1984 | Which publication offers information on Great Lakes ice services?   | Light List volume VII  | <b>U.S. Coast Pilot #6</b>   | Marine Weather Log  | National Weather Service, Ice Outlooks   |               |
| 1985 | Which publication would give detailed information on the commercial vessel traffic reporting system for connecting waters from Lake Erie to Lake Huron? | United States Coast Pilot - Great Lakes #6                                     | U.S. Coast Guard Light List - Vol. VII   | <b>Code of Federal Regulations - Title 33</b>                             | The appropriate Great Lakes Navigation Chart                                     |               |
| 1986 | Which pump must always be primed?   | <b>Centrifugal pump</b>  | Reciprocating pump   | Rotary pump   | All of the above   |               |
| 1987 | Which refers to the depth of a petroleum product in a tank?   | Outage   | Ullage   | Thieverage  | <b>Innage</b>  |               |
| 1988 | Which rope has the greatest breaking strength?  | Manila   | <b>Nylon</b>   | Polyester   | Polypropylene  |               |
| 1989 | Which safety check(s) should be made before letting go the anchor?  | See that the anchor is clear of obstructions.                                  | See that the chain is all clear.   | See that the wildcat is disengaged.                                       | <b>All of the above</b>  |               |
| 1990 | Which safety precaution(s) should be observed during crane operations?  | Checking for proper lifting from beneath the load during cargo operations      | <b>Using the proper slings or other lifting devices during cargo operations</b>                    | Relaying communications to port agents on the pier during cargo hoists    | All of the above   |               |
| 1991 | Which shallow water effect will increase dramatically if you increase your ship's speed past its "critical speed"?                                      | <b>Squatting</b>   | Smelling the bottom  | Sinkage   | Bank cushion   |               |
| 1992 | Which single-letter signal, when used by icebreakers on the Great Lakes, may be made by using the ship's whistle?                                       | E  | I  | <b>M</b>  | None   |               |
| 1993 | Which situation requires you to furnish a notice of marine casualty to the Coast Guard?   | A seaman slips on ice on deck and sprains his ankle, requiring an ace bandage. | You collide with a buoy and drag it off station with no apparent damage to the vessel or the buoy. | Storm damage to the cargo winch motors requires repairs costing \$19,000. | <b>Your vessel is at anchor and grounds at low tide with no apparent damage.</b> |               |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 1994 | Which situation requires you to furnish a notice of marine casualty to the Coast Guard? | Storm damage to the cargo winch motors requires repairs costing \$19,000.         | <b>Your vessel is at anchor and grounds at low tide with no apparent damage.</b> | You collide with a buoy and drag it off station with no apparent damage to the vessel or the buoy. | A seaman slips on ice on deck and sprains his ankle, requiring an ace bandage. |              |
| 1995 | Which space cannot be deducted from gross tonnage when calculating net tonnage?         | Crew messroom   | <b>Forepeak ballast tank</b>   | Master's cabin   | Chain locker   |              |
| 1996 | Which space(s) is (are) deducted from gross tonnage to derive net tonnage?              | <b>Boatswain's stores</b>   | Companions and booby hatches   | Passenger spaces   | All of the above   |              |
| 1997 | Which space(s) is(are) deducted from gross tonnage to derive net tonnage?               | Companions and booby hatches  | <b>Chart room</b>  | Open structures  | All of the above   |              |
| 1998 | Which space(s) is(are) deducted from gross tonnage to derive net tonnage?               | Companions and booby hatches  | Open structures  | <b>Spaces for the exclusive use of the officers or crew</b>  | Water ballast spaces   |              |
| 1999 | Which space(s) is(are) deducted from gross tonnage to derive net tonnage?               | Boatswain's stores  | Chart room   | Spaces for the exclusive use of the officers or crew   | <b>All of the above</b>  |              |
| 2000 | Which space(s) is(are) deducted from gross tonnage to derive net tonnage?               | Galley fitted with range or oven  | Open structures  | Passenger spaces   | <b>Boatswain's stores</b>  |              |
| 2001 | Which space(s) is(are) exempt when measuring gross tonnage?                             | Auxiliary machinery spaces above the uppermost continuous deck                    | Steering gear room   | Part of the wheelhouse used to control vessel  | <b>All of the above</b>  |              |
| 2002 | Which space(s) is(are) NOT exempt when measuring gross tonnage?                         | Auxiliary machinery spaces above the deck   | Steering gear room   | <b>Cargo holds</b>   | Galley in a deckhouse  |              |
| 2003 | Which splice is used to connect two separate lines together?                            | Back splice   | Chain splice   | Eye splice   | <b>Long splice</b>   |              |
| 2004 | Which splice should you use in order to make a permanent loop in a line?                | Back splice   | <b>Eye splice</b>  | Long splice  | Short splice   |              |
| 2005 | Which standard operating procedure(s) should be adhered to on a Ro-Ro vessel?           | <b>Periodic inspection and retensioning of lashings as required during voyage</b> | Battery cables must be disconnected to prevent fire hazard                       | One deck engine mechanic assigned to oversee the initial loading and lashing                       | All of the above   |              |
| 2006 | Which statement about a centrifugal cargo pump is TRUE?                                 | It is a positive displacement pump.   | <b>It must have a positive suction.</b>  | Increasing rotation speed will decrease discharge pressure.  | All of the above   |              |
| 2007 | Which statement about a tunnel bow thruster is TRUE?                                    | <b>It provides lateral control without affecting headway.</b>                     | It is fully effective at speeds up to about six knots.                           | It can be used to slow the ship in addition to backing down.                                       | It will allow you to hold a position when the current is from astern.          |              |



| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D  | Illustration |
|------|---|---|--|---|---|--------------|
| 2008 | Which statement about a vessel's stability while dry-docking is TRUE? | <b>Every ton of weight bearing on the blocks acts as if a ton of weight was removed at keel level.</b>                | When the ship touches the blocks, the beam for stability purposes increases to the beam of the dry-dock. | The stability of the vessel increases as a dock is pumped out due to the support of the keel blocks.                        | As the dock begins to support the weight of the vessel, stability calculations are based on the ship and dock as a single unit. |              |
| 2009 | Which statement about bilge keels is CORRECT?                         | They are critical strength members and require careful design consideration.  | <b>They increase resistance to rolling.</b>  | They attach to a low stress area.   | They provide support when the vessel is dry docked.   |              |
| 2010 | Which statement about damage control is TRUE?                         | <b>A hole in the hull at the waterline is more dangerous than a hole below the inner bottom.</b>                      | The amount of water entering a ship through a hole varies inversely to the area of the hole.             | Water flowing into a lower compartment on a ship is more dangerous than water on deck or flowing into an upper compartment. | Water flowing over the forecastle bulwark is more dangerous than a hole in the hull at the waterline.                           |              |
| 2011 | Which statement about general average is TRUE?                        | Damage to a ship must have been incurred while the ship and/or its machinery was being used for its intended purpose. | <b>Property must have been sacrificed or an expenditure of money incurred.</b>                           | The loss or damage to deck cargo due to heavy weather constitutes general average.  | Of the ship, the freight, and the cargo interests, only one need be involved.   |              |
| 2012 | Which statement about Naval Control of Shipping in wartime is TRUE?   | <b>It is mandatory in wartime.</b>  | It is mandatory in hazardous areas and voluntary in other areas.   | It is mandatory only for vessels sailing in convoy.   | It is mandatory for vessels bound foreign and voluntary for vessels in the coastwise trade.                                     |              |
| 2013 | Which statement about shipping coal is TRUE?                          | Anthracite will generate more methane than bituminous coal.   | Coal should not be shipped while wet.  | <b>Coal should be surface ventilated to remove methane gas.</b>   | The methane gas generated by coal will react with moisture on the ship's structure and accelerate corrosion.                    |              |
| 2014 | Which statement about ships operating in ice is FALSE?                | Light and partly loaded ships should be ballasted as deeply as possible.  | <b>In brash-filled channels, operating with a shallow draft forward is most effective.</b>               | Traditionally, operating ships light in the ice has been effective in the spring.   | Good searchlights should be available in the event of night navigation with or without icebreaker escort.                       |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|--|---|--|--|--------------|
| 2015 | Which statement about splices is TRUE?   | A back splice is used to permanently connect two lines together.   | <b>A long splice is used to connect two lines that will pass through narrow openings.</b>   | A short splice is used to temporarily connect two lines.   | In splicing fiber rope, you would splice with the lay of the line.   |              |
| 2016 | Which statement about stopping a vessel is TRUE?                                 | A lightly laden vessel requires as much stopping distance as a fully laden vessel when the current is from astern. | A vessel is dead in the water when the back wash from astern operation reaches the bow.   | A tunnel bow thruster can be used in an emergency to reduce the stopping distance.   | <b>When a vessel is dead in the water any speed displayed by Doppler log reflects the current.</b>                             |              |
| 2017 | Which statement about the carriage of coal is true?                              | Most problems with spontaneous combustion will occur within 72 hours of loading and after that the risk decreases. | Wet coal is more liable to spontaneous heating than dry coal.   | Coal absorbs nitrogen from the air which reacts with methane and causes spontaneous heating.                               | <b>Freshly worked coal is more dangerous than weathered coal.</b>  |              |
| 2018 | Which statement about the carriage of solid hazardous materials in bulk is TRUE? | A special permit issued by the Coast Guard is required before the cargoes in this subpart are loaded.              | <b>Other hazardous materials cargo must not be stowed on deck above a hold in which a solid hazardous material in bulk is loaded.</b> | A certificate issued by ABS will be accepted as evidence that the vessel complies with all applicable loading regulations. | The shipping papers can be used in lieu of a Dangerous Cargo Manifest for a vessel carrying solid hazardous materials in bulk. |              |
| 2019 | Which statement about the dangerous cargo manifest is FALSE?                     | The manifest must be made up by the carrier, agents, and any person designated for this purpose.                   | <b>Shipments of hazardous and non-hazardous cargoes may be listed on the manifest if they are destined for the same consignee.</b>    | The manifest must be kept in a designated holder on or near the bridge.  | The hazard class of each cargo must be indicated.  |              |
| 2020 | Which statement about the dangerous cargo manifest, carried on a ship, is TRUE?  | The manifest must be made up by the Master or other designated ship's officer.                                     | Shipments of hazardous and non-hazardous cargo may be listed on the manifest if they are destined for the same consignee.             | <b>The manifest must be kept in a designated holder on or near the bridge.</b>   | The type of label(s) required for each cargo must be indicated.  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|--|--|--|---|--------------|
| 2021 | Which statement about the deck line is TRUE?  | The top of the deck line is marked at the highest point of the freeboard deck, including camber, at the amidships point. | <b>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. | 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. |              |
| 2022 | Which statement about the forecastle card is TRUE?  | The forecastle card is a blank sample of the articles.   | It contains copies of the crew's signatures from the articles.   | <b>Is an exact copy of shipping articles.</b>  | Each crewmember is given a copy of the forecastle card.   |              |
| 2023 | Which statement about the ventilation of bulk coal is TRUE?   | Coal should not be ventilated; all oxygen should be excluded from the cargo.   | Coal should be through-ventilated to remove methane and reduce the heat of spontaneous combustion.   | Coal should be ventilated only if temperatures in the center of the cargo exceed 125°F.  | <b>Coal should be surface ventilated only.</b>  |              |
| 2024 | Which statement about the Williamson turn is FALSE?   | <b>It requires the highest degree of shiphandling skills to accomplish.</b>  | It is the slowest of the methods used in turning the vessel.   | It is the best turn to use when the victim is not in sight due to reduced visibility.  | It returns the vessel to the original track-line on a reciprocal course.  |              |
| 2025 | Which statement about tunnel bow thrusters fitted to large vessels is TRUE?                               | They are effective on most vessels at speeds up to 10 knots.   | Because of their location, most modern installations have as much power as a tug.  | They are fully effective at all drafts.  | <b>When going astern at slow speed, they provide effective steering control.</b>  |              |
| 2026 | Which statement about two lines spliced together is TRUE?   | Splicing is used to increase the circumference of each line.   | <b>Splicing two lines together is stronger than knotting two lines together.</b>   | Splicing is used to increase the overall strength of the line.   | Splicing is used to prevent rotting of the lines bitter end.  |              |
| 2027 | Which statement concerning a 298 GRT inspected tug engaged in towing from Seattle, WA, to Alaska is TRUE? | A licensed Master of Towing Vessels may serve as Master.   | Crew must be signed on before a Shipping Commissioner.   | <b>Each crew member must be issued a certificate of discharge at the time of discharge.</b>  | No able seamen are required.  |              |
| 2028 | Which statement concerning a short splice is TRUE?  | It is used to temporarily join two lines together.   | <b>A short splice is stronger than two lines joined by a knot.</b>   | A short splice decreases the diameter of the line.   | None of the above   |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 2029 | Which statement concerning an automatic towing engine is FALSE?   | It automatically maintains tow line tension.  | It prolongs the life of the hawser by distributing chafing as the hawser is paid out and taken in.         | <b>As tension on the hawser increases, more line is taken in by the automatic towing engine.</b>                       | As tension on the hawser decreases, more line is taken in by the automatic towing engine.        |              |
| 2030 | Which statement concerning castor oil is TRUE?  | It has a Reid vapor pressure of 9.5.  | It has a specific gravity of 1.3.  | The boiling point is 215°F (102°C).  | <b>It is a grade E combustible liquid.</b>   |              |
| 2031 | Which statement concerning dual-tonnage vessels is TRUE?  | The dual-tonnage mark is always marked above the load line marks.   | The tonnages referred to are the displacement tonnage and gross tonnage.                                   | <b>A single-deck vessel may not be assigned dual tonnages.</b>   | The dual-tonnage mark must never be submerged beyond the freshwater allowance.                   |              |
| 2032 | Which statement concerning solid floors is TRUE?  | They must be watertight.  | <b>They may have lightening, limber, or air holes cut into them.</b>                                       | They are built of structural frames connected by angle struts and stiffeners, with flanged plate brackets at each end. | They are lighter than open floors.   |              |
| 2033 | Which statement concerning storm surges on the Great Lakes is FALSE?  | <b>They are common along the deeper areas of the lakes.</b>   | They cause rapid differences in levels between one end of the lake and the other.                          | The greatest water level difference occurs when the wind is blowing along the axis of the lake.                        | If the wind subsides rapidly, a seiche effect will most likely occur.                            |              |
| 2034 | Which statement concerning sweat damage in containers is TRUE?  | Sweat damage in containers is unusual due to the small enclosed volume of air.  | In general, containerized hygroscopic cargoes are the only ones subject to sweat damage.                   | <b>Containers should be ventilated, dehumidified, or the contents physically protected against sweat damage.</b>       | Sweat damage is not a problem except in insulated and refrigerated containers.                   |              |
| 2035 | Which statement concerning the carriage of containers is TRUE?  | The Chief Mate and Master of a container ship should have the proposed stowage plan ready for the stevedore upon arrival in port. | When stowed on deck of a break bulk ship, the bottom of the container must be evenly supported throughout. | <b>With tiered containers, a 40-foot container may be stowed on top of two 20-foot containers.</b>                     | Deck load calculations must take into account the square footage of the entire container bottom. |              |
| 2036 | Which statement concerning the handling characteristics of a fully loaded vessel as compared with those of a light vessel is FALSE? | A fully loaded vessel will be slower to respond to the engines.   | A fully loaded vessel will maintain her headway further.   | A light vessel will be more affected by the wind.  | <b>A light vessel loses more rudder effect in shallow water.</b>                                 |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 2037 | Which statement concerning the lashings of containers with solid bar or wire rope lashings is TRUE? | <b>Stack weights should be less when using a solid bar lashing as compared to a wire lashing.</b> | Stack heights may be increased when using a solid bar lashing.  | Stack heights should be reduced when using a solid bar lashing.  | Solid bars should be used for lashing the first tier only, with wire lashings on the higher tier(s).                                  |              |
| 2038 | Which statement concerning the navigation of a vessel in ice is FALSE?                              | Anchoring in the presence of ice is not recommended except in an emergency.                       | Towing a vessel through an ice field is not recommended except in an emergency.                                     | The "Free and Proceed" system of escorting a beset vessel cuts down on the number of freeing operations. | <b>When anchoring in ice, it is advisable to increase the scope of the chain over what is normally used for non-icing conditions.</b> |              |
| 2039 | Which statement describes a cofferdam?  | any deck below the main deck and above the lowest deck  | a member that gives fore-and-aft strength   | <b>it's constructed by placing two bulkheads a few feet apart</b>  | a heavy fore-and-aft beam under the deck  |              |
| 2040 | Which statement describes the motion of a yawing tow?   | The tow twists, sometimes violently, astern of the tug  | The tow sheers to one side behind the tug and maintains a position in a line diagonal to the tug's forward movement | The tow snakes behind the tug  | <b>All of the above</b>   |              |
| 2041 | Which statement is ALWAYS true?   | <b>Keep clear of any line that is under a strain.</b>   | A line will creak, make snapping sounds, and smoke before it parts.   | Only synthetic lines will snap back after parting.   | Stepping on the bight of a line is safer than stepping in the bight of a line.  |              |
| 2042 | Which statement is correct concerning the carriage of coal in bulk?                                 | <b>Coal should be vented with surface ventilation only.</b>                                       | Because of its inherent vice, coal should not be loaded wet.  | Dunnage should be placed against ship's sides and around stanchions.                                     | Through ventilation, as well as surface ventilation, should be provided whenever possible.  |              |
| 2043 | Which statement is FALSE about using a wire bridle on an ocean tow?                                 | The inboard end of each bridle leg should have a large eye splice to fit over the bits.           | <b>The strength of each leg should be at least one-half that of the main towing hawser.</b>                         | Each leg should be at least 60 to 90 feet long.  | None of the above   |              |
| 2044 | Which statement is FALSE concerning a tagline as used with a 30-ton pedestal crane?                 | <b>Taglines are wire rope purchases that raise and lower the jib.</b>                             | Taglines are wire ropes for horizontal positioning of the rider block.  | Taglines can be fastened to corners of vehicles or containers.   | The crane might not have taglines installed in its rigging system.  |              |
| 2045 | Which statement is FALSE concerning precautions during fueling operations?                          | All engines, motors, fans, etc. should be shut down when fueling.                                 | All windows, doors, hatches, etc. should be closed.   | A fire extinguisher should be kept nearby.   | <b>Fuel tanks should be topped off with no room for expansion.</b>  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|---|--|--|---|---|--------------|
| 2046 | Which statement is FALSE regarding certificates of discharge?             | The mariner receives the original copy of the discharge  | <b>The mariner only signs the original copy of the discharge</b>   | Computer generated signatures are not authorized  | Copies of the certificate of discharge are furnished by the shipping company                |              |
| 2047 | Which statement is FALSE regarding the operation of a crane?              | The crane jib is raised and lowered by the luffing winch.  | The cargo block is raised and lowered by the hoisting winch.   | <b>The cargo block is raised and lowered by the luffing winch.</b>  | None of the above   |              |
| 2048 | Which statement is FALSE with regards to the Great Lakes Light List?      | <b>The Light List does not contain information on any of the navigational aids maintained by Canada.</b>                 | Volume VII does not include information on Class III private aids to navigation.                             | The Light List does not include Coast Guard mooring buoys, special purpose buoys, or buoys marking fish net areas.  | The Light List should be corrected each week from the appropriate Notice to Mariners.       |              |
| 2049 | Which statement is FALSE, concerning the Williamson turn?                 | In a large vessel (VLCC) much of the headway will be lost thereby requiring little astern maneuvering.                   | When the turn is completed, the vessel will be on a reciprocal course and nearly on the original track line. | The initial actions are taken at well defined points and reduce the need for individual judgment.                   | <b>The turn will return the vessel to the man's location in the shortest possible time.</b> |              |
| 2050 | Which statement is FALSE?   | Nylon can stretch approximately 40% and still recover.   | Only nylon stoppers should be used on nylon hawsers.   | <b>Nylon is most practical for use on hip towing.</b>   | With proper care nylon hawsers will greatly outlast manila and other natural fibers.        |              |
| 2051 | Which statement is FALSE?   | Your stern is sucked down and your draft increases when going from deep to shallow water.                                | Excessive speed while passing moored vessels may cause them to surge and break their moorings.               | Excessive speed while passing a tow being pushed ahead or pushing a tow into an eddy too fast may break up the tow. | <b>None of the above</b>  |              |
| 2052 | Which statement is NOT true concerning the stowage of class 1 explosives? | Class 1.1 explosives may be stowed with class 9 dangerous substances   | Class 1.4 explosives must be "separated from" a stow of class 5.1 oxidizing materials.                       | <b>Class 1.4 explosives may not be stowed in the same hold with class 6.1 poisons.</b>                              | Class 1.4 explosives must be "separated from" a stow of class 8 corrosive materials.        |              |
| 2053 | Which statement is TRUE about the use of a "gob rope"?                    | The gob rope is a mooring line for tying up lighters for working cargo alongside a vessel anchored in an open roadstead. | <b>The gob rope is used to secure the towline aft over the centerline of a tug..</b>                         | The gob rope is a line hung over a vessel's side to assist in boarding.   | The gob rope is a rope used in mooring a vessel to a buoy.                                  |              |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 2054 | Which statement is TRUE about hooks and shackles?  | Hooks are stronger than shackles of the same diameter.   | <b>Shackles are stronger than hooks of the same diameter.</b>  | Hooks and shackles of the same diameter are of equal strength.   | All the above may be true, depending on the hook's or shackle's overall length.      |              |
| 2055 | Which statement is TRUE about nylon line?  | Manila line will usually last longer than nylon line.  | Nylon line is excellent for use in alongside towing.   | A normal safe working load will stretch nylon line 50%.  | <b>Nylon stoppers should be used with nylon line.</b>                                |              |
| 2056 | Which statement is TRUE about placing the eyes of two mooring lines on the same bollard? | Put one line at the low point and one at the high point of the bollard so they don't touch.                          | <b>Take the eye of the second line up through the eye of the first line before putting the second line on the bollard.</b> | Never put two mooring lines on the same bollard.   | The mooring line forward should be put on the bollard first.                         |              |
| 2057 | Which statement is TRUE concerning a tagline as used with a 30-ton pedestal crane?       | Taglines are wire rope purchases that raise and lower the jib.   | <b>Taglines are wire ropes payed-out or taken-in for horizontal positioning of the rider block.</b>                        | Taglines can be can be fastened to the corners of the jib when lifting containers.                                 | The taglines are wire rope purchases that raise and lower the topping lift.          |              |
| 2058 | Which statement is TRUE concerning a tagline as used with a 30-ton pedestal crane?       | Taglines are wire rope purchases that raise and lower the jib.   | Taglines can be fastened to the corners of the jib when lifting containers.  | <b>The crane might not have taglines installed in its rigging system.</b>  | The taglines are wire rope purchases that raise and lower the topping lift.          |              |
| 2059 | Which statement is TRUE concerning a tagline as used with a 30-ton pedestal crane?       | Taglines are wire rope purchases that raise and lower the jib.   | Taglines are wire ropes payed-out or taken-in for positioning the crane pedestal.  | <b>Taglines can be fastened to the corners of vehicles or containers during cargo operations.</b>                  | Taglines are wire rope purchases that raise and lower the topping lift.              |              |
| 2060 | Which statement is TRUE concerning deep well self-priming pumps?                         | When loading oil cargo, it is always loaded via the discharge line through to the pump until the tank is topped off. | <b>Stripping systems are generally eliminated for the purposes of cargo handling.</b>                                      | In recent years deep well pumps have become increasingly unpopular in product tankers and medium size crude ships. | There is no danger of damaging the pump from overheating.                            |              |
| 2061 | Which statement is TRUE concerning hawser towing?  | The catenary in a hawser should be sufficient so that the hawser just touches the bottom.                            | The hawser is of sufficient length for towing when taut between tug and tow.   | Increasing speed usually increases the catenary in the hawser.   | <b>Shortening the tow hawser generally decreases the maneuverability of the tug.</b> |              |



| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|---|--|---|--|--------------|
| 2062 | Which statement is TRUE concerning insulating flanges?  | <b>They should be inspected and tested periodically to ensure that the insulation is clean and in good condition.</b> | Switching off a cathodic protection system may be substituted for using an insulating flange         | The measured resistance value after installation should be less than 1,000 ohms.                        | After the insulating flange is installed, hot work may be performed on deck.                   |              |
| 2063 | Which statement is TRUE concerning lifeboat installations on Great Lakes vessels?                                   | All davit installations shall have 3 lifelines fitted to a davit span.  | All vessels over 3,000 gross tons must be fitted with gravity davits.                                | <b>All lifelines shall be able to reach the water at the vessel's lightest draft with a 20° list.</b>   | All of the above   |              |
| 2064 | Which statement is TRUE concerning lighting requirements for Great Lakes vessels?                                   | The showing of a forward masthead light is optional for vessels under 150 meters.                                     | <b>An all-round white light may be carried in lieu of the second masthead light and stern light.</b> | Sidelights for vessels over 50 meters are required to have only a two-mile range of visibility.         | Great Lakes vessels are exempted from the requirement to show yellow towing lights.            |              |
| 2065 | Which statement is TRUE concerning protection of double bottom tanks against excessive pressure?                    | Each vent for the tank must be equal to the area of the tank filling line.  | The tanks must be protected by overflows.  | <b>The total area of the vents or the overflow shall be at least 125% of the area of the fill line.</b> | There must be twice as much vent area as the area of the fill line.                            |              |
| 2066 | Which statement is true concerning repairs on the hull of a vessel which is to be riveted and welded?               | Riveting must be completed before welding begins.   | Riveting and welding should be done alternately.   | <b>Welding must be completed before the riveting begins.</b>  | It does not matter in what order the operations are done.                                      |              |
| 2067 | Which statement is TRUE concerning the tandem working arrangement of pedestal cranes when completing a quad lift?   | The cranes require shoreside assistance to handle heavy cargos.   | The cargo discharge cannot be accomplished without pendulation.                                      | The cargo discharge cannot be performed at anchor.  | <b>The discharge is slow due to the size of the cargo and all the cranes working together.</b> |              |
| 2068 | Which statement is TRUE concerning the vessel's slipstream?   | It has no effect on the steering of the vessel.   | It has no effect on the rudder when the helm is amidships.   | Its velocity is the same as that of the wake.   | <b>The propeller gives it a helical motion.</b>  |              |
| 2069 | Which statement is TRUE concerning toluene?   | Its Reid Vapor Pressure is 9.4.   | The boiling point is 174°F.  | <b>It is an aromatic hydrocarbon.</b>   | It is classified as a grade A flammable liquid.  |              |
| 2070 | Which statement is TRUE concerning vessels over 1600 gross tons certificated for service solely on the Great Lakes? | They must have magnetic compasses.  | They must have gyro compasses.   | <b>They must carry a deep-sea hand lead.</b>  | All of the above statements are TRUE.  |              |

| ID # | Question   | Choice A  | Choice B   | Choice C  | Choice D  | Illustration  |
|------|--|---|--|---|---|---------------|
| 2071 | Which statement is TRUE concerning weather conditions on the Great Lakes?      | When a vessel is south of an eastward-moving storm center, the approach of the low is evidenced by winds from the north to northeast. | <b>When a vessel is north of an eastward-moving storm center, changes in the weather are less distinctive than when sailing south of the center.</b> | The most destructive storms usually come from the northwest or north.   | Thunderstorms are most likely to develop from November through April.                                   |               |
| 2072 | Which statement is TRUE of centrifugal pumps aboard tank vessels?              | They are positive displacement pumps.   | <b>They are gravity-fed.</b>   | They produce a pulsating flow.  | They require more maintenance than a reciprocating pump.  |               |
| 2073 | Which statement is TRUE regarding the operation of a crane?                    | <b>The crane jib is raised and lowered by the luffing winch.</b>  | The crane jib is raised and lowered by the hoisting winch.   | The cargo block is raised and lowered by the luffing winch.   | The crane jib is raised and lowered by a jibbing winch.   |               |
| 2074 | Which statement is TRUE with respect to shiphandling procedures in ice?        | Never go "full astern" at any time while in ice.  | <b>Go astern in ice with extreme care - always with rudder amidships.</b>  | Enter ice at medium speeds to reduce impact.  | The presence of a snow cover on the ice assists a vessel's progress through an ice field.               |               |
| 2075 | Which statement is TRUE with respect to the elasticity of nylon mooring lines? | Nylon can stretch over forty percent without being in danger of parting.  | Nylon can be elongated by one-hundred percent before it will part.   | Nylon will part if it is stretched any more than twenty percent.  | <b>Under load, nylon will stretch and thin out but will return to normal size when free of tension.</b> |               |
| 2076 | Which statement is TRUE with respect to the load line markings shown.          | <b>A vessel displaying these marks may load in the salt waters of the St. Lawrence River.</b>   | Vessels engaged solely on Great Lakes voyages are not required to show these marks.  | U.S. flag vessels less than 100 feet in length and less than 200 gross tons are not required to show these marks. | U.S. flag vessels of 100 gross tons and upward must show these marks.                                   | <b>D031DG</b> |
| 2077 | Which statement(s) is(are) TRUE concerning wire rope?                          | <b>Wire rope should be condemned if the outside wires are worn to one-half their original diameter.</b>                               | Wire rope should be condemned if the fiber core appears moist.   | Wire rope which is right-hand laid should be coiled counterclockwise to prevent kinking.                          | All of the above  |               |
| 2078 | Which statement(s) is/are FALSE concerning crane cargo operations?             | Lifting points on all equipment must be safely checked prior to commencing a lift.  | <b>Cargo loaded into vehicles and/or containers prior to lifting need not be secured.</b>  | Never exceed crane manufacturer's limits concerning the safe working loads of cargo jibs.                         | All the above   |               |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 2079 | Which statement(s) is/are TRUE concerning crane cargo operations?  | Lifting points on all equipment need not be checked prior to commencing a lift.    | Cargo loaded into vehicles and/or containers prior to lifting need not be secured.   | <b>Never exceed crane manufacturer's limits concerning the safe working loads of cargo jibs.</b>                    | All the above  |              |
| 2080 | Which statement(s) is/are TRUE concerning crane cargo operations?  | Lifting points on all equipment must be safely checked prior to commencing a lift. | Cargo loaded into vehicles and/or containers prior to lifting needs to be properly secured so as to prevent shifting during transport. | Never exceed crane manufacturer's limits concerning the safe working loads of cargo jibs.                           | <b>All the above</b>   |              |
| 2081 | Which statement(s) is/are TRUE concerning crane cargo operations?  | Do not exceed rated load capacity of crane and container spreader or slings.       | During any cargo handling operation, the safety of personnel is paramount.   | Cargo handlers must be outfitted with adequate protection from personal injury.                                     | <b>All the above</b>   |              |
| 2082 | Which statement(s) is/are TRUE regarding the operation of a crane?                                       | <b>The load is handled by the hoisting winch and cargo block.</b>                  | The crane jib is raised and lowered by the hoisting winch.   | The cargo block is raised and lowered by the luffing winch.   | All the above  |              |
| 2083 | Which statement, concerning offshore supply vessel operations, correctly defines the length of a voyage? | The distance from the point of departure to the vessel's first stop                | The distance from the point of departure to the most distant point offshore  | <b>The total distance from the port of departure to the port of arrival, not including stops at offshore points</b> | The shortest measurable distance from the port of departure to the port of arrival                         |              |
| 2084 | Which step is NOT generally taken when gas-freeing a tank?   | Washing the tank interior with sea water   | <b>Application of degreasing solvents</b>  | Removal of corrosion products and sludge  | Fresh air ventilation  |              |
| 2085 | Which structural members improve a towing vessel's chance of surviving punctured shell plating?          | Stringers  | Longitudinals  | <b>Transverse watertight bulkheads</b>  | The rake   |              |
| 2086 | Which synthetic rope has the greatest breaking strength?   | Polyethylene   | <b>Polyester</b>   | Polyglycine   | Polypropylene  |              |
| 2087 | Which tackle arrangement has the LEAST mechanical advantage?   | <b>Single whip</b>   | Gun tackle   | Luff tackle   | Twofold purchase   |              |
| 2088 | Which tanker discharge pattern would be the safest and most efficient?                                   | Empty the forward tanks and start working aft, emptying each tank in sequence      | <b>Start discharging with most of the discharge coming from forward, but include some from amidships and after tanks</b>               | Start pumping from forward, amidships, and aft with the discharge distributed equally among the tanks               | Start pumping from amidships and then work forward and aft simultaneously as the amidships tank is emptied |              |

| ID # | Question  | Choice A                  | Choice B                        | Choice C                        | Choice D                   | Illustration  |
|------|---|---------------------------|---------------------------------|---------------------------------|----------------------------|---------------|
| 2089 | Which tensioning device is used with chain to secure heavy vehicles aboard Ro-Ro vessels?       | <b>Chain lever</b>        | Buckle tensioner                | Adjust-a-matic tensioner        | Ratchet tensioner          |               |
| 2090 | Which tensioning device is used with chain to secure heavy vehicles aboard Ro-Ro vessels?       | Ratchet tensioner         | Buckle tensioner                | Adjust-a-matic tensioner        | <b>Turnbuckle</b>          |               |
| 2091 | Which tensioning device is used with webbing to secure light vehicles aboard Ro-Ro vessels?     | Chain lever               | Turnbuckle                      | Adjust-a-matic tensioner        | <b>Ratchet tensioner</b>   |               |
| 2092 | Which tensioning device is used with wire rope lashing to secure vehicles aboard Ro-Ro vessels? | Chain lever.              | <b>Adjust-a-matic tensioner</b> | Buckle tensioner                | Ratchet tensioner          |               |
| 2093 | Which tensioning device is used with wire rope lashing to secure vehicles aboard Ro-Ro vessels? | Chain lever               | Buckle tensioner                | <b>Adjust-a-matic tensioner</b> | Ratchet tensioner          |               |
| 2094 | Which term describes a part of a natural fiber line?  | <b>Yarns</b>              | Twines                          | Lacings                         | Lays                       |               |
| 2095 | Which term describes a part of a natural fiber line?  | Twines                    | <b>Fibers</b>                   | Lays                            | Lacings                    |               |
| 2096 | Which term describes a part of a natural fiber line?  | Lacings                   | Lays                            | <b>Strands</b>                  | Twines                     |               |
| 2097 | Which term describes a rope in which three right-handed strands are laid up left-handed?        | Soft-laid                 | Hard-laid                       | Shroud laid                     | <b>Hawser-laid</b>         |               |
| 2098 | Which term describes goods having a stowage factor below 40?                                    | <b>"Deadweight" cargo</b> | "Full-and-down" cargo           | "Heavy-lift" cargo              | "Measurement" cargo        |               |
| 2099 | Which term indicates the rise in height of the bottom plating from the plane of the base line?  | <b>Deadrise</b>           | Camber                          | Molded height                   | Sheer                      |               |
| 2100 | Which term refers to a transverse curvature of the deck?  | Deadrise                  | <b>Camber</b>                   | Freeboard                       | Flare                      |               |
| 2101 | Which tool is used to open the strands of fiber lines when making an eye splice?                | Belaying spike            | <b>Fid</b>                      | Heaver                          | Pricker                    |               |
| 2102 | Which towing equipment can be used to prevent the tripping of a tug?                            | Bridles                   | Chafing boards                  | <b>Gob ropes</b>                | Drogues                    |               |
| 2103 | Which towing method maintains the most control over the tow?                                    | Tandem towing             | Honolulu towing                 | Tandem tug towing               | <b>Breasted tug towing</b> |               |
| 2104 | Which two Great Lakes are considered hydraulically as one?                                      | Lakes Superior - Huron    | <b>Lakes Michigan - Huron</b>   | Lakes Erie - St. Clair          | Lakes Erie - Ontario       |               |
| 2105 | Which type of anchor is depicted?   | Stock                     | Danforth                        | <b>Patent</b>                   | Old-fashioned              | <b>D038DG</b> |
| 2106 | Which type of anchor is illustrated?  | <b>Stockless</b>          | Danforth                        | Old-fashioned                   | Kedge                      | <b>D038DG</b> |
| 2107 | Which type of ballast is most commonly used in barges and ships?                                | <b>Water</b>              | Oil                             | Concrete and barite             | Sand, rock and gravel      |               |
| 2108 | Which type of bottom is best suited for holding an anchor of a small boat?                      | <b>Mud and clay</b>       | Rocky                           | Sandy                           | Gravel                     |               |
| 2109 | Which type of bottom provides most anchors with the best holding ability?                       | Clay and rocks            | Soft mud                        | <b>Sandy mud</b>                | Soft sand                  |               |

| ID # | Question  | Choice A                      | Choice B  | Choice C  | Choice D                                     | Illustration |
|------|---|-------------------------------|---|---|--|--------------|
| 2110 | Which type of bridle is the most effective for a heavy ocean tow?   | Nylon because of its strength | Polypropylene because it floats and is easier to handle | <b>Stud link anchor chain for chafe resistance and strength</b> | Wire rope for flexibility and strength       |              |
| 2111 | Which type of carrier accepts without discrimination all legal cargoes of a shipper?  | <b>Common</b>                 | Industrial  | Private   | Tramp  |              |
| 2112 | Which type of chemical testing is NOT required of merchant marine personnel?  | Pre-employment                | Periodic  | Random  | <b>Annual</b>                                |              |
| 2113 | Which type of davit is not considered to be a mechanical davit?   | Sheath-screw boom             | <b>Radial</b>   | Crescent  | Quadrantal                                   |              |
| 2114 | Which type of fog is the most dense and widely spread of those that occur on the Great Lakes?   | Steam fog                     | <b>Advection fog</b>                                    | Radiation fog   | Lake effect fog                              |              |
| 2115 | Which type of hull damage should be repaired FIRST?   | Damage below the waterline    | Damage to interior watertight boundaries                | Damage in way of machinery rooms                                | <b>Damage at or just above the waterline</b> |              |
| 2116 | Which type of ice is a hazard to navigation?  | Ice rind                      | Pancake ice   | Frazil ice  | <b>Growlers</b>                              |              |
| 2117 | Which type of ice is the most difficult to combat and presents the greatest hazard to shipping on the Great Lakes during the winter months? | Icebergs                      | Fast ice  | Slow ice  | <b>Pack slush ice</b>                        |              |
| 2118 | Which type of line floats?  | Dacron                        | Nylon   | Old manila  | <b>Polypropylene</b>                         |              |
| 2119 | Which type of line is best able to withstand sudden shock loads?  | Polypropylene                 | <b>Nylon</b>  | Dacron  | Manila                                       |              |
| 2120 | Which type of line will stretch the most when under strain?   | Polypropylene                 | Dacron  | <b>Nylon</b>  | Manila                                       |              |
| 2121 | Which type of line would have the LEAST resistance to mildew and rot?   | <b>Manila</b>                 | Nylon   | Dacron  | Polypropylene                                |              |
| 2122 | Which type of link is generally used to connect shots of anchor chain?  | <b>Detachable</b>             | Open  | Pear shaped   | Stud link                                    |              |
| 2123 | Which type of rudder may lose its effectiveness at angles of 10 or more degrees?  | Contra-guide                  | <b>Balanced spade</b>                                   | Unbalanced  | Flat plate                                   |              |
| 2124 | Which type of shackle is used for most towing connections?  | <b>Safety shackles</b>        | Round pin anchor shackles                               | Screw pin shackles  | Heart shaped shackles                        |              |
| 2125 | Which type of stopper should be used to stop off wire rope?   | <b>Chain</b>                  | Manila  | Polypropylene   | Wire   |              |
| 2126 | Which type of towing hawser is preferred for towing astern?   | Manila                        | Polypropylene   | <b>Nylon</b>  | Polyester                                    |              |
| 2127 | Which type of weld testing can be used to detect internal flaws?  | <b>Radiographic</b>           | Magnetic particle                                       | Dye penetrant   | Chemical reaction                            |              |
| 2128 | Which type of weld testing can be used to detect internal flaws?  | Magnetic particle             | Dye penetrant   | <b>Ultrasonic</b>   | Chemical reaction                            |              |
| 2129 | Which U.S. agency assigns an official number to a vessel?   | American Bureau of Shipping   | Collector of Customs                                    | Treasury Department   | <b>Coast Guard</b>                           |              |
| 2130 | Which U.S. Government agency can suspend or revoke a Merchant Mariner's license for violating the load line act?                            | American Bureau of Shipping   | <b>U.S. Coast Guard</b>                                 | U.S. Customs Service  | U.S. Maritime Administration                 |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 2131 | Which variable factor affects the initial lashing requirements aboard Ro-Ro vessels?                                | <b>Number, position and angle of lashings</b>  | Vessel's draft  | Port of origin   | ABS requirements  |              |
| 2132 | Which variable factor affects the initial lashing requirements aboard Ro-Ro vessels?                                | Age of vehicle or cargo unit   | <b>Size and weight of vehicle/cargo unit</b>                            | Reputation of shipper concerning condition of cargo                  | Air pressure in the vehicles tires  |              |
| 2133 | Which variable factor affects the initial lashing requirements aboard Ro-Ro vessels?                                | Vessel's draft   | <b>Center of gravity of vehicle or cargo unit</b>                       | Changes in humidity  | Age of vehicle or cargo unit  |              |
| 2134 | Which vessel is exempt from the load line and marking requirements for vessels operating on the Great Lakes System? | A 300 GT tank barge operating exclusively on Lake Michigan                                   | A 200 GT passenger vessel operating between Duluth, MN and Munising, MI | A 79-foot, 150 GT pleasure craft operating on the St. Lawrence River | <b>A 500 GT dry cargo river barge operated continuously between Calumet Hbr Chicago, IL and Burns Hbr, IN</b> |              |
| 2135 | Which vessel is most likely to be loaded full but not down?   | A bulk carrier loaded with heavy ore   | A bulk carrier loaded with steel  | <b>A break bulk vessel loaded with palletized cargo</b>              | A tanker loaded with heavy grain  |              |
| 2136 | Which vessel is required by regulations to have an Official Logbook?  | <b>A 100-gross ton tug on a trip between Baltimore, Maryland, and San Pedro, California.</b> | A 199-gross ton tug on a coastwise trip of 610 miles.                   | A 66-gross ton tug operating between states.                         | All of the above  |              |
| 2137 | Which vessel, if navigating independently in ice, is more likely to become beset due to inadequate horsepower?      | A 254 ft. "Whaleback" tanker with 1800 H.P.  | A 309 ft. cement carrier with 2000 H.P.                                 | A 385 ft. shallow draft tanker with 2400 H.P.                        | <b>A 630 ft. bulk ore carrier with 3500 H.P.</b>  |              |
| 2138 | Which weakens a line the LEAST?   | Clove hitch  | Long splice   | <b>Short splice</b>  | Square knot   |              |
| 2139 | Which weld fault can only be detected by a method that examines the internal structure of a weld?                   | Undercut   | Lack of reinforcement   | Overlap  | <b>Lack of penetration</b>  |              |
| 2140 | Which will cause a wire rope to fail?   | Using a medium graphite grease as a lubricant  | Operating a winch too slow  | <b>Using a sheave with an undersized throat</b>                      | A sheave diameter of 24 times the wire's diameter   |              |
| 2141 | Which will most likely occur when entering shallow water?   | Rudder action will become more effective.  | The vessel's list will change.  | <b>The vessel's trim will change.</b>                                | An increase in speed will occur.  |              |
| 2142 | Which will NOT reduce yawing of a tow?  | Increasing the length of the towing hawser   | <b>Trimming the tow by the bow</b>                                      | Trimming the tow by the stern  | Drogues put over the stern  |              |
| 2143 | Which wire rope purchase(s) is/are optional with a 30-Ton pedestal crane?   | Hoist  | Luff  | <b>Rider block</b>   | All of the above  |              |
| 2144 | Which wire rope purchases may be used with a 30-ton pedestal crane?   | Hoist  | Luff  | Rider block  | <b>All of the above</b>   |              |
| 2145 | Which would you NOT use to report the amount of anchor chain out? "Three shots _____."                              | at the water's edge  | on deck   | <b>on the bottom</b>   | well in the water   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|--|--|--|--|--------------|
| 2146 | While a vessel is at sea, the mate on watch discovers a fire in one of the hatches. Fire hoses are used to put the fire out and some of the cargo is damaged by water. In marine insurance terms, this partial loss by water is called _____. | an Act of God  | fire and water damage  | <b>general average</b>   | particular average   |              |
| 2147 | While a vessel is in a foreign port where there is no American Consul, a seaman becomes violent prior to sailing. The Master should _____.  | call local police, put the seaman in prison ashore, and sail the vessel      | pay off the seaman and make arrangements with the agent to return him to the original port of signing on in the U.S. | <b>put the seaman in irons and sail to the next port where there is an American Consul</b> | send the seaman ashore and arrange with the agent to repatriate him by armed guard |              |
| 2148 | While anchoring your vessel, the best time to let go the anchor is when the vessel is _____.  | dead in the water  | <b>moving slowly astern over the ground</b>  | moving fast ahead over the ground  | moving fast astern over the ground   |              |
| 2149 | While assigned to a 106 GRT vessel, you are required to sign "foreign" articles on a voyage from San Francisco to which port?   | Mazatlan, Mexico (west coast)  | Vera Cruz, Mexico (east coast)   | <b>New York, NY</b>  | Vancouver, Canada (west coast)   |              |
| 2150 | While assigned to a 120 GRT vessel, you are required to sign "foreign" articles on a voyage from New York City to which port?   | Halifax, Canada  | <b>Long Beach, California</b>  | Veracruz, Mexico   | Saint Maarten, Netherlands Antilles  |              |
| 2151 | While assigned to a 150 GRT vessel, you are required to sign "foreign" articles on a voyage from New Orleans to which port?   | Houston, Texas   | Veracruz, Mexico   | Kingston, Jamaica  | <b>Cristobal Colon, Panama</b>   |              |
| 2152 | While assigned to a 90 GRT vessel, you are required to sign "foreign" articles on a voyage from Philadelphia to which port?   | <b>San Francisco, CA</b>   | Baltimore, MD  | Tampico, Mexico  | Montreal, Canada   |              |
| 2153 | While being assisted by an icebreaker on Lake Superior, you receive a single letter code instructing you to slow your vessel. Which signal could you use to signify that you are complying with the request?                                  | Three blasts of the whistle  | The code flag "A" (Alpha) displayed from a halyard   | <b>Four blasts of the whistle, namely 1 short 2 long and 1 short</b>                       | The code flag "L" (Lima) displayed from a halyard                                  |              |
| 2154 | While cranking out a quadrantal davit, slippage of the quadrant due to excessive wear or failure of the teeth in the quadrant will cause the _____.   | <b>davit arm to pivot on the traveling nut and the head to fall outboard</b> | traveling nut to lock up in place on the worm gear   | limit switch to engage and hold the traveling nut in position                              | winch brake to lock in position and prevent lowering the boat                      |              |
| 2155 | While discharging a cargo, the stripping of the tanks falls behind schedule. This would indicate the _____.   | main pumps are working at a high discharge pressure                          | <b>main pumps are leaving too much oil in the tanks</b>  | stripping pump is not primed   | stripping line is cross-connected to the main line                                 |              |
| 2156 | While discharging a tanker, list can be controlled by _____.  | shoreside personnel  | using a center tank near the bow, discharging as necessary   | <b>using wing tanks near the longitudinal center, discharging as necessary</b>             | using the after peak tank, loading as necessary                                    |              |



| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|---|---|---|--|--------------|
| 2157 | While in dry dock your vessel will be belt-gauged. This process involves _____.   | measuring the thickness of the tail shaft liner             | taking the vessel's offsets to check for hull deformation         | testing and examining the anchor cables for defective links                 | <b>drilling or sonic-testing the hull to determine the plate thickness</b> |              |
| 2158 | While loading a cargo of grain, your vessel develops a list to starboard. This will be corrected by _____.  | the compensating tanks on the high side                     | <b>the list man changing the discharge location of the chutes</b> | allowing the grain to level itself as the hold fills to the spar deck level | trimming the final loading cone by hand                                    |              |
| 2159 | While loading cargo, a white trimming light on the starboard side comes on. This indicates that _____.  | <b>the vessel has a list of about 1° to starboard</b>       | the chutes should be directed to the starboard side               | the chutes in No. 1 hold should be directed to the starboard side           | a severe list to starboard has developed and all loading should cease      |              |
| 2160 | While loading or discharging vehicles, which is the most important safety consideration aboard a Ro-Ro vessel?  | <b>Preventing the asphyxiation of personnel below decks</b> | Notifying the engine room prior to completing operations          | Calling out the deck department for all hands periodically                  | Ensuring that a fuel barge cannot come alongside                           |              |
| 2161 | While on duty as a look-out, which other duty may you perform?  | Sweep down the forecastle                                   | Paint any area near your station                                  | Overhaul a block, as long as it is at your look-out station                 | <b>None of the above</b>   |              |
| 2162 | 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, the lookout may be _____.  | the helmsman  | <b>the mate on watch</b>  | Either A or B   | Neither A nor B  |              |
| 2163 | While on watch at sea you must maintain a proper lookout at all times. You are on a 200-foot cargo vessel with an unobstructed view astern from the steering position. The vessel is being hand-steered during daylight hours in good visibility and clear of any navigational hazards. The lookout may be _____. | the helmsman  | the officer on watch  | <b>Either A or B</b>  | Neither A nor B  |              |
| 2164 | While standing look-out at night, a dim light on the horizon will be seen quickest by looking _____.  | <b>a little above the horizon</b>                           | directly towards the light  | a little below the horizon  | quickly above then quickly below the horizon                               |              |
| 2165 | While steering by autopilot you notice that the vessel has deviated 15 degrees from course and there is no corrective rudder being applied. As a standard operating procedure you should first _____.   | check the setting of the rudder adjustment                  | check the setting of the weather adjustment                       | <b>switch to hand steering</b>  | immediately engage the trick wheel   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|---|---|--|--|--------------|
| 2166 | While steering by autopilot you notice that the vessel is deviating from the given course and there is no follow up with corrective rudder action to return to the proper heading. The emergency operating procedure should require you to immediately change operation from _____. | "gyro" to "hand"  | "hand" to "gyro"  | "gyro" to "control"  | "control" to "hand"  |              |
| 2167 | While the Pilot is maneuvering the vessel to a dock, what is the primary responsibility of the watch officer?   | Judge the appropriateness of the Pilot's orders and countermand them if necessary | <b>Insure that helm and throttle orders given by the Pilot are correctly executed</b> | Record the bells and their times in the bell book  | Supervise the signaling and flag etiquette   |              |
| 2168 | While the Pilot is maneuvering the vessel to a dock, what is the PRIMARY responsibility of the watch officer?   | Supervise the signaling and flag etiquette.                                       | Record the bells and their times in the bell book.                                    | <b>Insure that helm and throttle orders given by the Pilot are correctly executed.</b>                   | Judge the appropriateness of the Pilot's orders and countermand them if necessary.     |              |
| 2169 | While the Pilot is maneuvering the vessel to a dock, what is the PRIMARY responsibility of the watch officer?   | Supervise the signaling and flag etiquette.                                       | Record the bells and their times in the bell book.                                    | Judge the appropriateness of the Pilot's orders and countermand them if necessary.                       | <b>Insure that helm and throttle orders given by the Pilot are correctly executed.</b> |              |
| 2170 | While towing in shallow water you should consider _____.  | using a short towing hawser   | using a floating hawser   | the catenary and the effect it may have on the tow   | <b>All of the above</b>  |              |
| 2171 | While towing, bridle legs of unequal lengths may cause _____.   | the bridle to foul  | <b>the shorter leg to fail</b>  | chafing on the fairlead or bits  | a bent swivel  |              |
| 2172 | While towing, sudden shock-loading caused during heavy weather can be reduced by _____.   | using a short tow hawser  | using a nonelastic type hawser  | <b>using a heavier hawser</b>  | decreasing the catenary in the hawser  |              |
| 2173 | While towing, what is the principal danger in attempting to swing a barge on a hawser in order to slow the barge's speed?   | The barge may swing too quickly and run over the tug.                             | <b>The barge may pass under the hawser and capsize the tug.</b>                       | Free surface affect of liquid inside the barge may rupture the barge bulkheads when turning too quickly. | Dangerous wakes may result from the swinging barge and capsize the tug.                |              |
| 2174 | While towing, what is the principal danger in attempting to swing a barge on a short hawser in order to slow the barge's speed?   | The barge may capsize from the sharp turn.  | <b>The barge may swing too quickly and run over the tug.</b>                          | Free surface effect of liquid inside the barge may rupture the barge bulkheads when turning too quickly. | Dangerous wakes may result from the swinging barge and capsize the tug.                |              |
| 2175 | While underway in thick fog you are on watch and hear the cry "man overboard". Which type of maneuver should you make?  | figure eight turn   | Round turn  | Racetrack turn   | <b>Williamson turn</b>   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 2176 | While underway, part of your cargo is damaged by fire. In marine insurance terms this partial loss is called _____.   | absolute total loss   | constructive total loss   | general average  | <b>particular average</b>                                       |              |
| 2177 | While you are on watch entering port, the Master gives the helmsman a rudder command which conflicts with a rudder command from the Pilot. You should make sure the helmsman _____.   | brings the rudder to a point midway between the two conflicting positions | obeys the Pilot   | asks you for instructions                                  | <b>obeys the Master</b>   |              |
| 2178 | 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?   | Round   | <b>Scharnow</b>   | Racetrack  | Single turn of 180°   |              |
| 2179 | While your vessel is docked port side to a wharf, a sudden gale force wind causes the vessel's bow lines to part. The bow begins to fall away from the dock, and no tugs are immediately available. Which measure(s) should you take FIRST?     | Call the Master and the deck gang.  | Slip the stern lines, let the vessel drift into the river, and then anchor. | <b>Let go the starboard anchor.</b>                        | Obtain assistance and attempt to put some new bow lines out.    |              |
| 2180 | While your vessel is docked port side to a wharf, a sudden gale force wind causes the vessel's stern lines to part. The stern begins to fall away from the dock, and no tugs are immediately available. Which measure(s) should you take FIRST? | Notify the engine room of the need for propulsion.                        | <b>Shut down any cargo transfer that's in progress.</b>                     | Let go the port anchor and veer to a short scope of chain. | Obtain assistance from the terminal to put new stern lines out. |              |
| 2181 | Whipping the bitter end of a fiber rope _____.  | increases the circumference of the rope                                   | makes for easier handling   | <b>prevents fraying of the bitter end</b>                  | prevents moisture from entering the bitter end                  |              |
| 2182 | Who cannot commit the crime of barratry?  | Master  | Ship's officer(s)   | Ship's unlicensed crewmember(s)                            | <b>Ship owner</b>   |              |
| 2183 | Who certifies the safe working load of cargo booms on a vessel?   | U.S. Coast Guard  | <b>American Bureau of Shipping</b>  | Society of Naval Architects and Marine Engineers           | The Ship's Master   |              |
| 2184 | Who is responsible for establishing watches aboard a U.S. vessel?   | The owner of the vessel   | The company that operates the vessel  | The company that charters the vessel                       | <b>The Master of the vessel</b>                                 |              |
| 2185 | Who is responsible for properly manning a vessel in accordance with all applicable laws, regulations and international conventions?   | The (USCG) Officer in Charge of Marine Inspection                         | The (USCG) Captain of the Port  | The owner or operator of the vessel                        | <b>The Master of the vessel</b>                                 |              |
| 2186 | Who is responsible for providing urine specimen collection kits to be used following a serious marine incident?   | Qualified medical personnel   | <b>The marine employer</b>  | The U.S. Coast Guard                                       | The local police department                                     |              |
| 2187 | Who may perform as a lookout?   | A member of the engineering watch   | <b>A member of the navigational watch</b>                                   | A member of the Stewards Department                        | All of the above  |              |

| ID # | Question   | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|--|--|--|--|--------------|
| 2188 | Who publishes the "Canadian List of Lights, Buoys and Fog Signals"?  | The U.S. Coast Guard   | <b>The Canadian Coast Guard</b>  | The U.S. Hydrographic Service  | The Canadian Hydrographic Service  |              |
| 2189 | Who should be notified prior to starting up a crane?   | The pumpman  | The stevedore foreman  | <b>The engine room</b>   | All the above  |              |
| 2190 | Who would normally certify that all preparations have been made and all regulations observed prior to loading a cargo of bulk grain? | American Bureau of Shipping                                      | U.S. Coast Guard   | <b>National Cargo Bureau</b>   | Master of the vessel   |              |
| 2191 | Why are most break bulk vessels built with the transverse framing system rather than the longitudinal system?                        | The transverse system is more resistant to hog and sag stresses. | The numerous longitudinal frames cause excessive broken stowage.             | The transverse system provides better support to the varying cargo densities on a break bulk vessel. | <b>The deep web frames interfere with the stowage of break bulk cargo.</b> |              |
| 2192 | Why are stern towing bits placed well forward of the rudder when hawser towing?  | To keep the hawser from fouling the rudder                       | To keep the towing bits as far away as possible from the tugs pivoting point | <b>To allow the stern to swing more freely when using rudder</b>                                     | To have as much of the towing hawser in use as possible                    |              |
| 2193 | Why is 6X19 class wire rope more commonly used for cargo runners than the more flexible 6X37 wire rope?                              | <b>It resists abrasion better.</b>                               | It is longer.  | It hugs the winch drum better.   | It is less expensive.  |              |
| 2194 | Wire rope is galvanized to _____.  | <b>protect it from corrosion due to contact with saltwater</b>   | make it bend more easily   | increase its strength  | increase its circumference   |              |
| 2195 | Wire rope is used in the towing industry _____.  | for back up wires and main towing hawsers                        | for face wires or jockeys when pushing ahead                                 | as stern wires when pushing ahead  | <b>All of the above</b>  |              |
| 2196 | Wire rope should be renewed when the _____.  | outer wires are rusted   | <b>outer wires are worn to half their original diameter</b>                  | inner core appears dry   | certification period expires   |              |
| 2197 | With a following sea, a vessel will tend to _____.   | heave to   | pound  | reduce speed   | <b>yaw</b>   |              |
| 2198 | With a given load on the cargo hook, tension in a single span topping lift _____.  | increases as the boom's angle to the horizontal increases        | is at a maximum when the boom is at a 45° angle to the horizontal            | <b>increases as the boom's angle to the horizontal decreases</b>                                     | decreases as the boom's angle to the horizontal decreases                  |              |
| 2199 | With a given load on the cargo hook, the thrust on a cargo boom _____.   | <b>increases as the angle to the horizontal increases</b>        | increases as the angle to the horizontal decreases                           | is greatest at an angle of 45° and decreases as the boom is raised or lowered                        | is least at an angle of 45° and increases as the boom is raised or lowered |              |

| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|---|---|--|--|---|--------------|
| 2200 | With a large ocean tow in heavy weather, you should NOT _____.  | keep the stern of the tug well down in the water                                | <b>adjust the towline so the tug is on the crest when the tow is in the trough</b>                 | keep the low point of the catenary in the water  | use a long towing hawser  |              |
| 2201 | With a large tow astern, there is immediate danger to the tug in the event of the _____.  | <b>tug losing power</b>   | tow line parting   | bridle twisting  | tow broaching   |              |
| 2202 | With an increase in temperature the volume of flammable and combustible liquids _____.  | <b>expands</b>  | contracts  | remains constant   | remains constant if pressure remains constant                                     |              |
| 2203 | With rudders amidships and negligible wind, a twin-screw vessel moving ahead on the port screw and backing on the starboard screw will _____.   | move in a straight line   | <b>pivot to starboard</b>  | pivot to port  | walk sideways to starboard  |              |
| 2204 | With rudders amidships and negligible wind, a twin-screw vessel moving astern with both engines backing will back _____.  | to port   | to starboard   | <b>in a fairly straight line</b>   | in a circular motion  |              |
| 2205 | With the buttress securing system, containers of different heights must be stowed _____.  | on the bottom tier on deck  | in the hold  | next to the buttress tower   | <b>on the top tier</b>  |              |
| 2206 | With the exception of a Coast Guard approved commercial hybrid Personal Flotation Device (PFD), which type of life preserver must be carried for each person on board an uninspected passenger vessel?  | <b>Type I</b>   | Type II  | Type III   | None of the above   |              |
| 2207 | Yawing can be described as _____.   | jumping on the towline as the tow pitches                                       | jumping on the towline as the tow slams into waves   | <b>veering from side to side on the end of the towline</b>                               | corkscrew motion of the tow due to wave action                                    |              |
| 2208 | Yawing is angular motion of the vessel about what axis?   | Longitudinal  | Transverse   | <b>Vertical</b>  | Centerline  |              |
| 2209 | 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?                                  | The bow will come in and the stern will go out.                                 | The bow and stern come in equally closer toward the pier.  | <b>The bow will come in and the stern will remain the same distance off the pier.</b>    | The stern will come in and the bow will remain the same distance off the pier.    |              |
| 2210 | You are a watchstanding mate and have come to the bridge to relieve the watch while underway at sea. The watch should not be transferred _____.   | during an engine speed change   | <b>during a navigational course change</b>   | unless the helm is in the "hand" mode  | All of the above  |              |
| 2211 | 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 _____. | you state the vessel's charted position, present course and port of destination | the mate being relieved tells you the vessel's course and speed and states that you have the watch | <b>you say, "I relieve you" and you state the course per gyro and magnetic compasses</b> | the mate being relieved says, "You have the conn" and you state the ship's course |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D  | Illustration      |
|------|--|---|---|--|---|-------------------|
| 2212 | 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. Which of the following is exemplary of the statement that would officially transfer the watch? | You say to the mate going off watch, "Destination New York, course 283°, speed 16 knots." | The mate being relieved says, "You now have the watch, course 147°, speed 15 knots."                  | The mate being relieved says, "All in apparent good order, course 068° per gyro, 075° per standard." | <b>You say to the mate going off watch, "I relieve you, course 321° per gyro, 316° per standard."</b> |                   |
| 2213 | You are aboard a right-handed single-screw vessel with headway on. The engine is put full astern and the rudder hard left. What will the bow do?   | It will swing to the left, and will swing left faster as the vessel loses way.            | <b>It will swing to the left, straighten out and then swing to the right as the vessel loses way.</b> | It will swing to the left without increasing or decreasing its swing.                                | The bow will swing to the right.  |                   |
| 2214 | You are aboard a single-screw vessel (right-hand propeller) going full ahead with good headway. The engine is put astern and the rudder is placed hard left. The stern of the vessel will swing to _____.  | <b>starboard until headway is lost and then to port</b>                                   | port  | port until headway is lost and then may possibly swing to starboard                                  | port slowly at first and then quickly to port   |                   |
| 2215 | You are aboard a single-screw vessel with a right-handed propeller. The vessel is dead in the water and the rudder is amidships. If you reverse your engine you would expect your vessel to _____.   | <b>kick its stern to port</b>   | kick its stern to starboard   | move astern without swinging   | swing its stern to starboard, then to port  |                   |
| 2216 | You are aboard vessel "A" in a narrow channel and the pilot is approaching vessel "B" as shown. The reason he has not previously changed course to the starboard side of the channel is _____.   | to avoid vessel squat in the shallower water near the bank                                | <b>to avoid the effects of bank cushion and bank suction</b>  | because there is less chance of striking submerged objects in mid-channel                            | because the current has less eddies in mid-channel  | <b>DIAGRAM 37</b> |
| 2217 | You are anchoring in 16 fathoms of water. On a small to medium size vessel, the _____.   | anchor may be dropped from the hawsepipes   | <b>anchor should be lowered to within 2 fathoms of the bottom before being dropped</b>                | scope should always be at least ten times the depth of the water                                     | scope should always be less than 5 times the depth of the water                                       |                   |
| 2218 | You are anchoring in a river where the current is from one direction only. The best way to lay out two anchors is to have them _____.  | directly in line with the bow   | side by side, with their lines on the port and starboard side   | <b>so that their lines form an angle</b>   | on top of one another   |                   |
| 2219 | You are approaching a disabled vessel in order to remove survivors from it. If your vessel drifts faster than the disabled vessel, how should you make your approach?  | <b>To windward of the disabled vessel</b>   | To leeward of the disabled vessel   | Directly astern of the disabled vessel   | At three times the drifting speed of the disabled vessel  |                   |
| 2220 | You are approaching a pier and intend to use the port anchor to assist in docking port side to. You would NOT use the anchor if _____.   | the current was setting you on the pier   | another vessel is berthed ahead of your position  | the wind was blowing from the starboard side   | <b>there is shallow water enroute to the berth</b>  |                   |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|--|--|---|--|--------------|
| 2221 | 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 _____.   | <b>compare the rate of drift between the ships</b>   | install chafing gear on the towline  | secure the bitter end of the towing hawser to prevent loss if the tow is slipped                                    | have traveling lizards rigged to guide the towline while it is paid-out                                  |              |
| 2222 | 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?   | Backing full   | Stopping the engines   | Giving right full rudder  | <b>A short burst of ahead full with left full rudder</b>   |              |
| 2223 | You are arriving in port and are assigned to anchor in anchorage circle B-4. It has a diameter of 500 yards and your vessel's LOA is 484 feet. If you anchor in 8 fathoms at the center of the circle, what is the maximum number of shots of chain you can use and still remain in the circle?  | 6 shots  | 5 shots  | 4 shots   | <b>3 shots</b>   |              |
| 2224 | You are arriving in port and are assigned to anchor in anchorage circle B-4. It has a diameter of 550 yards and your vessel's LOA is 449 feet. If you anchor in 9 fathoms at the center of the circle, what is the maximum number of shots of chain you can use and still remain in the circle?  | 6 shots  | 5 shots  | <b>4 shots</b>  | 3 shots  |              |
| 2225 | You are arriving in port and are assigned to anchor in anchorage circle B-4. It has a diameter of 600 yards and your vessel's LOA is 525 feet. If you anchor in 10 fathoms at the center of the circle, what is the maximum number of shots of chain you can use and still remain in the circle? | <b>4 shots</b>   | 5 shots  | 6 shots   | 7 shots  |              |
| 2226 | You are arriving in port and are assigned to anchor in anchorage circle B-4. It has a diameter of 700 yards and your vessel's LOA is 600 feet. If you anchor in 11 fathoms at the center of the circle, what is the maximum number of shots of chain you can use and still remain in the circle? | 4 shots  | <b>5 shots</b>   | 6 shots   | 7 shots  |              |
| 2227 | You are attempting to take a dead ship in tow. All lines have been passed and secured. How should you get underway?  | Order minimum turns until the towing hawser is just clear of the water, then reduce speed to that necessary to keep the line clear of the water. | If the towline is properly adjusted and weighted you can order slow or dead slow and the towline will act as a spring to absorb the initial shock. | Order minimum turns until the towing hawser is taut and then continue at that speed until towing speed is attained. | <b>Gradually apply power until catenary almost breaks the water, but keep the catenary in the water.</b> |              |



| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D  | Illustration  |
|------|---|--|---|---|---|---------------|
| 2228 | You are backing on twin engines with rudders amidships, when your port engine stalls. To continue backing on course, you should _____.  | apply left rudder  | <b>apply right rudder</b>   | increase engine speed   | keep your rudder amidships  |               |
| 2229 | You are backing on twin engines with rudders amidships. Your starboard engine stalls. To continue backing on course, you should _____.  | <b>apply left rudder</b>   | apply right rudder  | increase your engine speed  | keep your rudder amidships  |               |
| 2230 | You are being towed by one tug. As you lengthen the bridle legs you _____.  | increase your chances of breaking the towing hawser  | <b>reduce the yawing of your vessel</b>   | reduce the spring effect of the tow connection  | increase your chances of breaking the bridle legs   |               |
| 2231 | You are carrying cargoes of crotonaldehyde, phosphoric acid, and morpholine on your multiple-product tankship. Which of the following statements is TRUE?   | <b>Each of the cargoes must be segregated from the other by at least two barriers.</b>                                       | The minimum protective clothing required for taking samples of phosphoric acid is goggles or a face shield.   | Aluminum, copper, and zinc are prohibited in all valve parts in contact with these cargoes.                                   | The required warning sign must have the legend "cancer hazard" added to it.                                 |               |
| 2232 | You are carrying triethylamine, methyl methacrylate and isoprene in your multiple-product tankship. Which of the following statements is true?  | <b>Isoprene may be carried in a cargo tank adjacent to either of the other two cargoes.</b>                                  | Methyl methacrylate may not be carried in a tank adjacent to a pump room.                                     | Methyl methacrylate must usually be heated to maintain its stability.   | Portable thermometers are not permitted to be used to take the cargo temperature of triethylamine.          |               |
| 2233 | You are cleaning the tanks after carrying a cargo of crude oil. Which statement is TRUE?  | Washing water should be recirculated if possible because it has the same electric potential as the cargo tank being cleaned. | The hoses to portable cleaning machines should be disconnected before the machines are removed from the tank. | The principal hazard with steaming cargo tanks is raising the ambient temperature above the flame point of the cargo residue. | <b>Steam cleaning and water washing are both capable of generating electrostatic charges within a tank.</b> |               |
| 2234 | You are coming to anchor in 8 fathoms of water. In this case, the _____.  | <b>anchor may be dropped from the hawsepipe</b>  | anchor should be lowered to within 2 fathoms of the bottom before being dropped                               | anchor should be lowered to the bottom then the ship backed and the remainder of the cable veered                             | scope should be less than 3 times the depth of the water  |               |
| 2235 | You are conducting trials to determine the maneuvering characteristics of your vessel. While making a turn you take the ranges and bearings of an isolated light with the results shown. Based on this information, what is the transfer for a turn of 75°? | 340 yards (306 meters)   | <b>300 yards (274 meters)</b>   | 230 yards (207 meters)  | 190 yards (171 meters)  | <b>D034DG</b> |

| ID # | Question   | Choice A                           | Choice B                                    | Choice C   | Choice D  | Illustration |
|------|--|------------------------------------|---|--|---|--------------|
| 2236 | 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 with the results as shown. Based on this information, what is the advance for a turn of 45°?   | 590 yards                          | 635 yards                                   | <b>690 yards</b>   | 740 yards   | D034DG       |
| 2237 | 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 with the results as shown. Based on this information, what is the advance for a turn of 75°?   | <b>825 yards (754 meters)</b>      | 860 yards (774 meters)                      | 910 yards (819 meters)   | 955 yards (860 meters)  | D034DG       |
| 2238 | 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 with the results as shown. Based on this information, what is the advance for a turn of 90°?   | 820 yards                          | <b>870 yards</b>                            | 930 yards  | 975 yards   | D034DG       |
| 2239 | 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 with the results as shown. Based on this information, what is the transfer for a turn of 180°? | 875 yards                          | <b>910 yards</b>                            | 975 yards  | 1015 yards  | D034DG       |
| 2240 | 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 with the results as shown. Based on this information, what is the transfer for a turn of 90°?  | 355 yards                          | <b>380 yards</b>                            | 410 yards  | 455 yards   | D034DG       |
| 2241 | 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 with the results shown. Based on this information, what is the transfer for a turn of 45°?     | <b>130 yards</b>                   | 165 yards                                   | 195 yards  | 230 yards   | D034DG       |
| 2242 | You are conning a twin-screw vessel going ahead with rudders amidships. If the port screw stops turning the bow will _____.  | <b>go to port</b>                  | go to starboard                             | not veer to either side  | go first to port and then to starboard                                |              |
| 2243 | You are docking a ship with a single-screw tug assisting on your starboard bow. How should the tug be tied up if you are anticipating that she will have to hold your bow off while you stem the current?  | One head line would be sufficient. | The tug would need at least two head lines. | The tug should put a spring line up, leading astern on the ship. | <b>The tug should put a stern line up, leading ahead on the ship.</b> |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|---|--|--|---|--------------|
| 2244 | You are docking a vessel in a slip which has its entrance athwart the tide. You land the ship across the end of the pier, stemming the tide, preparatory to breaking the ship around the corner. You have one tug to assist. Where would you generally tie up the tug? | Have her on a hawser from the stern.                    | Tie her up on the inshore bow to hold the ship off the end.              | <b>Tie her up on the offshore bow.</b>               | Tie her up on the inshore quarter to lift the stern.                                    |              |
| 2245 | You are docking a vessel starboard side to with the assistance of two tugs. You are attempting to hold the vessel off by operating both tugs at right angles to the vessel and at full power. You must ensure that _____.  | steerageway is not taken off                            | the bow doesn't close the dock first                                     | the bow closes the dock first                        | <b>the ship has no headway at the time</b>  |              |
| 2246 | You are docking a vessel. If possible, you should _____.   | go in with the current                                  | <b>go in against the current</b>   | approach the dock at a 90° angle and swing to        | pass a mooring line to the dock with a heaving line and let the crew pull the vessel in |              |
| 2247 | You are docking a vessel. Wind and current are most favorable when they are _____.   | crossing your course in the same direction              | crossing your course in opposite directions                              | <b>parallel to the pier from ahead</b>               | setting you on the pier   |              |
| 2248 | You are docking an oceangoing single-screw vessel under normal circumstances with a single tug. The tug is usually used to _____.  | <b>control the bow and is tied to the offshore bow</b>  | control the stern and is tied to the stern on the offshore side          | pull the vessel into the slip and is tied to the bow | push the ship bodily alongside and is tied to the offshore side amidships               |              |
| 2249 | You are doing a Williamson turn. Your vessel has swung about 60° from the original course heading. You should _____.   | put the rudder amidships and check the swing            | stop the engines and prepare to maneuver to pick up the man in the water | <b>shift your rudder</b>                             | increase to maximum speed   |              |
| 2250 | You are drifting in a locale where there is no current. As a rule, your vessel will lie _____.   | bow to the wind   | <b>beam to the wind</b>  | stern to the wind                                    | with the wind on the quarter  |              |
| 2251 | You are going ahead on twin engines when you want to make a quick turn to port. Which actions will turn your boat the fastest?   | <b>Reverse port engine; apply left rudder</b>           | Reverse port engine; rudder amidships                                    | Reverse starboard engine; apply left rudder          | Reverse starboard engine; rudder amidships  |              |
| 2252 | You are going ahead on twin engines with rudder amidships. Your starboard engine stalls. To continue on course, you should _____.  | <b>apply left rudder</b>                                | apply right rudder   | increase engine speed                                | keep your rudder amidships  |              |
| 2253 | You are going ahead on twin engines with rudders amidships. Your port engine stalls. To continue your course you should _____.   | <b>apply right rudder</b>                               | apply left rudder  | keep your rudder amidships                           | increase engine speed   |              |
| 2254 | You are going astern (single-screw, right-handed propeller) with the anchor down at a scope of twice the depth of the water. As the anchor dredges, you should expect the _____.   | stern to walk to the same side as the anchor being used | vessel to back in a straight line  | <b>stern to walk to port but at a reduced rate</b>   | stern to walk to port at a faster rate than normal                                      |              |

| ID # | Question   | Choice A  | Choice B   | Choice C                                      | Choice D  | Illustration |
|------|--|---|--|---|---|--------------|
| 2255 | You are going to load bales of wool having a stowage factor of 100 in #3 lower hold which has a bale cubic of 62,000. How many tons of the wool can be stowed in the compartment, assuming 10% broken stowage?   | 520   | <b>558</b>   | 620   | 654   |              |
| 2256 | You are going to load bales of wool having a stowage factor of 100 in #3 lower hold which has a bale cubic of 72,000. How many tons of the wool can be stowed in the compartment, assuming 10% broken stowage?   | 493   | 577  | 602   | <b>648</b>  |              |
| 2257 | You are going to load bales of wool having a stowage factor of 110 in #3 lower hold which has a bale cubic of 72,000. If broken stowage is figured at 15%, how many tons of the wool can be stowed?  | <b>556</b>  | 654  | 752   | 770   |              |
| 2258 | You are going to load bales of wool having a stowage factor of 96 in #3 lower hold which has a bale cubic of 84,000. How many tons of wool can be stowed in the compartment?   | 577   | 602  | 654   | <b>875</b>  |              |
| 2259 | You are handling a mooring line and are instructed to "Check the line". What should you do?  | Ensure the bight is not fouled by taking up slack.  | Pay out the line smartly and keep it free for running.   | Secure the line by adding more turns.         | <b>Surge the line so it maintains a strain without parting.</b>     |              |
| 2260 | You are heading into the sea during rough weather. Having too much weight forward can cause your small boat to _____.  | broach  | <b>plunge into the wave</b>                              | rise rapidly over the wave                    | list  |              |
| 2261 | You are in a fresh water port loading logs with gear rated at 5 tons, and suspect the weight of the logs exceeds the SWL of the gear. The logs are floating in the water alongside the vessel and have 95% of their volume submerged. The average length of the logs is 15 feet and the average diameter is 4.4 feet. What is the nearest average weight of the logs, based on these average measurements? | 5.5 tons  | <b>6.0 tons</b>  | 7.7 tons                                      | 24.1 tons   |              |
| 2262 | You are in a tropical port. The refrigeration machinery on a container loaded with air-cooled fruit fails. It cannot be repaired for 18 to 24 hours. Which step should you take to reduce the temperature rise and spoilage of the fruit?  | Discharge a cylinder of nitrogen into the container | <b>Shade the container and periodically hose it down</b> | Seal any ventilation openings and add dry ice | Spread ice over the top layer and in any voids within the container |              |
| 2263 | You are in charge of a 225-gross ton tug preparing to depart from Houston, Texas, with a loaded 2500-gross ton tank barge bound for New York. Prior to departure, regulations require that you _____.  | record the status of all firefighting equipment     | <b>record the barge's load line and draft readings</b>   | record the condition of the towing gear       | have on board an Official Logbook in lieu of other forms of records |              |

| ID # | Question  | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|---|---|--|---|--------------|
| 2264 | 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?                               | No credentials are required since you operate on inland waters only                           | Social Security card  | State driver's license with photo ID   | <b>Merchant Mariner Credential</b>  |              |
| 2265 | You are in charge of a U.S. documented vessel. Under title 46 of the United States Code, if you fail to report a complaint of a sexual offense, you may be _____.   | held personally liable by the victim and sued   | criminally charged and jailed   | <b>civilly charged and fined</b>   | All of the above are correct.   |              |
| 2266 | You are in charge while handling a synthetic hawser on a capstan. The hawser has a heavy strain and you wish to avoid the hawser's slipping on the capstan drum. Which action should you take?  | <b>Back off on the capstan a bit and have the seaman take several more turns on the drum.</b> | Have the seaman take a strain on the hawser and carefully have several turns added on the drum. | Have more than one seaman hold a good strain on the hawser and continue to heave easy. | While continuing to heave slowly on the capstan, have the seaman take several more turns on the drum. |              |
| 2267 | You are in port A in the United States, and your Certificate of Inspection has expired. You wish to go to port B in the United States for repairs and to complete the inspection. If the Officer-in-Charge Marine Inspection deems it safe, he may issue a _____.                                     | Certificate of Seaworthiness  | Limited Certificate of Inspection   | Temporary Certificate of Inspection  | <b>Permit to Proceed</b>  |              |
| 2268 | You are in the process of adding a barge to your tow. A line run from your power capstan and around timber heads on your tow is made fast on the new barge so that it can be pulled into position. This line is called a _____.   | scissors wire   | <b>capstan line</b>   | spring line  | fore and aft line   |              |
| 2269 | You are in the process of loading 465,000 barrels of cargo oil. At 1030, on 5 November, you gauge the vessel and find that you have loaded 203,000 barrels. At 1200 you find that you have loaded 218,000 barrels. If you continue loading at the same rate, you will finish at approximately _____.  | 1510, 5 November  | 1104, 6 November  | <b>1242, 6 November</b>  | 0735, 7 November  |              |
| 2270 | You are in the process of loading 465,000 barrels of cargo oil. At 1030, on 5 November, you gauge the vessel and find that you have loaded 203,000 barrels. At 1200, you find that you have loaded 219,000 barrels. If you continue loading at the same rate, you will finish at approximately _____. | 1510, 5 November  | 0140, 6 November  | <b>1104, 6 November</b>  | 0735, 7 November  |              |

| ID # | Question  | Choice A                      | Choice B                            | Choice C                                | Choice D  | Illustration |
|------|---|-------------------------------|-------------------------------------|---|---|--------------|
| 2271 | You are landing a single-screw vessel with a left-handed propeller, starboard side to the dock. As you approach the dock you back your engine with your rudder amidships. You would expect the vessel to _____.   | lose headway without swinging | turn its bow towards the dock       | <b>turn its stern towards the dock</b>  | drift away from the dock                                  |              |
| 2272 | You are landing a single-screw vessel with a right-handed propeller port side to a dock. As you approach the dock, you back down on your engine with rudder amidships. You would expect the vessel to _____.  | drift away from the dock      | lose headway without swinging       | <b>swing its stern towards the dock</b> | swing its stern away from the dock                        |              |
| 2273 | You are landing a single-screw vessel, with a right-hand propeller, starboard side to the dock. When you have approached the berth and back the engine, you would expect the vessel to _____.   | lose headway without swinging | <b>turn her bow toward the dock</b> | turn her bow away from the dock         | head into the wind, regardless of the side the wind is on |              |
| 2274 | You are lifting a 3 ton weight with a single whip rove on a swinging boom set at an angle of 60° to the horizontal. Use the formula for the size of a shackle with a safe working load and determine the minimum size shackle that should be used to secure the head block to the boom. | 1 1/8 inch                    | <b>1 1/2 inch</b>                   | 1 3/4 inch                              | 2 inch  |              |
| 2275 | You are lifting a 3-ton weight with a single whip rove on a swinging boom set at an angle 20° to the horizontal. Use the formula for the size of a shackle with a safe working load and determine the minimum size shackle that should be used to secure the head block to the boom.    | <b>1 3/8 inch</b>             | 1 1/2 inch                          | 1 5/8 inch                              | 1 3/4 inch  |              |
| 2276 | You are lifting a 5-ton weight with a single whip rove on a swinging boom set at an angle of 20° to the horizontal. Use the formula for the size of a shackle with a safe working load and determine the minimum size shackle that should be used to secure the head block to the boom. | 1 3/8 inch                    | 1 1/2 inch                          | <b>1 3/4 inch</b>                       | 1 7/8 inch  |              |
| 2277 | You are lifting a 5-ton weight with a single whip rove on a swinging boom set at an angle of 60° to the horizontal. Use the formula for the size of a shackle with a safe working load and determine the minimum size shackle that should be used to secure the head block to the boom? | 1 inch                        | 1 3/8 inch                          | 1 1/2 inch                              | <b>1 7/8 inch</b>   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|--|--|---|--|--------------|
| 2278 | You are lifting a one-ton weight with a swinging boom. When comparing the stresses in the rig with the boom at 20° to the horizontal to the stresses when the boom is at 60° to the horizontal, which statement is TRUE?                                  | The stress on the topping lift is greater at 60°.  | The thrust on the boom is greater at 20°.              | The stress on the heel block is less at 20°.        | <b>The stress on the masthead fairlead for the topping lift is greater at 20°.</b> |              |
| 2279 | You are lifting a one-ton weight with a swinging boom. When comparing the stresses on the rig with the boom at 20° to the horizontal to the stresses when the boom is at 60° to the horizontal, which statement is TRUE?                                  | <b>The thrust on the boom is greater at 60°.</b>   | The stress on the topping lift is greater at 60°.      | The stress on the heel block is less at 20°.        | The stress on the head block is less at 60°.                                       |              |
| 2280 | You are lifting a one-ton weight with a swinging boom. When comparing the stresses on the rig with the boom at 20° to the horizontal to the stresses when the boom is at 60° to the horizontal, which statement is true?                                  | The thrust on the boom is greater at 20°.  | The stress on the topping lift is greater at 60°.      | <b>The stress on the heel block is less at 60°.</b> | The change in angle of elevation has no effect on the stresses in the head block.  |              |
| 2281 | You are lifting a one-ton weight with a swinging boom. When comparing the stresses on the rig with the boom at 20° to the horizontal to the stresses when the boom is at 60° to the horizontal, which statement is TRUE?                                  | The angle of elevation does not change the stresses in the masthead fairlead for the topping lift. | <b>The stress on the head block is greater at 60°.</b> | The stress on the heel block is greater at 60°.     | The thrust on the boom is greater at 20°.  |              |
| 2282 | You are loading 465,000 barrels of cargo oil. At 0900 you find that you have loaded 207,000 barrels. At 1030 you find that you have loaded 223,000 barrels. If you continue loading at the same rate, you will finish at approximately _____.             | 2100 that night  | 0730 the next day                                      | <b>0910 the next day</b>                            | 1215 the next day  |              |
| 2283 | You are loading 475,000 barrels of cargo oil. At 0800 on 8 July, you find that you have loaded 174,000 barrels. At 1000, you find that you have loaded 192,000 barrels. If you continue loading at the same rate, you will finish at approximately _____. | 1752, 8 July   | 1940, 8 July   | 0143, 9 July  | <b>1727, 9 July</b>  |              |
| 2284 | You are loading 530,000 barrels of cargo oil. At 0945 on 13 April, you find that you have loaded 202,000 barrels. At 1130, you find that you have loaded 223,000 barrels. If you continue at the same rate, you will finish at _____.                     | 1322, 13 April   | 1920, 13 April   | 1120, 14 April                                      | <b>1305, 14 April</b>  |              |
| 2285 | You are loading a cargo of canned goods with a stowage factor of 65. If you allow 15% for broken stowage, how many tons can be loaded in a space of 55,000 cubic feet?  | 687  | <b>719</b>   | 846   | 973  |              |



| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration  |
|------|--|---|--|--|---|---------------|
| 2286 | You are loading a cargo of cases into a hold which has a bale cubic of 44,000. The cargo consists of cases measuring 4 ft by 2 ft by 1.5 ft. Estimated broken stowage is 15%. What is the maximum number of cases which can be stowed in the hold? | 3096  | <b>3116</b>  | 3136   | 3156  |               |
| 2287 | You are loading a cargo tank on your container ship. The tank displays the red label shown. Which statement is TRUE?   | <b>The tank contains propylene.</b>   | The tank's volume is 1077 cubic feet.  | There are three tanks in the shipment.   | The tank contains an oxidizing material.  | <b>D023DG</b> |
| 2288 | You are loading a cargo that includes cylinders of acetylene aboard your break bulk vessel. Which statement is true?   | <b>The cylinders must be stowed at least 10 horizontal feet from corrosive materials in the same space.</b> | Stowage in the upper deck-deck is considered to be the equivalent of "on deck" stowage for this cargo. | The cylinders must have a red label for flammability and a green label for compressed gas.                 | The cylinders may be protected from the radiant heat of the Sun by laying a tarp on them.                                 |               |
| 2289 | You are making a sharp turn in a channel and using a buoy four points on the bow to gauge your rate of turn. If you observe the buoy moving aft relative to you, what should you do?   | <b>Increase the rate of turn</b>  | Decrease the rate of turn  | Maintain a constant rate of turn   | Decrease speed  |               |
| 2290 | You are making a sharp turn in a channel and using a buoy four points on the bow to gauge your rate of turn. If you observe the buoy moving forward relative to you, what should you do?   | Increase the rate of turn   | <b>Decrease the rate of turn</b>   | Maintain a constant rate of turn   | Increase speed  |               |
| 2291 | You are making mooring lines fast to bits, stern to, as in some Mediterranean ports. A swell is liable to make the vessel surge. How should you tie up?  | <b>Use manila or synthetic fiber hawsers only.</b>  | Use wires only from the stern and each quarter.  | Use synthetic fiber and/or manila hawsers as required.   | Use wires from each quarter and manila hawsers from the stern.  |               |
| 2292 | You are Master of a U.S. flag vessel which was dry docked for bottom cleaning in Rotterdam, Netherlands. Upon return to a U.S. port, you must _____.   | <b>file a customs' form for duty on this repair</b>   | file no extra reports  | file a report of the dry docking with the U.S.C.G. Officer in Charge, Marine Inspection                    | obtain a U.S. Coast Guard diver to certify the work   |               |
| 2293 | You are Master of a vessel that is sold in a foreign country after discharge of cargo. What is your responsibility to the crew in regards to return to the United States?  | You must provide air transportation to the nearest port of entry in the United States.                      | <b>You must provide passage to the port of original engagement.</b>                                    | There is no requirement for return to the United States provided the voyage has exceeded 4 weeks duration. | The crew can be employed on another United States vessel, but only if it is returning to the port of original engagement. |               |
| 2294 | You are mooring to a buoy. You should approach the buoy with the current from _____.   | <b>ahead</b>  | broad on the bow   | abeam  | astern  |               |
| 2295 | You are moving a gas free tank barge to dry dock for repairs. The barge must have onboard a valid _____.   | Gas Free Certificate  | <b>Certificate of Inspection</b>   | Permit to Proceed and Hot Work Permit  | All of the above  |               |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D   | Illustration |
|------|---|--|---|---|--|--------------|
| 2296 | You are on a 120,000 DWT loaded bulk carrier. What is the maximum safe docking speed when coming alongside?   | 0.1 foot per second (0.06 knot)  | <b>0.2 foot per second (0.12 knot)</b>  | 0.5 foot per second (0.30 knot)   | 0.75 foot per second (0.44 knot)   |              |
| 2297 | You are on a 120,000 DWT loaded bulk carrier. When anchoring without the aid of tugs, your maximum speed should not exceed how many feet per second?  | <b>0.5 (0.3 knot)</b>  | 1.0 (0.6 knot)  | 1.3 (0.8 knot)  | 1.75 (1.0 knot)  |              |
| 2298 | You are on a 165 foot (50.3 meters) long vessel with a draft of 9 feet (2.7 meters) and twin screws. Which statement about rescuing a survivor in the water with ship pickup is TRUE?                 | You should stop to windward of the man and drift down on him.  | You should stop with the man on your weather beam and twist the ship up to him.   | <b>A pickup off the weather bow gives maximum maneuverability with the least possibility of injury to the man.</b>                    | Ship pick up should never be used with a shallow draft vessel.   |              |
| 2299 | You are on a cargo vessel carrying portable tanks of dangerous cargoes in bulk. Which statement is TRUE?  | If the tanks are pumped out while remaining on board, each hose connection must have a minimum of three bolts. | If the tanks are off loaded, no more than two tanks may be lifted together in a hoist.  | When transferring sulfuric acid, you must display a red flag by day whether at anchor or moored.                                      | <b>All electrical equipment within 10 feet horizontally must be explosion proof or intrinsically safe.</b> |              |
| 2300 | You are on a cargo vessel carrying toluol in bulk in portable tanks. Which is a requirement for pumping the toluol?   | Hose connections to the tank must be made with a minimum of three bolts.                                       | <b>There must be water pressure on the fire main.</b>   | You must shut down if another vessel comes alongside.   | If transferring at anchor, you must display a red flag by day and a red light at night.                    |              |
| 2301 | You are on a container vessel. What concerning the handling and stowage of containerized hazardous materials is TRUE?   | <b>Open-bed containers may be used to transport hazardous materials if the cargo is properly secured.</b>      | A portable cargo tank of a flammable, cryogenic liquid may not be in transit for a period exceeding its marked rated holding time unless the liquid is inhibited. | A portable cargo tank containing a cryogenic liquid must be shipped on deck unless forced ventilation is provided to the tween-decks. | A container loaded with packages of tear gas would display a placard reading "Irritant."                   |              |
| 2302 | You are on a containership carrying a tank container that had been filled with sodium hydroxide solution. The container is empty but has not been cleaned. Which, if any, placard is required?        | No placard is required; the tank openings must be sealed   | Empty placard with corrosive placard  | Residue label with the UN number  | <b>Black and white corrosive placard</b>   |              |
| 2303 | You are on a containership. The cargo includes a container of small arms ammunition, a container of lead-acid storage batteries and a container of methyl acetylene bottles. Which statement is TRUE? | The storage batteries must be stowed on deck away from the ammunition.   | The storage batteries must be at least ten horizontal feet away from the methyl acetylene.  | The ammunition must be separated from the methyl acetylene by at least one hold.  | <b>No separation is required because freight containers are exempted.</b>                                  |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|---|--|---|--|---|--------------|
| 2304 | You are on a containership. Which statement about the stowage of hazardous materials in containers is TRUE?   | The containers provide automatic segregation of hazardous materials except for class A explosives.                   | All packages within a container must be marked "This End Up" to indicate the correct stowage.                           | <b>A refrigerated container with a fuel tank containing a flammable liquid must be stowed on deck.</b>             | Packages of liquids within a container should be stowed on top of packages of solids to prevent crushing.               |              |
| 2305 | You are on a course of 000°T and put the rudder right 30°. In which direction will the transfer be measured?  | 000°T  | <b>090°T</b>  | 180°T  | 270°T   |              |
| 2306 | You are on a large merchant vessel entering a U.S. port. There is a Pilot on board and he has the conn. Which statement is TRUE?                                    | The Pilot is solely responsible for the safe maneuvering of the ship only if he is required to be on board by law.   | <b>The Master is responsible for the safe navigation of the ship and the Pilot is employed for his local knowledge.</b> | The Pilot is solely responsible for the internal working of the ship.  | The Pilot becomes solely responsible for the safe navigation of the vessel only if the Master relinquishes the conn.    |              |
| 2307 | You are on a large merchant vessel entering a U.S. port. There is a Pilot onboard and he has the conn. Which statement is TRUE?                                     | The Pilot becomes solely responsible for the safe navigation of the vessel only if the Master relinquishes the conn. | The Pilot is solely responsible for the internal working of the ship.   | The Pilot is solely responsible for the safe maneuvering of the ship only if he is required to be on board by law. | <b>The Master is responsible for the safe navigation of the ship and the Pilot is employed for his local knowledge.</b> |              |
| 2308 | You are on a large vessel fitted with a right-handed controllable-pitch propeller set at maximum forward pitch. Which statement about reversing is TRUE?            | When the pitch is reversed, the stern will slew to port even with headway.   | The vessel will respond to the rudder until sternway is developed, then the stern will slew to starboard.               | <b>There will probably be a loss of steering control.</b>  | The vessel will have full rudder control throughout the speed change from ahead to astern.                              |              |
| 2309 | You are on a large vessel fitted with a right-handed controllable-pitch propeller. When making large speed changes while decreasing pitch, which statement is TRUE? | You will probably have full directional control throughout the speed change.   | <b>You may lose rudder control until the ship's speed has dropped to correspond to propeller speed.</b>                 | The stern will immediately slew to starboard due to unbalanced forces acting on the propeller.                     | The stern will immediately slew to port due to unbalanced forces acting on the propeller.                               |              |
| 2310 | You are on a multiple product tankship and carrying methyl acrylate, diethanolamine, and triethylamine. Which statement is TRUE?                                    | Methyl acrylate may be loaded in a tank adjacent to diethanolamine but not triethylamine.                            | <b>The heating coils to the cargo tank loaded with methyl acrylate must be blanked off.</b>                             | Valve components made of aluminum, copper, or zinc may not be in contact with the cargoes.                         | Each crew member working on deck must have an emergency escape breathing apparatus.                                     |              |
| 2311 | You are on a multiple-product chemical tanker and will carry cargoes of allyl alcohol, benzene, and propanolamine. Which of the following is true?                  | All of these cargoes are mutually compatible.  | Benzene may not be carried in a tank adjacent to either of the other two cargoes.                                       | <b>Allyl alcohol is incompatible with propanolamine but both are compatible with benzene.</b>                      | Propanolamine is compatible with allyl alcohol but must be segregated from benzene.                                     |              |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|--|---|---|---|--------------|
| 2312 | You are on a multiple-product chemical tanker and will carry cargoes of butyric acid, propylene oxide, and octyl alcohol. Which statement is true?   | Butyric acid is incompatible with octyl alcohol but not propylene oxide.                                 | <b>Propylene oxide may not be stowed in a tank adjacent to butyric acid.</b>  | All of these cargoes are compatible.  | Octyl alcohol is incompatible with both butyric acid and propylene oxide.                                   |              |
| 2313 | You are on a multiple-product chemical tanker and will carry cargoes of ethanolamine, methyl acrylate, and glycerine. Which statement is true?   | All of these cargoes are mutually incompatible.  | Glycerine may be stowed adjacent to methyl acrylate but must be segregated from ethanolamine.                           | Methyl acrylate and ethanolamine are compatible but both must be segregated from glycerine.         | <b>Glycerine is compatible with both of the other cargoes.</b>  |              |
| 2314 | You are on a multiple-product chemical tanker and will carry cargoes of isophorone, ethylenediamine, and creosote. Which of the following is TRUE?   | <b>All of these cargoes are compatible.</b>  | Isophorone is incompatible with ethylenediamine but may be stowed adjacent to creosote.                                 | All of these cargoes are incompatible.  | Ethylenediamine is compatible with isophorone but both are incompatible with creosote.                      |              |
| 2315 | You are on a multiple-product chemical tanker with orders to load diethylamine. What is NOT a requirement for transporting this cargo?   | You must have two toxic vapor detectors or the pumproom must meet special requirements.                  | Each crew member must be provided with an emergency escape breathing apparatus.   | <b>You must have a containment system made out of stainless steel other than types 416 and 422.</b> | If you are also carrying allyl alcohol, the venting systems don't have to be segregated.                    |              |
| 2316 | You are on a multiple-product chemical tanker. The loading plan includes cargoes of diethylenetriamine and formamide. Which statement concerning the stowage of these cargoes is TRUE?                           | They must be separated by a void space or empty tank.  | The cargoes must have individual venting systems.   | The valves in common piping systems must be chained closed and locked.                              | <b>The minimum segregation required is a single bulkhead.</b>   |              |
| 2317 | You are on a multiple-product tankship and scheduled to load a cargo classed as an aromatic amine. This cargo is incompatible with cargoes classed as _____.   | <b>organic anhydrides</b>  | ketones   | phenols   | esters  |              |
| 2318 | You are on a power-driven vessel proceeding down a channel, with the current, on a river on the Great Lakes System. If you meet another power-driven vessel who is upbound, your responsibilities include _____. | backing down to get out of the way of the other vessel   | waiting for the other vessel to signal her intentions, and then answering promptly                                      | <b>proposing a safe way to pass</b>   | All of the above  |              |
| 2319 | You are on a ship that has broken down and are preparing to be taken in tow. You will use your anchor cable as part of the towline. Which statement is TRUE?   | The anchor cable should be veered enough to allow the towline connection to be just forward of your bow. | The anchor cable should be veered enough to allow the towline connection to be immediately astern of the towing vessel. | <b>The strain of the tow is taken by the riding pawl, chain stopper, and anchor windlass brake.</b> | The anchor cable should be led out through a chock, if possible, to avoid a sharp nip at the hawsepipe lip. |              |
| 2320 | You are on a single-screw vessel with a left-handed propeller making no way in the water. How will your vessel react when you apply right rudder?  | Bow will kick to starboard   | Bow will kick to port   | <b>Rudder alone has no effect on the vessel</b>   | Stern will kick to port, then slowly swing to starboard   |              |

| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|---|---|---|---|--------------|
| 2321 | You are on a single-screw vessel with a right-handed propeller, and you are making headway. When you enter shallow water, _____.  | you will have better rudder response  | your speed will increase without a change in your throttle  | <b>your rudder response will become sluggish</b>  | your vessel will tend to ride higher  |              |
| 2322 | You are on a single-screw vessel with a right-handed propeller. The vessel is going full speed astern with full right rudder. The bow will swing _____.                             | quickly to port, then more slowly to port   | <b>probably to port</b>   | slowly to port, then quickly to starboard   | probably to starboard   |              |
| 2323 | You are on a tankship carrying benzene in bulk. Which statement is TRUE?  | No other cargoes may be carried due to the possibility of contamination by a carcinogen.                                  | The crew quarters must have positive-pressure ventilation to prevent the fumes from entering the living spaces. | Benzene is not a cancer-causing agent.  | <b>Personnel working in regulated areas must use respirators.</b>                                   |              |
| 2324 | You are on a tankship designed to carry molten sulfur. Which statement is TRUE?   | There must be two portable toxic vapor detectors on board.  | The cargo tank ventilation system must maintain the H2S vapor concentration at 1.85% or more by volume.         | <b>Cargo temperature may be taken by portable thermometers.</b>                                 | The pressure in the heating coils in the tanks must be less than that of the cargo exerted on them. |              |
| 2325 | You are on a tankship discharging oil. When all of the oil that the main cargo pumps can handle is pumped out of a tank, the remainder is _____.                                    | stripped out and pumped directly ashore into the mainline as the remaining cargo tanks are pumped out with the main pumps | <b>stripped to one tank and then pumped out with the main pumps</b>   | stripped out and pumped directly ashore after all the tanks have been emptied by the main pumps | gravitated to the centers from the wings and pumped out with the main pumps                         |              |
| 2326 | 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? | <b>Cargo manual</b>   | Cargo information card  | Certificate of Inspection   | Shipping document   |              |
| 2327 | You are on a vessel designed to carry compressed gasses in bulk with a cargo of butadiene. Which statement is TRUE?   | The ullage must be padded with compressed air at a minimum pressure of 2 psig.  | <b>Silver and copper are prohibited in the parts of valves and fittings in contact with the cargo.</b>          | The cargo tank may be sampled only when the tank is being filled.                               | The shipping document must specify the exact quantity of butadiene being carried.                   |              |
| 2328 | You are on a vessel that carries liquefied gasses in bulk. The person on watch is required to have what information about the cargo easily accessible?                              | Port of loading   | Exact quantity on board   | Name and address of consignee   | <b>Firefighting procedures</b>  |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|--|---|--|---|--------------|
| 2329 | You are on an ice-reinforced vessel about to enter pack ice. You should _____.   | enter the pack on the windward side where there is a well defined ice edge | trim to an even keel or slightly down by the bow to take maximum benefit of the ice reinforcement | take maximum advantage of coastal leads caused by offshore winds               | <b>look for areas of rotten ice and enter perpendicular to the ice edge</b>         |              |
| 2330 | You are on anchor watch. As an aid to preventing thievery on the vessel you should _____.  | show running lights, anchor lights and deck lights                         | only show the required anchor lights and keep the rest of the vessel darkened                     | maintain water on deck with firehoses led out and all-purpose nozzles attached | <b>show anchor lights, deck lights and cargo lights hung over the vessel's side</b> |              |
| 2331 | You are on watch and receive word that a person has fallen overboard from the starboard side. What should your first action be?  | notify the Master  | <b>put the wheel hard right</b>   | put the engines full astern  | sound the man overboard alarm   |              |
| 2332 | You are on watch and see a man fall overboard. Which man overboard turn should NOT be used in this situation?  | <b>Scharnow</b>  | Single turn   | Racetrack  | Williamson  |              |
| 2333 | You are on watch and the pilot has just anchored the vessel. The next thing that you should do after the anchor has been let go is to _____.   | stop the engines   | escort the pilot to the accommodation ladder  | <b>plot the vessel's position on the chart</b>                                 | make a round of the weather decks   |              |
| 2334 | You are on watch and the Pilot has the conn. The Master has temporarily gone below. The Pilot orders a course change which you are certain will put the vessel into imminent danger. Your first action should be to _____. | <b>countermand the order and immediately notify the Master</b>             | make an appropriate entry in the deck log concerning the Pilot's order                            | immediately call the Master and await further orders from him                  | immediately sound a short ring on the general alarm                                 |              |
| 2335 | You are on watch at night in clear visibility and the vessel has just been anchored. The first thing that you should do after the anchor has been let go is to _____.  | stop the engines   | <b>take bearings to obtain ship's position</b>  | turn off the running lights and turn on the anchor lights                      | lower the accommodation ladder and illuminate it                                    |              |
| 2336 | You are on watch at sea and find it prudent to call the Master to the bridge due to traffic congestion. The moment that the Master officially relieves you of the conn is whenever _____.                                  | a watchstander announces "Captain's on the bridge"                         | you call the Captain to the bridge in a traffic situation   | <b>the Master specifically informs you that he has the conn</b>                | the Captain states the course being steered   |              |
| 2337 | You are on watch at sea at night and a fire breaks out in #3 hold. What should be done IMMEDIATELY?  | <b>Shut down the cargo hold ventilation.</b>                               | Proceed to the space and determine the extent of the fire.  | Flood the space with CO2 from the fixed fire fighting system.                  | Cool the deck to contain the fire.  |              |
| 2338 | You are on watch at sea at night when a fire breaks out in #3 hold just forward of the bridge. You would NOT _____.  | call the Master  | <b>proceed to the space and inspect the extent of the fire</b>                                    | shut down the cargo hold ventilation   | sound the fire alarm signal to roust out all hands                                  |              |



| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D  | Illustration |
|------|--|---|--|--|---|--------------|
| 2339 | You are on watch at sea on course 090°T. A man falls overboard on your starboard side. You immediately start a Williamson Turn. Which action is NOT a part of a Williamson Turn?   | <b>Stop the engines until clear of the man.</b>                       | Come right full rudder until the vessel heads 150°T.   | Shift the helm to left full rudder.  | Continue with left rudder until on course 270°T.  |              |
| 2340 | You are on watch while your vessel is entering port with a pilot conning. The pilot gave a steering command to the helmsman who failed to acknowledge it by repeating the order. You have now enunciated the pilot's order to the helmsman and there is still no response. If the helmsman continues on the original course, you should immediately _____. | <b>take the helm and expedite the maneuver that the pilot ordered</b> | ask the Pilot to repeat the command since the helmsman failed to hear it                             | tell the helmsman to ask the Pilot to repeat any command that he fails to hear or understand                             | repeat the Pilot's command a second time and notify the Master  |              |
| 2341 | 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 _____.   | notify the Master   | ask the Pilot to repeat the command since the helmsman failed to hear it                             | tell the helmsman to ask the Pilot to repeat any command that he fails to hear or understand                             | <b>repeat the Pilot's command and ensure that the helmsman repeats it exactly</b>                           |              |
| 2342 | You are onboard a 120 GT uninspected sea going tug which carries one Master and one Mate of Towing Vessels and four (4) seamen when underway. How many of the four seamen must have a rating as able seamen if the voyage is under 600 miles?  | 4   | 3  | <b>2</b>   | 1   |              |
| 2343 | You are operating a 150 GT towing vessel. What is NOT required on the vessel?  | Certificate of Documentation  | FCC station license  | Your Coast Guard license   | <b>Certificate of Inspection</b>  |              |
| 2344 | You are operating a twin-screw vessel and lose your port engine. You continue to operate on your starboard engine only. Which action would you take to move your vessel ahead in a straight line?  | <b>Compensate with right rudder.</b>                                  | Compensate with left rudder.   | Surge the starboard engine.  | Rudder amidships - no compensation is necessary on a twin-screw vessel.                                     |              |
| 2345 | You are operator of a towing vessel which collides with a buoy and drags it off station. What should you do if the damage to your vessel is not serious?   | If the buoy is afloat, no action is necessary.                        | Wait one week and submit form GG-2692 to the nearest Coast Guard Marine Safety or Inspection Office. | <b>Immediately notify the nearest Coast Guard Marine Safety or Inspection Office and no further action is necessary.</b> | Immediately notify the nearest Coast Guard Marine Safety or Inspection Office and then submit form CG-2692. |              |
| 2346 | You are ordering a new block to use with a 3-inch circumference manila line. Which represents a proper size block for this line?   | 6-inch cheek, 4-inch sheave   | 8-inch cheek, any size sheave  | <b>9-inch cheek, 6-inch sheave</b>   | At least a 12-inch sheave   |              |
| 2347 | You are picking up an unconscious person that has fallen overboard in a fresh breeze. For safety reasons a small craft should approach with the _____.   | victim to leeward   | <b>victim to windward</b>  | wind on your port side   | wind on your starboard side   |              |



| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D   | Illustration |
|------|--|---|---|---|--|--------------|
| 2348 | You are planning the stowage of two incompatible products on your multiple-product tankship. What will NOT provide the minimum required segregation?   | Empty tank  | <b>Solid (non-intercostal) bulkhead</b>   | Diagonally adjacent tanks   | Tank containing a third cargo compatible with the other two  |              |
| 2349 | You are planning to anchor in an area where several anchors have been lost due to fouling. As a precaution, you should _____.  | anchor using both anchors   | anchor with scope of 8 or more to 1   | use a stern anchor  | <b>fit a crown strap and work wire to the anchor</b>   |              |
| 2350 | You are planning to use a crude oil washing system. What precaution must be taken with the source tank for the washing machines?   | <b>At least one meter must be decanted from the source tank.</b>  | The oil in the source tank must be sampled for compatibility.                                     | The source tank must have been crude oil washed at least once in the past 150 days.   | The inert gas system must lower the oxygen content in the source tank to a maximum of 12%.                             |              |
| 2351 | You are planning to use the crude oil washing system on your tankship. What is required to prevent electrostatic buildup in the tanks?   | The portable machines must be set at the proper drop for the first wash before the fixed machines are used. | <b>The source tank for the tank cleaning machines must have least one meter decanted from it.</b> | The inert gas system must reduce the oxygen content in the tanks to a maximum of 18%. | The fixed machines must be operated simultaneously with the portable machines to equalize the electrostatic potential. |              |
| 2352 | You are preparing to lubricate standing rigging on your vessel. When rigging a bosun's chair on a stay with a shackle, _____.  | connect the shackle to the bosun's chair with a hook  | <b>never allow the shackle pin to ride on the stay</b>  | run the gantline through the shackle and then make fast to the bosun's chair          | tie the bitter end of the gantline to the shackle before shackling it to the bosun's chair                             |              |
| 2353 | You are preparing to relieve the mate on watch while underway at sea. The watch should not be transferred _____.   | during an engine speed change   | while the Master is on the bridge   | <b>during a collision avoidance maneuver</b>  | All of the above   |              |
| 2354 | You are preparing to slush a stay on your vessel by lowering yourself down the stay in a bosun's chair. The proper way to do this is to ride down the stay on a riding shackle _____.                    | with the pin of the shackle riding on the stay  | <b>with the pin of the shackle through the chair's bridle eye</b>                                 | with a hook attaching the chair to the riding shackle                                 | connected to a second shackle on the chair   |              |
| 2355 | You are proceeding against the current on a river in the Great Lakes System. You are meeting a downbound vessel. Both vessels are power-driven. The other vessel sounds one short blast. You must _____. | change course to port   | hold course and speed   | sound three short blasts  | <b>sound one short blast</b>   |              |
| 2356 | You are proceeding along the right bank of a narrow channel aboard a right-handed single-screw vessel. The vessel starts to sheer due to bank suction/cushion effect. You should _____.                  | stop engines and put the rudder left full   | back full with rudder amidships   | decrease speed and put the rudder right full  | <b>increase speed and put the rudder right full</b>  |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|---|--|--|--|--------------|
| 2357 | You are proceeding at a slow speed with your starboard side near the right bank of a channel. If your vessel suddenly sheers toward the opposite bank, the best maneuver would be _____.                   | full ahead, hard left rudder  | <b>full ahead, hard right rudder</b>   | full astern, hard left rudder  | full astern, hard right rudder   |              |
| 2358 | You are proceeding down a channel and lose the engine(s). You must use the anchors to stop the ship. Which statement is true?  | Pay out all of the cable before setting up on the brake to insure the anchors dig in and hold.                    | For a mud, mud and clay, or sandy bottom pay out a scope of 5 to 7 times the depth before setting up on the brake. | <b>Use one or both anchors with a scope of twice the depth before setting the brake.</b>                                       | Drop the anchor to short stay and hold that scope.   |              |
| 2359 | You are proceeding to a distress site and expect large numbers of people in the water. Which statement is TRUE?  | You should stop to windward of the survivors in the water and only use the ship's boats to recover the survivors. | If the survivors are in inflatable rafts you should approach from windward to create a lee for the survivors.      | <b>An inflatable liferaft secured alongside can be an effective boarding station for transfer of survivors from the boats.</b> | Survivors in the water should never be permitted alongside due to the possibility of injury from the vessel. |              |
| 2360 | You are proceeding to a distress site where the survivors are in liferafts. Which action will assist in making your vessel more visible to the survivors?  | Steering a zigzag course with 5 to 10 minutes on each leg   | Steering a sinuous course  | Dumping debris over the side to make a trail to your vessel  | <b>Making smoke in daylight</b>  |              |
| 2361 | You are proceeding to a distress site. The survivors are in liferafts. What will make your ship more visible to the survivors?   | Steering a sinuous course   | Steering a zig-zag course  | <b>Turning on all available deck lights at night</b>   | Dumping debris over the side to make a trail to your vessel  |              |
| 2362 | You are proceeding to the area of reported distress. When you arrive at the reported position, the vessel in distress is not sighted. What type of search should be conducted?                             | Sector search   | <b>Expanding square</b>  | Track crawl  | Parallel track search  |              |
| 2363 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message by rapid transmission which does not require a higher precedence. Which precedence would you assign this message?      | <b>R (ROUTINE)</b>  | P (PRIORITY)   | O (IMMEDIATE)  | Z (FLASH)  |              |
| 2364 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message by rapid transmission which does not require a higher precedence. Which precedence would you assign this transmission? | O (IMMEDIATE)   | Z (FLASH)  | P (PRIORITY)   | <b>R (ROUTINE)</b>   |              |
| 2365 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message concerning an initial enemy contact. Which precedence will you assign this message?                                    | O (IMMEDIATE)   | P (PRIORITY)   | R (ROUTINE)  | <b>Z (FLASH)</b>   |              |

| ID # | Question   | Choice A                              | Choice B   | Choice C  | Choice D   | Illustration |
|------|--|---------------------------------------|--|---|--|--------------|
| 2366 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message concerning an initial enemy contact. Which precedence would you assign this message?   | <b>Z (FLASH)</b>                      | P (PRIORITY)   | R (ROUTINE)   | O (IMMEDIATE)  |              |
| 2367 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message concerning an initial enemy contact. Which precedence would you assign this message?   | O (IMMEDIATE)                         | P (PRIORITY)   | <b>Z (FLASH)</b>  | R (ROUTINE)  |              |
| 2368 | You are proceeding under NCS (Naval Control of Shipping) and wish to send a message warning of a hurricane. Which precedence would you assign this message?  | R (ROUTINE)                           | Z (FLASH)  | <b>O (IMMEDIATE)</b>  | P (PRIORITY)   |              |
| 2369 | You are proceeding under NCS (Naval Control of Shipping) when it becomes necessary to send a distress message. What precedence would you assign this message?  | R (ROUTINE)                           | Z (FLASH)  | P (PRIORITY)  | <b>O (IMMEDIATE)</b>   |              |
| 2370 | You are proceeding under NCS (Naval Control of Shipping) when it becomes necessary to send a distress message. Which precedence would you assign this message?   | P (PRIORITY)                          | <b>O (IMMEDIATE)</b>                                   | R (ROUTINE)   | Z (FLASH)  |              |
| 2371 | You are proceeding under NCS (Naval Control of Shipping) when you wish to send a message concerning your ships diversion. Which precedence would you assign this message?  | <b>P (PRIORITY)</b>                   | Z (FLASH)  | R (ROUTINE)   | O (IMMEDIATE)  |              |
| 2372 | You are proceeding under NCS (Naval Control of Shipping) when you wish to send a message concerning your ships diversion. Which precedence would you assign this message?  | O (IMMEDIATE)                         | <b>P (PRIORITY)</b>                                    | R (ROUTINE)   | Z (FLASH)  |              |
| 2373 | You are proceeding under NCS (Naval Control of Shipping) when you wish to send a message concerning your ships diversion. Which precedence would you assign this message?  | O (IMMEDIATE)                         | Z (FLASH)  | R (ROUTINE)   | <b>P (PRIORITY)</b>  |              |
| 2374 | You are riding to a single anchor. The vessel is yawing excessively. Which action should be taken to reduce the yawing?  | Veer chain to the riding anchor       | Heave to a shorter scope of chain on the riding anchor | Drop the second anchor at the extreme end of the yaw and veer the riding anchor | <b>Drop the second anchor at the extreme end of the yaw, then adjust the cables until the scope is equal</b> |              |
| 2375 | You are rigging a stage over the ship's side to serve as a working platform. For stability of the stage, the downhaul to one end of the stage and the downhaul to the other end, which are used for lowering the stage, should be led _____. | both to the inboard side of the stage | both to the outboard side of the stage                 | <b>one to the inboard and the other to the outboard</b>                         | either both to the inboard or both to the outboard side of the stage   |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|---|---|--|---|--------------|
| 2376 | You are rigging a stage over the vessel's side and are securing the downhaul with lowering turns at your end of the stage. When finished, the remainder of the line should be _____. | <b>lowered down into the water</b>  | coiled on the stage with the bitter end on the bottom                             | coiled on the stage with the bitter end on top   | coiled on deck to be slacked down by a seaman as needed   |              |
| 2377 | You are scheduled to load a bulk shipment of steel turnings. Which statement is TRUE?  | <b>The primary hazard of this cargo is that it is subject to spontaneous heating and ignition.</b>                    | The shipping papers should describe this cargo as "Waste; steel borings".         | After loading, you may not sail if the temperature in each hold of steel turnings exceeds 130°F. | This cargo may not be transported in bulk unless a special permit is issued by the Coast Guard.   |              |
| 2378 | You are signing on a crew. When they present their Merchant Mariner Credential, you should suspect a fraudulent document if it has a single endorsement that says _____.             | see Certificate of Registry   | any unlicensed rating in the deck department including AB                         | Steward's Department (F.H.)  | <b>Bosun</b>  |              |
| 2379 | You are signing on a crew. Which person is presenting a Merchant Mariner's Document (MMD) that you should suspect as being invalid?  | An AB with an endorsement of "Any unlicensed rating in the deck department including Able Seaman"                     | <b>A seaman with an MMD only endorsed as "Bosun"</b>                              | A Purser with an MMD only endorsed "See certificate of registry"                                 | A Chief Steward with an MMD only endorsed as "Steward's Dept. (FH)"                               |              |
| 2380 | You are signing on a crew. You can determine the minimum number and qualifications of the crew that you are required to carry by consulting which document?                          | Crew list   | <b>Certificate of Inspection</b>  | Articles of Agreement  | forecastle card   |              |
| 2381 | You are signing on a crew. A man presents a Merchant Mariner's Document that you suspect has been tampered with. Which action should you take?                                       | Confiscate the document and deliver it to the Coast Guard.  | Sign the man on and notify the Coast Guard at the first U.S. port of call.        | <b>Refuse to sign the man on articles until authorized by the Coast Guard.</b>                   | Refuse to sign the man on and notify the FBI of unauthorized use of a federal document.           |              |
| 2382 | You are signing on a deck officer, who will be designated as one of the GMDSS operators, before sailing foreign. Which statement is TRUE?  | <b>He/she must have an STCW certificate endorsed as "Valid for Service on Vessels Operating in the GMDSS System".</b> | He/she must present either an FCC-issued license or a Coast Guard-issued license. | You must consult the "List of Qualifications" on the reverse of his/her FCC-issued license.      | His/her Merchant Mariners Document must have an added endorsement as "Radio Electronics Officer". |              |
| 2383 | You are signing on crew members. The minimum number of people required aboard, and the qualifications of each, is listed on the _____.   | Crew list   | <b>Certificate of Inspection</b>  | Articles of Agreement  | forecastle card   |              |
| 2384 | You are signing on crew members. The minimum number of people required aboard, and the qualifications of each, is listed on the _____.   | Crew list   | forecastle card   | <b>Certificate of Inspection</b>   | Articles of Agreement   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|---|--|---|---|---|--------------|
| 2385 | You are signing on crew members. The minimum number of people required aboard, and the qualifications of each, is listed on the _____.  | forecastle card  | Crew list   | Articles of Agreement   | <b>Certificate of Inspection</b>  |              |
| 2386 | You are signing on the Purser. He should present a Merchant Mariner Credential with which endorsement?  | <b>See Certificate of Registry</b>   | Steward's Department  | Purser  | Staff Officer   |              |
| 2387 | You are signing on your crew. Which is NOT authorized?  | <b>A man presenting his Chief Mate's license to sign on as able seaman</b> | An engineer presenting an MMD endorsed "QMED - any rating" to sign on as an Electrician | A man presenting an MMD endorsed as "Able Seaman" to sign on as Bosun                             | A man presenting an MMD endorsed "Steward's Department (F.H.)" to sign on as Chief Cook |              |
| 2388 | You are standing look-out duty at night. A dim light on the horizon will be seen quickest by looking _____.   | at an area just a little below the horizon                                 | at the horizon, where the sky and water appear to meet                                  | <b>a little above the horizon</b>   | well below the horizon  |              |
| 2389 | You are standing the wheel watch on entering port and the Master gives you a rudder command which conflicts with a rudder command from the Pilot. What should you do?   | Ask the Pilot if he relinquishes control.                                  | Obey the Pilot.   | <b>Obey the Master.</b>   | Bring the rudder to a position midway between the two conflicting positions.            |              |
| 2390 | You are standing the wheelwatch when you hear the cry, "Man overboard starboard side". You should instinctively _____.  | give full left rudder  | <b>give full right rudder</b>   | put the rudder amidships  | throw a life ring to mark the spot  |              |
| 2391 | You are standing watch on entering port and the Master gives a rudder command which conflicts with a rudder command from the Pilot. You should ensure the helmsman _____.   | <b>obeys the Master</b>  | obeys the Pilot   | brings the rudder to a position midway between the two conflicting positions                      | asks the Pilot if he has relinquished control   |              |
| 2392 | You are steaming in a heavy gale and find it necessary to heave to. Under most circumstances, this is best done by _____.   | stopping the engines and drifting beam to the seas                         | going slow astern and taking the seas on the quarter                                    | <b>taking the sea fine on the bow and reducing the speed to the minimum to hold that position</b> | maintaining speed and taking the sea broad on the bow                                   |              |
| 2393 | You are stopped with no way upon your vessel at the pilot station. Your vessel is a large twin-screw ship. You must come around 180° to board your Pilot. How should you use the engines and rudder to turn the ship fastest in the least amount of space?  | Full ahead on the engines and hard over rudder                             | Full ahead on one engine, full astern on the other                                      | <b>Half ahead with hard over rudder, then full astern on inboard engine</b>                       | Slow ahead with hard over rudder  |              |
| 2394 | You are taking the bow line from the port bow of a large vessel that is underway when the stern of your tug comes in contact with the vessel. The forward motion of both vessels causes your tug to be turned toward the other vessel and contact the stem thereby being "stemmed". You should immediately _____. | stop engines and the vessel's wake will push you clear of the bow          | <b>go full astern with rudder amidships</b>   | go full ahead with the rudder hard over to starboard  | go full ahead with the rudder amidships   |              |

| ID # | Question  | Choice A   | Choice B  | Choice C   | Choice D   | Illustration |
|------|---|--|---|--|--|--------------|
| 2395 | You are the Chief Mate of a 30,000-DWT tankship. The vessel is engaged in trade with another country signatory to MARPOL 73/78. Which statement is TRUE?  | The Certificate of Inspection serves as prima facie evidence of complying with MARPOL 73/78. | <b>The IOPP Certificate for an inspected vessel is valid for 5 years.</b>                 | An IOPP Certificate is invalidated if the ship carries cargoes outside the classes authorized thereon. | An IOPP Certificate is renewed at each inspection for certification.                     |              |
| 2396 | You are the credentialed Master of a 199 GT uninspected towing vessel making a 500 mile coastwise trip. You carry a deck crew of six (6). Which statement is TRUE?  | There must be 3 separate watches stood.  | There must be at least 5 able seamen among the deck crew.                                 | Only the able seamen require Merchant Mariner Credentials.   | <b>None of the above</b>   |              |
| 2397 | You are the credentialed Master of a towing vessel operating between New York and Tampa, Florida. If you carry four (4) deckhands onboard, how many must be able seamen?  | 4  | <b>3</b>  | 2  | 1  |              |
| 2398 | You are the licensed Master of a 100 GT towing vessel sailing coastwise. What percentage of the deck crew must be able to understand any order spoken by the officers?  | 50%  | 65%   | <b>75%</b>   | 100%   |              |
| 2399 | You are the licensed operator of a 100 GT towing vessel making coastwise runs. Whenever a crew member is discharged from your vessel you must _____.  | issue a Certificate of Discharge and make an entry in his Continuous Discharge Book          | <b>issue a Certificate of Discharge or make an entry in his Continuous Discharge Book</b> | retain the crew member's Continuous Discharge Book onboard   | retain the crew member's Certificate of Discharge onboard                                |              |
| 2400 | You are the licensed operator of a 100 GT towing vessel sailing coastwise. What percentage of the deck crew must be able to understand the language commonly used onboard the vessel?                           | 100%   | <b>75%</b>  | 65%  | 50%  |              |
| 2401 | You are the Master of a 500-gross ton passenger vessel operating on rivers. Your vessel accidentally runs aground. Under the regulations for passenger vessels, you must notify the _____.                      | Coast Guard, only if the grounding results in damage to property in excess of \$25,000       | <b>nearest Coast Guard Marine Safety or Marine Inspection Office as soon as possible</b>  | Coast Guard, only if the grounding results in a loss of life   | Coast Guard, only if the grounding results in injury to personnel                        |              |
| 2402 | You are the Master of a 500-gross ton passenger vessel operating on rivers. Your vessel accidentally runs aground. Under the regulations for passenger vessels, you must notify the _____.                      | Coast Guard, only if the grounding results in damage to property in excess of \$25,000       | Coast Guard, only if the grounding results in a loss of life                              | Coast Guard, only if the grounding results in injury to personnel                                      | <b>nearest Coast Guard Marine Safety or Marine Inspection Office as soon as possible</b> |              |
| 2403 | 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 _____. | 5 to 7 times the depth of the water  | <b>1 1/2 to 2 times the depth of the water</b>  | equal to the depth of the water  | you should NEVER use the anchor to help in docking                                       |              |

| ID # | Question  | Choice A  | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|---|--|---|--|--------------|
| 2404 | You are the Master of an uninspected diesel towing vessel of 190 GT operating on a regular run from New York to the Gulf of Mexico. Which statement is TRUE?  | Able Seamen are not required in the deck crew.                            | Sailors may stand watch for 6 hours on and 6 hours off.                            | A licensed Chief Engineer is required.  | <b>All crew members must have Merchant Mariner Credentials.</b>                            |              |
| 2405 | You are the operator of an uninspected vessel which is involved in an accident. You are not required to assist people affected by the accident if _____.  | the other vessel did not appear to be sinking                             | it would unduly delay your voyage  | the other vessel was at fault   | <b>it would cause serious danger to your vessel</b>  |              |
| 2406 | You are the person in charge of a vessel involved in a marine casualty. You must notify the nearest Coast Guard Marine Inspection Office if the property damage is over _____.  | \$ 1,500  | \$10,000   | <b>\$25,000</b>   | \$50,000   |              |
| 2407 | You are to load a consignment of lumber. Each piece measures 2-inches thick, 10-inches wide and 16-feet long. There are 30,000 pieces in the shipment. How many board feet would be listed on the Bill of Lading?                         | <b>800,000</b>  | 1,200,000  | 1,440,000   | 14,400,000   |              |
| 2408 | You are to load a consignment of lumber. Each piece measures 3-inches thick, 12-inches wide and 16-feet long. There are 30,000 pieces in the shipment. How many board feet would be listed on the Bill of Lading?                         | 96,000  | 1,200,000  | <b>1,440,000</b>  | 14,400,000   |              |
| 2409 | You are to load styrene in bulk, which is subject to self-polymerization. In accordance with 46 CFR Table 153 what are you required to do?  | not carry any cargo in the tanks surrounding the tank loaded with styrene | inject nitrogen to pad any ullage above the styrene to prevent contact with oxygen | <b>be furnished with a Certificate of Inhibition to be maintained on the bridge</b>               | use heating coils to maintain the styrene within the temperatures specified by the shipper |              |
| 2410 | You are towing a large barge on a hawser. Your main engine suddenly fails. What is the greatest danger?   | The tug and the tow will go aground.                                      | The tow will endanger other traffic.   | <b>The tow will overrun tug.</b>  | The tow will block the channel.  |              |
| 2411 | You are transiting the Straits of Mackinac by way of an improved channel. You have information which indicates that the channel's Federal project depth is 28 ft. Which of the following statements is true with regards to this channel? | The least depth within the limits of the channel is 28 ft.                | <b>The design dredging depth of the channel is 28 ft.</b>                          | The channel has 28 ft. in the center but lesser depths may exist in the remainder of the channel. | The maximum depth which may be expected within the limits of the channel is 28 ft.         |              |
| 2412 | You are transporting dangerous cargo on your vessel. The Dangerous Cargo Manifest must be signed by the _____.  | shipper   | U.S. Coast Guard Marine Inspector  | <b>Master or his authorized representative</b>  | Master only  |              |
| 2413 | You are transporting dangerous cargo on your vessel. The regulations require you to _____.  | <b>periodically inspect it and make an entry in a log</b>                 | keep a warning sign posted nearby  | keep a fire hose run out and ready for use if needed  | allow no chipping or painting in the vicinity of the cargo                                 |              |



| ID # | Question  | Choice A  | Choice B  | Choice C  | Choice D  | Illustration  |
|------|---|---|---|---|---|---------------|
| 2414 | You are transporting dangerous cargo on your vessel. You must inspect this cargo _____.   | <b>daily</b>  | daily, at sea only  | after encountering rough weather                              | after loading and prior to arrival in port only |               |
| 2415 | You are trying to rescue survivors from a wrecked vessel on fire. You should approach _____.  | to leeward of the wrecked vessel  | at a speed of at most one-half that of the wrecked vessel | at a speed of at least that of the wrecked vessel             | <b>to windward of the wrecked vessel</b>        |               |
| 2416 | You are underway in heavy weather and your bow is into the seas. To prevent pounding, you should _____.   | change course, in order to take the seas at an 85 degree angle from the bow | <b>decrease speed</b>                                     | increase speed  | secure all loose gear                           |               |
| 2417 | You are using a racetrack turn to recover a man overboard. The vessel is first steadied when how many degrees away from the original heading?   | 60° to 70°  | 90°   | 135°  | <b>180°</b>                                     |               |
| 2418 | You are using an automatic tension winch by yourself. If you get caught in the turns of the line as they lead into the gypsyhead _____.   | the safety cutout will stop the winch before you're injured                 | the line will part and snap back                          | <b>you may be pulled into the winch and injured or killed</b> | None of the above are correct                   |               |
| 2419 | You are using tackle number 10 to lift a weight. The hauling part of this tackle is bent to the weight hook (w) of tackle number 4. What is the mechanical advantage of this rig?                   | 24  | <b>20</b>   | 13  | 9   | <b>D029DG</b> |
| 2420 | You are using tackle number 12 to lift a weight of 300 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight? | 80 lbs.   | <b>69 lbs.</b>  | 55 lbs.   | 50 lbs.   | <b>D029DG</b> |
| 2421 | You are using tackle number 12, as shown, to lift a weight. The hauling part of this tackle is bent to the weight hook (w) of tackle number 2. What is the mechanical advantage of this rig?        | 9   | 10  | <b>14</b>   | 21  | <b>D029DG</b> |
| 2422 | You are using tackle number 2 to lift a weight of 100 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?  | 50 lbs.   | 55 lbs.   | <b>60 lbs.</b>  | 110 lbs.  | <b>D029DG</b> |
| 2423 | You are using tackle number 3 to lift a weight of 120 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?  | <b>52 lbs.</b>  | 49 lbs.   | 40 lbs.   | 27 lbs.   | <b>D029DG</b> |
| 2424 | You are using tackle number 4 to lift a weight. The hauling part of this tackle is bent to the weight hook (w) of tackle number 10. What is the mechanical advantage of this rig?                   | 4   | 5   | 9   | <b>20</b>                                       | <b>D029DG</b> |

| ID # | Question   | Choice A  | Choice B                           | Choice C  | Choice D   | Illustration |
|------|--|---|------------------------------------|---|--|--------------|
| 2425 | You are using tackle number 4, as shown, to lift a weight. The hauling part of this tackle is bent to the weight hook of tackle number 11. What is the mechanical advantage of this rig?                             | 4   | 6                                  | 10  | <b>24</b>  | D029DG       |
| 2426 | You are using tackle number 5 to lift a weight of 300 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?                   | 50 lbs.   | 75 lbs.                            | <b>90 lbs.</b>  | 112 lbs.   | D029DG       |
| 2427 | You are using tackle number 5 to lift a weight. The hauling part of this tackle is bent to the weight hook (w) of tackle number 8. What is the mechanical advantage of this rig?                                     | 20  | <b>15</b>                          | 10  | 5  | D029DG       |
| 2428 | You are using tackle number 5 to lift a weight. The hauling part of this tackle is bent to the weight hook of tackle number 9. What is the mechanical advantage of this rig?   | <b>20</b>   | 9                                  | 5   | 4  | D029DG       |
| 2429 | You are using tackle number 6 to lift a weight. The hauling part of this tackle is bent to the weight hook (w) of tackle number 8. Disregarding friction, what is the mechanical advantage of this rig?              | 11  | 16                                 | <b>18</b>   | 24   | D029DG       |
| 2430 | You are using tackle number 7 to lift a weight of 100 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?                   | 200 lbs.  | 150 lbs.                           | 110 lbs.  | <b>55 lbs.</b>   | D029DG       |
| 2431 | You are using tackle number 8 to lift a weight of 100 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?                   | 120 lbs.  | 55 lbs.                            | <b>40 lbs.</b>  | 37 lbs.  | D029DG       |
| 2432 | You are using the anchor to steady the bow while maneuvering. You have the proper scope of anchor cable when the _____.  | <b>bow is held in position with the engines coming slowly ahead</b> | anchor is just touching the bottom | scope is not more than 5 times the depth of the water | cable enters the water at an angle between 60° and 85° from the horizontal |              |
| 2433 | You attach a line to a stationary barge lying off your starboard beam in order to maneuver it into position to make up tow. The line used to do this is a _____.   | jockey line   | fore and aft line                  | check line  | <b>swing line</b>  |              |
| 2434 | You can safely step in the bight of a line _____.  | when it is not under strain   | if both ends are made fast         | in an emergency                                       | <b>at no time</b>  |              |
| 2435 | You have a large, broken-down vessel in tow with a wire rope and anchor cable topline. Both vessels have made provision for slipping the tow in an emergency; however, unless there are special circumstances _____. | <b>the towing vessel should slip first</b>                          | the vessel towed should slip first | they should slip simultaneously                       | either vessel may slip first   |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration  |
|------|---|--|--|---|--|---------------|
| 2436 | You have a tow of chemical barges. The mate reports an ammonia smell around the head of the tow. You would suspect a leak in the barge carrying _____.  | methyl chloride  | heptane  | propanolamine   | <b>morpholine</b>  |               |
| 2437 | You have anchored in a mud and clay bottom. The anchor appears to be dragging in a storm. What action should you take?  | Shorten the scope of the cable.  | Veer cable to the anchor.  | Drop the other anchor underfoot.  | <b>Drop the second anchor, veer to a good scope, then weigh the first anchor.</b>                    |               |
| 2438 | You have arrived at your anchorage location. You have put the engines astern prior to letting go the anchor. How will you know when the vessel has stopped making way?  | The ship's Doppler log reads zero  | <b>The backwash of the propeller reaches amidships</b>   | An azimuth bearing on the beam remains steady                                   | All of the above   |               |
| 2439 | You have arrived at your anchorage location. You have put the engines astern prior to letting go the anchor. How will you know when the vessel has stopped over the ground?   | The ship's log reads zero  | The backwash of the propeller reaches amidships  | <b>An azimuth bearing on the beam remains steady</b>                            | All of the above   |               |
| 2440 | You have been pulled aloft in a bosun's chair rigged to a mast that you intend to paint. You are now supporting your weight by seizing the hauling part and the standing part of the gantline in one hand. Your next procedure in securing the bosun's chair is to _____. | secure the tail of the standing part leading from the becket bend to the mast                  | <b>dip the bight of the hauling part around your back and up in front of you to form the hitch</b> | take a strain on the hauling part by having it led to the gypsy head on a winch | secure the standing part of the gantline to the hauling part by taking turns of marlin and tying off |               |
| 2441 | You have been towing astern and have just let go the tow. Your deckhands are pulling in and faking the towline by hand on the stern. The most dangerous action to take is to _____.   | continue ahead at slow speed   | continue ahead at half speed   | stop your engines   | <b>back down on your engines</b>   |               |
| 2442 | You have completed a crude oil wash. What action should be taken with the oil in the lines running to the washing machines?   | <b>Open a COW nozzle forward and one aft and drain the line into the after tank by gravity</b> | Blow the line out using compressed air   | Pull a suction using the supply line pump                                       | Close off all valves in the system and leave the oil in the line primed for the next crude oil wash  |               |
| 2443 | You have completed a Dangerous Cargo Manifest for dangerous cargoes loaded on board. It should be kept in a conspicuous location _____.   | in the radio room  | in the ship's office   | <b>on or near the bridge</b>  | outside the Captain's stateroom  |               |
| 2444 | You have determined the maneuvering characteristics of your vessel by taking radar ranges and bearings of an isolated light while making a turn. The results are as shown. Based on this data what is the advance for a turn of 60°?                                      | <b>665 yards</b>   | 710 yards  | 745 yards   | 780 yards  | <b>D035DG</b> |

| ID # | Question  | Choice A                                 | Choice B                 | Choice C  | Choice D                                      | Illustration |
|------|---|--|--------------------------|---|---|--------------|
| 2445 | You have determined the maneuvering characteristics of your vessel by taking radar ranges and bearings of an isolated light while making a turn. The results are as shown. Based on this data what is the advance for a turn of 90°?  | 490 yards                                | 350 yards                | <b>790 yards</b>  | 885 yards                                     | D035DG       |
| 2446 | You have determined the maneuvering characteristics of your vessel by taking radar ranges and bearings of an isolated light while making a turn. The results are as shown. Based on this data what is the transfer for a turn of 90°?                                       | <b>400 yards</b>                         | 430 yards                | 485 yards   | 525 yards                                     | D035DG       |
| 2447 | 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 as listed. Based on this data what is the transfer for a turn of 180°?                                 | 745 yards                                | 770 yards                | <b>850 yards</b>  | 890 yards                                     | D035DG       |
| 2448 | 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 as listed. Based on this data what is the transfer for a turn of 30°?                                  | <b>40 yards</b>                          | 140 yards                | 190 yards   | 230 yards                                     | D035DG       |
| 2449 | 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 listed in illustration D035DG. Based on this data what is the advance for a turn of 30°?               | 380 yards                                | 420 yards                | <b>470 yards</b>  | 525 yards                                     | D035DG       |
| 2450 | 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 listed in illustration D035DG. Based on this data what is the tactical diameter of the turning circle? | 755 yards                                | 780 yards                | 820 yards   | <b>880 yards</b>                              | D035DG       |
| 2451 | 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 listed. Based on this data what is the transfer for a turn of 60°?                                     | <b>155 yards</b>                         | 195 yards                | 255 yards   | 295 yards                                     | D035DG       |
| 2452 | You have loaded dangerous cargo on your vessel and must fill out a Dangerous Cargo Manifest. In which publication would you find the requirements to complete this form?  | 33 CFR - Navigation and Navigable Waters | <b>46 CFR - Shipping</b> | IMCO - Intergovernmental Maritime Consultative Organization | IMDG - International Maritime Dangerous Goods |              |

| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D  | Illustration |
|------|--|---|---|--|---|--------------|
| 2453 | You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is true?  | Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks. | <b>Pyridine and diisopropylamine may not be carried in tanks having a common header vent.</b>               | Pyridine must be separated from carbon disulfide by two barriers (cofferdams, voids, empty tanks, etc.).               | A tank of diisopropylamine may be used to separate a tank of pyridine from a tank of carbon disulfide.        |              |
| 2454 | You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is TRUE?  | Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks. | Pyridine and diisopropylamine may be carried in tanks having a common header vent.                          | <b>Diisopropylamine must be separated from carbon disulfide by two barriers (cofferdams, voids, empty tanks, etc.)</b> | A tank of carbon disulfide may be used to separate a tank of pyridine from a tank of diisopropylamine.        |              |
| 2455 | You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is TRUE?  | Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks. | Pyridine and diisopropylamine may be carried in tanks having a common header vent.                          | <b>Pyridine need not be separated from carbon disulfide by two barriers (cofferdams, voids, empty tanks, etc.).</b>    | A tank of carbon disulfide may be used to separate a tank of pyridine from a tank of diisopropylamine.        |              |
| 2456 | You have orders to load cargoes of carbon disulfide, diisopropylamine and pyridine on your multi-product tankship. Which statement is TRUE?  | Carbon disulfide may be carried in NOS. 1 and 2 center tanks and diisopropylamine in NOS. 1 and 2 wing tanks. | Pyridine and diisopropylamine may be carried in tanks having a common header vent.                          | Carbon disulfide must be separated from pyridine by two barriers (cofferdams, voids, empty tanks, etc.).               | <b>A tank of pyridine may be used to separate a tank of carbon disulfide from a tank of diisopropylamine.</b> |              |
| 2457 | You have taken another vessel in tow at sea. You can tell that the towing speed is too fast when the _____.  | vessels are not in step   | tow line feels like it is "jumping" when touched  | <b>catenary comes clear of the water</b>   | towed vessel goes "in irons"  |              |
| 2458 | You have the "conn" at the time the helmsman who is steering by hand reports that the rudder is not responding to the wheel. Your FIRST action should be to _____.                                   | <b>shift the selector switch to the other steering pump</b>   | signal the engine room to stop the engines  | call the engine room   | call the Master   |              |
| 2459 | You have the "conn" at the time the helmsman who is steering by hand reports that the rudder is not responding to the wheel. Your FIRST action should be to _____.                                   | call the engine room and report that you have lost steering   | signal the engine room to stop the engines  | <b>shift the selector switch to the other steering system</b>  | call the Master   |              |
| 2460 | You have water washed your cargo tanks using the fixed machines. What should you do before using portable machines to clean areas screened from the wash of the fixed machine by structural members? | <b>Ventilate the tank to eliminate any electrostatically charged mist.</b>                                    | Attach the water supply hose to the portable machine after the cleaning head is positioned inside the tank. | Insure that the tanks are not stripped until the final wash is started.  | Ground the fixed machines to eliminate any electrostatic buildup on the cleaning head.                        |              |

| ID # | Question  | Choice A   | Choice B   | Choice C  | Choice D   | Illustration |
|------|---|--|--|---|--|--------------|
| 2461 | You intend to overtake a vessel in a narrow channel. As you approach the other vessel's stern _____.  | you will gain speed  | both vessels will gain speed   | <b>the vessels will drift together</b>  | the vessels will drift apart   |              |
| 2462 | You intend to tow a barge with one tug and expect continuous high winds from the north. To reduce the yaw of your tow, you should _____.  | reduce the draft of the barge  | <b>shorten one leg of the bridle</b>                                   | place bulky deck loads as far aft as possible   | trim the barge down by the bow   |              |
| 2463 | You may be able to avoid loss of suction in a pump by _____.  | using a full tank to keep the pump primed  | opening the vent cock on the pump                                      | closing down on the tank valve  | <b>All of the above</b>  |              |
| 2464 | You may BEST turn a twin-screw vessel about, to the right, in a narrow channel by using _____.  | both engines ahead and helm  | one engine only  | <b>port engine ahead and the starboard engine astern</b>  | both engines astern and use helm   |              |
| 2465 | You must evacuate a seaman by helicopter lift. Which statement is TRUE?   | The ship should be stopped with the wind off the beam while the helicopter is hovering overhead. | The basket or stretcher must not be allowed to touch the deck.         | The tending line of the litter basket should be secured to the ship beyond the radius of the helicopter blades. | <b>The hoist line should be slack before the basket or stretcher is hooked on.</b>                   |              |
| 2466 | You must load as much of a large shipment of case goods as possible into a hold which has 24,000 cubic feet of space. Each case measures 2 feet by 2-1/2 feet by 4 feet and weights 448 pounds. If you allow for broken stowage of 15%, how many long tons can be loaded? | 280  | 233  | <b>204</b>  | 190  |              |
| 2467 | You must load as much of a large shipment of case goods as possible into a hold which has 24,400 cubic feet of space. Each case measures 2 feet by 2 feet by 4 feet and weighs 448 pounds. If you allow for broken stowage of 15%, how many long tons can be loaded?      | 54   | 207  | <b>259</b>  | 351  |              |
| 2468 | You must medevac a critically injured seaman by helicopter hoist. Which statement is TRUE?  | The ship's relative wind should be from dead ahead at 10 to 30 knots.                            | <b>The deck crew at the hoist point should not wear baseball hats.</b> | The helicopter's drop line should be secured to the ship not more than 15 feet from the hoist position.         | When using a "horse collar", the bight of the loop should be around the chest of the injured seaman. |              |
| 2469 | You must shore up a bulkhead due to solid flooding forward. The bulkhead approximates a rectangle. The center of pressure of the shores on the bulkhead should be located _____.  | evenly over the surface of the bulkhead  | <b>approximately one-third of the way up the bulkhead</b>              | approximately halfway up the bulkhead   | at the bottom of the bulkhead  |              |

| ID # | Question  | Choice A   | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|--|--|--|--|--------------|
| 2470 | You must shore up the collision bulkhead due to solid flooding forward. The bulkhead approximates an inverted triangle. The center of pressure of the shores on the bulkhead should be located _____. | evenly over the surface of the bulkhead                    | approximately two-thirds of the way up the bulkhead    | <b>approximately halfway up the bulkhead</b>                               | at the bottom of the bulkhead  |              |
| 2471 | You need to make a fixed loop at the end of a line in order to use the line as a mooring line. You have insufficient time to make a splice. Which knot should you use?                                | Clove Hitch  | Fisherman's Bend                                       | <b>Bowline</b>   | Round-turn and two half hitches  |              |
| 2472 | You notice that your speed has decreased, the stern of your vessel has settled into the water, and your rudder is sluggish in responding. The MOST likely cause is _____.                             | mechanical problems with the steering gear                 | <b>shallow water</b>                                   | loss of lubricating oil in the engine                                      | current  |              |
| 2473 | You operate a harbor craft on inland waters exclusively. If you regularly service or contact foreign flag vessels in the course of business, which statement is TRUE?                                 | Your vessel must be inspected.                             | <b>Your crew must have identification credentials.</b> | A customs official must be on board when contacting a foreign flag vessel. | All contacts with a foreign flag vessel must be reported to the U.S. Coast Guard.  |              |
| 2474 | You receive a package, for shipment aboard your vessel, containing Class 1 explosives. The package is damp, moldy and stained. You must _____.  | <b>refuse to accept the package</b>                        | note the exception(s) on the Bill of Lading            | replace the packaging material before stowage                              | seek the approval of the USCG Captain of the Port                                  |              |
| 2475 | You receive a package, for shipment aboard your vessel, containing Class 1 explosives. The package is damp, moldy and stained. You must _____.  | have the U.S.C.G. Captain of the Port approve the shipment | note an exception on the Bill of Lading                | repair or replace the packaging before stowage                             | <b>seek the shipper's advice with regard to withdrawal, repair, or replacement</b> |              |
| 2476 | You should attach a towline to a trailer eye bolt using a(n) _____.   | eye splice   | <b>bowline</b>   | towing hitch   | square knot  |              |
| 2477 | You should conduct a sector search under which of the following circumstances?  | <b>The search target is sighted and then lost.</b>         | More than one vessel is available for a search.        | The search object is a target that will be readily detected by radar.      | An aircraft is available to assist a surface vessel.                               |              |
| 2478 | You should keep clear of _____.   | <b>any line under a strain</b>                             | lines that are paying out                              | lines that are coiled down only  | None of the above are correct  |              |
| 2479 | You start a centrifugal cargo pump to discharge cargo. The pump works for a while and then loses suction. This could be caused by _____.  | the pump running backwards                                 | <b>incomplete priming</b>                              | the discharge head being too high  | All of the above   |              |
| 2480 | You start a centrifugal cargo pump to discharge cargo. The pump works for a while and then loses suction. This could NOT be caused by _____.  | leaking shaft seals  | air pockets in the liquid                              | <b>high cargo level in the tanks</b>                                       | a leaking suction line   |              |



| ID # | Question   | Choice A  | Choice B  | Choice C   | Choice D   | Illustration |
|------|--|---|---|--|--|--------------|
| 2481 | You suspect that a crewmember has fallen overboard during the night and immediately execute a Williamson turn. What is the primary advantage of this maneuver under these circumstances? | <b>You will be on a reciprocal course and nearly on the track-line run during the night.</b>    | The turn provides the maximum coverage of the area to be searched.  | The turn enables you to reverse course in the shortest possible time.                          | You have extra time to maneuver in attempting to close in on the man for rescue.                                     |              |
| 2482 | You want to double the strength of a mooring line by using two lines. To accomplish this, the second line must _____.  | be 1 1/2 times the diameter of the first  | be married to the first   | not cross the first  | <b>be of the same length</b>   |              |
| 2483 | You will be advised of any hazardous areas due to the fallout of a nuclear explosive by a message with the code word _____.  | <b>MERWARN</b>  | NUCLEAR   | FALLOUT  | FALLWARN   |              |
| 2484 | You will load and carry a bulk cargo of sulfur at ambient temperature. Which statement is true?  | Wooden covers must be laid over the bilge wells to prevent the sulfur from entering the bilges. | <b>Bulk sulfur may be carried without a special permit providing the vessel complies with all applicable regulations.</b> | The major characteristic of this cargo is that it forms sulfuric acid upon contact with water. | Other hazardous material may not be stowed in the same hold as the sulfur but may be carried on deck above the hold. |              |
| 2485 | You will load class 1.2 commercial explosives and need to construct a portable magazine. The magazine MUST _____.  | be made of metal  | <b>be elevated with skids 10cm (3.9 inches) above the deck</b>  | have a hinged cover  | be fastened with nails or screws   |              |
| 2486 | You would be most likely to use a fishplate _____.   | when towing alongside   | <b>on a hawser tow</b>  | when pushing ahead or in the notch   | when running "light boat"  |              |
| 2487 | You would NOT secure a line to a _____.  | kevel   | <b>stand pipe</b>   | button   | timber head  |              |
| 2488 | You would properly secure a gantline to a bosun's chair with a _____.  | fisherman's bend  | bowline   | <b>double sheet bend</b>   | double blackwall hitch   |              |
| 2489 | Your 199 GT tugboat is on a 675 mile coastwise voyage. What percentage of the deck crew must be Able Bodied Seamen?  | 0%  | 25%   | 50%  | <b>65%</b>   |              |
| 2490 | Your containership has a container displaying a hazardous cargo placard. The placard has the number 2199 on it. This indicates that it is carrying what cargo?                           | Furan   | <b>Phosphine</b>  | Adiponitrile   | Xylenol  |              |
| 2491 | Your containership has a container displaying a hazardous cargo placard. The placard has the number 2206 on it. This indicates that it is carrying what cargo?                           | <b>Isocyanates, n.o.s.</b>  | Propadiene, inhibited   | Xylenol  | Hexanols   |              |
| 2492 | 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?                           | Hexanol   | Acrylic acid  | <b>Benzonitrile</b>  | Propadiene, inhibited  |              |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|--|--|---|---|--------------|
| 2493 | Your containership has a container displaying a hazardous cargo placard. The placard has the number 2282 on it. This indicates that it is carrying what cargo?   | Isoheptene   | Phosphine  | Furan   | <b>Hexanols</b>   |              |
| 2494 | Your enrolled vessel is bound from Baltimore, MD, to Norfolk, VA, via Chesapeake Bay. Which statement about the required Pilot is TRUE?  | The Pilot must be licensed by Virginia and Maryland. | The Pilot must be licensed by either Virginia or Maryland.                                   | <b>The Pilot need only be licensed by the Coast Guard.</b>                  | The Pilot must be licensed by Virginia, Maryland and the Coast Guard.   |              |
| 2495 | Your load line certificate expires on 27 May 1988. The vessel is surveyed on that date and is found satisfactory. You are sailing foreign the same day. Which statement is TRUE?   | A new certificate must be issued before you sail.    | The existing certificate is endorsed as valid for a five year period commencing 27 May 1988. | <b>The existing certificate is extended for a period of up to 150 days.</b> | The existing certificate is extended until the first foreign port of call where a new certificate will be issued by the local surveyor. |              |
| 2496 | Your ship departed Venezuela for New York, loaded with 10,000 barrels of crude oil, whose average cargo temperature was 30°C (86° F). API is 25°. The volume correction factor (VCF) is .00045. If this cargo is heated to 100°F prior to discharge, how many gallons will you offload?                        | 417,354  | <b>422,646</b>   | 546,535   | 553,465   |              |
| 2497 | Your ship departed Venezuela for New York, loaded with 10,000 barrels of crude oil, whose average cargo temperature was 30°C (86°F). API is 25°. The volume correction factor (VCF) is .00045. If this cargo is heated to 100°F prior to discharge, how many barrels will you offload?                         | 10,315   | <b>10,063</b>  | 9,937   | 9,685   |              |
| 2498 | Your ship has loaded 20,000 barrels of crude oil, departing Valdez, Alaska for San Francisco. When loaded the cargo temperature was 96°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 56°F at the discharge port, how many gallons will be offloaded? | 1,117,600  | 1,082,400  | 853,440   | <b>826,560</b>  |              |
| 2499 | Your ship has loaded 20,000 barrels of crude oil, departing Valdez, Alaska for San Francisco. When loaded the cargo temperature was 96°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 56°F at the discharge port, how many barrels will be offloaded? | <b>19,680</b>  | 19,712   | 20,288  | 20,320  |              |

| ID # | Question   | Choice A     | Choice B  | Choice C       | Choice D       | Illustration |
|------|--|--------------|-----------|----------------|----------------|--------------|
| 2500 | Your ship has loaded 22,000 barrels of crude oil, departing Valdez, Alaska for Panama. When loaded the cargo temperature was 90°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 100°F at the discharge port, how many barrels will be offloaded? | 21,252       | 21,912    | <b>22,088</b>  | 22,748         |              |
| 2501 | Your ship has loaded 22,000 barrels of crude oil, departing Valdez, Alaska for Panama. When loaded the cargo temperature was 90°F. API was 15°. The volume correction factor (VCF) is .0004. If the cargo temperature is expected to be 100°F at the discharge port, how many gallons will be offloaded? | 1,214,840    | 1,205,160 | <b>927,696</b> | 920,304        |              |
| 2502 | 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 gallons would you expect to unload if the cargo temperature is 90°F at the discharge port?             | 337,920      | 322,080   | 295,952        | <b>258,048</b> |              |
| 2503 | 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?             | 5,856        | 5,982     | 6,018          | <b>6,144</b>   |              |
| 2504 | Your ship has loaded 8,000 barrels of gasoline at a cargo temperature of 36°C (97°F). API gravity is 54°. The volume correction factor (VCF) is .0006. You are bound for New Jersey from Ecuador. How many barrels would you expect to unload if the cargo temperature is 55°F at the discharge port?    | <b>7,798</b> | 7,827     | 8,173          | 8,202          |              |
| 2505 | Your ship has loaded 8,000 barrels of gasoline at a cargo temperature of 36°C (97°F). API gravity is 54°. The volume correction factor (VCF) is .0006. You are bound for New Jersey from Ecuador. How many gallons would you expect to unload if the cargo temperature is 55°F at the discharge port?    | 451,110      | 428,890   | 344,484        | <b>327,533</b> |              |

| ID # | Question  | Choice A                                     | Choice B   | Choice C  | Choice D  | Illustration |
|------|---|--|--|---|---|--------------|
| 2506 | Your ship has loaded 8,000 barrels of gasoline at a cargo temperature of 85°F, departing Aruba bound for New Jersey. API gravity is 55°. The volume correction factor (VCF) is .0006. How many barrels would you expect to unload if the cargo temperature is 50°F at the discharge port?               | 7,880  | <b>7,832</b>   | 8,168   | 8,120   |              |
| 2507 | Your ship has loaded 8,000 barrels of gasoline at a cargo temperature of 85°F, departing Aruba bound for New Jersey. API gravity is 55°. The volume correction factor (VCF) is .0006. How many gallons would you expect to unload if the cargo temperature is 50°F at the discharge port?               | 449,240                                      | 430,760  | 343,056   | <b>328,944</b>  |              |
| 2508 | Your ship has loaded 9,000 barrels of fuel oil at a cargo temperature of 35°C (95° F). API gravity is 44°. The volume correction factor (VCF) is .0005. You are bound to New Jersey from Venezuela. How many barrels would you expect to unload if the cargo temperature is 55°F at the discharge port? | 9,090  | 9,180  | <b>8,820</b>  | 8,910   |              |
| 2509 | Your ship has loaded 9,000 barrels of fuel oil at a cargo temperature of 35°C (95°F). API gravity is 44°. The volume correction factor (VCF) is .0005. You are bound for New Jersey from Venezuela. How many gallons would you expect to unload if the cargo temperature is 55°F at the discharge port? | <b>370,440</b>                               | 85,560   | 485,100   | 504,900   |              |
| 2510 | Your ship is carrying hazardous cargo. During a daily inspection, you notice that some of the cargo has shifted and several cases are broken. You should FIRST _____.   | call out the deck gang to jettison the cargo | log the facts in the rough log and inform the Chief Mate later | make a determination of the seriousness of the breakage, and do what you think best | <b>report the facts immediately to the Master, who will make a decision</b> |              |
| 2511 | Your ship is dead in the water with the rudder amidships. As the right-handed screw starts to turn ahead, the bow will tend to go _____.  | to starboard                                 | <b>to port</b>   | straight ahead  | as influenced by the tide and sea   |              |
| 2512 | Your ship is in a neutral port when full Naval Control of Shipping is established. You may expect to be boarded and instructed by a(n) _____.   | U.S. Naval Control of Shipping Officer       | allied Naval Control of Shipping Officer                       | Consular Shipping Advisors (CONSA)  | <b>Any of the above</b>   |              |
| 2513 | Your ship is in shallow water and the bow rides up on its bow wave while the stern sinks into a depression of its transverse wave system. What is this called?  | Broaching                                    | Fish tailing   | <b>Squatting</b>  | Parallel sinkage  |              |

| ID # | Question   | Choice A  | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|---|---|---|---|--------------|
| 2514 | Your ship is navigating independently in heavy ice when it becomes beset. Which statement is FALSE?  | The vessel will most likely require an icebreaker to free her.              | The vessel may be able to free herself by pumping ballast from side to side.      | <b>The propeller is more susceptible to ice damage when turning slowly than when stopped.</b> | It is advisable to clear the rudder area of ice by using ahead turns before backing down.             |              |
| 2515 | Your ship is steaming at night with the gyro-pilot engaged when you notice that the vessel's course is slowly changing to the right. What action should you take FIRST?  | <b>switch to hand steering</b>  | shift steering to the emergency steering station                                  | call the Master   | notify the engine room  |              |
| 2516 | Your tank vessel is fully loaded, and you find that she is down slightly by the head. To adjust the trim, you may _____.   | add ballast aft   | load more cargo aft   | <b>shift cargo aft</b>  | All of the above  |              |
| 2517 | Your tank vessel is loaded down to her marks, and you find that she has too much trim by the stern. To adjust the trim you may _____.  | add ballast forward   | load more cargo forward   | <b>shift bunkers forward</b>  | All of the above  |              |
| 2518 | Your tank vessel is loading a hazardous cargo. The allowance for expansion is based on ambient temperatures of what maximum range?   | 0°C to 100°C  | -10°C to 90°C   | <b>-18°C to 46°C</b>  | -40°C to 50°C   |              |
| 2519 | Your tankship is carrying a 30% solution of hydrogen peroxide. The cargo containment system must have a permanent inert gas system. While discharging this cargo the inert gas system must maintain a minimum pressure of _____. | <b>0.5 psig</b>   | 3.0 psig  | 5.0 psig  | atmospheric pressure  |              |
| 2520 | Your tankship is carrying a cargo of styrene. Which of the following is NOT a requirement for carriage of this cargo?  | <b>P/V valves with galvanized parts must be replaced.</b>                   | Authorization to carry styrene must be endorsed on the Certificate of Inspection. | You must have a "Certificate of Inhibition" provided by the shipper.                          | The cargo tank heating coils must be blanked off.   |              |
| 2521 | Your twin-screw vessel is moving ASTERN with rudders amidships. The starboard screw suddenly stops turning. Your vessel's head will _____.   | <b>go to port</b>   | go to starboard   | remain stationary   | suddenly drop down  |              |
| 2522 | Your U.S. tankship is designed to carry anhydrous ammonia in bulk. The keel was laid in 1980. Which statement concerning the carriage of this cargo is TRUE?   | A flammable gas detection system must be installed in each cargo pump room. | <b>The cargo may be gauged by automatic float type devices.</b>                   | Carriage of this cargo is authorized by issuance of an IMO Certificate.                       | Aluminum, copper, zinc, and mercury are allowed in valve parts in contact with the cargo.             |              |
| 2523 | Your U.S. tankship is designed to carry anhydrous ammonia in bulk. The keel was laid in 1980. Which statement concerning the carriage of this cargo is TRUE?   | A flammable gas detection system must be installed in each cargo pump room. | Tanks may not be located "on deck".   | Carriage of this cargo is authorized by issuance of an IMO Certificate.                       | <b>Aluminum and copper alloys are prohibited from being in valve parts in contact with the cargo.</b> |              |

| ID # | Question   | Choice A   | Choice B   | Choice C  | Choice D  | Illustration |
|------|--|--|--|---|---|--------------|
| 2524 | Your vessel (185 GT) is on a voyage between New York and San Francisco. Which statement is TRUE?   | The maintenance of an Official Logbook is optional.                            | The vessel must be on foreign articles.  | This is considered a coastwise voyage.  | <b>An Official Logbook must be maintained.</b>  |              |
| 2525 | Your vessel has a deadweight capacity of 5000 tons and a cubic capacity of 300,000 cu. ft. You are to load lead, with a stowage factor of 18, and cotton, with a stowage factor of 80. If you load full and down, how much cotton should you load?   | 1613 tons  | 2190 tons  | 2810 tons   | <b>3387 tons</b>  |              |
| 2526 | Your vessel has been damaged and is partially flooded. The first step to be taken in attempting to save the vessel is to _____.  | <b>establish flooding boundaries and prevent further spread of flood water</b> | plug the hole(s) in the outer shell  | pump out the water inside the vessel  | calculate the free surface effect and lost buoyancy to determine the vessel's stability |              |
| 2527 | Your vessel has been damaged and you must shore a bulkhead. You should cut the shore _____.  | approximately 1/2 inch longer than the measured length to allow for trimming   | <b>approximately 1/2 inch shorter than the measured length to allow for wedges</b>             | approximately 1/2 inch shorter per foot of shoring to allow for wet expansion | to the same length as the measured length   |              |
| 2528 | Your vessel has been loaded in a sagging condition. Enroute you encounter heavy weather and notice buckling in the amidships deck plating of your vessel. To relieve the strain you could _____.   | pump fuel oil from amidships to the ends of the vessel                         | reduce speed   | take a course which most eases the vessel                                     | <b>All of the above</b>   |              |
| 2529 | Your vessel has been ordered to proceed to the United Grain Growers Wharf at Thunder Bay, Lake Superior, for the purpose of taking on a load of wheat. Which publication(s) would you consult for such information as the length of the wharf, the depth of the water alongside, and the loading capacity at the facility? | The Navigational Chart and Light List Vol. VII                                 | The International Guide to Canadian Ports and Facilities                                       | The Lake Carriers Association Facilities Directory                            | <b>The United States Coast Pilot #6</b>   |              |
| 2530 | Your vessel has completed an inspection for certification and is issued a temporary certificate. This _____.   | expires six months after it is issued  | must be exchanged for a regular Certificate of Inspection before going foreign or out of state | <b>has the full force of a regular Certificate of Inspection</b>              | must be posted in the vicinity of the officers' licenses                                |              |
| 2531 | Your vessel has gone aground in waters where the tide is falling. The BEST action you can take is to _____.  | <b>set out a kedge anchor</b>  | shift the vessel's load aft and repeatedly surge the engine(s) astern                          | shift the vessel's load forward and wait until the next high tide             | slowly bring the engine(s) to full speed astern   |              |

| ID # | Question   | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|--|---|--|--|--|--------------|
| 2532 | Your vessel has grounded on a bar. What should you do?   | If you cannot get clear immediately, lighten the ship by pumping all ballast overboard. | Run the engine full astern to keep from being set further onto the bar.  | <b>Switch to the high suction for condenser circulating water, if it is submerged.</b>                       | All of the above   |              |
| 2533 | Your vessel has run aground and is touching bottom for the first one-quarter of its length. What is the LEAST desirable method from the standpoint of stability to decrease the bottom pressure?   | Discharge forward deck cargo.   | <b>Pump out the forepeak tank.</b>   | Shift deck cargo aft.  | Flood an after double-bottom tank.   |              |
| 2534 | Your vessel has run hard aground in an area subject to heavy wave action. Backing full astern failed to free her. Which action should be taken next?   | Continue backing to scour out the bottom.   | Wait for high tide and then try backing.   | <b>Flood empty tanks to increase bottom pressure and prevent inshore creep.</b>                              | Shift weight aft to reduce the forward draft.  |              |
| 2535 | Your vessel has the symbol shown inscribed on the side. Which statement concerning this symbol is TRUE?  | This represents the load line marks when engaged on a voyage upon the Great Lakes.      | The line directly under the triangle is at the same level as the summer load line.                               | The symbol is the equivalent of a load line marking and is used by government vessels (USN, MSC, USCG) only. | <b>The applicable gross and net tonnage of the ship will change if this mark is submerged and the load line mark is visible.</b> | D022DG       |
| 2536 | Your vessel has the symbol shown inscribed on the sides amidships. Which statement is TRUE?  | This line represents the load line mark for a Great Lakes voyage.                       | <b>The gross and net tonnage of the ship will change if this mark is submerged and the load line is visible.</b> | The line directly under the triangle is at the same level as the summer load line.                           | This is the equivalent of a load line marking for government (COE, NOAA, MSC) vessels.   | D022DG       |
| 2537 | Your vessel is a single-screw ship with a right-hand propeller. There is no current. The easiest way to make a landing is _____.   | <b>port side to</b>   | starboard side to  | dropping anchor and swinging the ship in to the pier   | either port or starboard side to, with no difference in degree of difficulty   |              |
| 2538 | Your vessel is anchored in an open roadstead with three shots of chain out on the port anchor. The wind freshens considerably and the anchor begins to drag. Which action should you take FIRST?   | Drop the starboard anchor short with about one shot of chain.                           | Sheer out to starboard using the rudder, then drop the starboard anchor with about four shots of chain.          | Put the engines slow ahead to help the anchor.   | <b>Veer out more chain on the port anchor.</b>   |              |
| 2539 | Your vessel is approaching the International Bridge on the St. Marys River. If the gage on the bridge, read from top to bottom, indicates 124 ft. and the IGLD (1955) is 600 ft., determine the actual vertical clearances between the existing water level and the lowest point of the bridge over the channel. | <b>124 feet</b>   | 476 feet   | 724 feet   | 840 feet   |              |



| ID # | Question  | Choice A  | Choice B   | Choice C   | Choice D   | Illustration |
|------|---|---|--|--|--|--------------|
| 2540 | Your vessel is backing on the starboard screw, and going ahead on the port screw. The bow will _____.   | back on a straight line   | move ahead on a straight line  | swing to port  | <b>swing to starboard</b>  |              |
| 2541 | 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). What action should you take? | Reduce speed  | <b>Stop your engines</b>   | Reverse your engines   | Stop your vessel instantly   |              |
| 2542 | Your vessel is being towed and back-up wires have been installed. Back-up wires carry the towing load in the event that the _____.  | bridle legs part  | <b>towing bitt or pad eye fails</b>  | bight ring fails   | main towing hawser parts   |              |
| 2543 | Your vessel is being towed and you are using a tripping rope. A tripping rope of fiber or wire is used to _____.  | give added strength to the main tow hawser  | retrieve the main tow hawser   | <b>retrieve the outboard legs of the bridle where they are connected to the fishplate</b>          | open the pelican hook at the fishplate   |              |
| 2544 | Your vessel is broken down and rolling in heavy seas. You can reduce the danger of capsizing by _____.  | constantly shifting the rudder  | moving all passengers to one side of the boat  | <b>rigging a sea anchor</b>  | moving all passengers to the stern   |              |
| 2545 | Your vessel is chartered under a time charter party. Under this type of charter party, your responsibility is _____.  | solely to the charterer for all matters pertaining to cargo and ship administration | solely to the cargo shippers and consignees  | solely to the owner, as under normal conditions  | <b>to the owner for vessel administration and to the charterer for cargo operations and schedule</b> |              |
| 2546 | Your vessel is crossing a river on the Great Lakes System. A power-driven vessel is ascending the river, crossing your course from port to starboard. Which statement is TRUE?  | <b>The vessel ascending the river has the right of way.</b>                         | Your vessel has the right of way, but you are directed not to impede the other vessel. | The other vessel must hold as necessary to allow you to pass.                                      | You are required to propose the manner of passage.   |              |
| 2547 | Your vessel is disabled and in imminent danger of grounding on a lee shore. The Master agrees to salvage services using Lloyd's Open Form of Salvage Agreement. Which is TRUE?  | The salvage award will be decided by suit in Admiralty Court.                       | <b>The salvage service is on a "no cure-no pay" basis.</b>                             | Underwriters will repudiate the agreement if it is unsuccessful, due to their increased liability. | The salvor becomes the owner of the vessel until the salvage award, if any, is paid.                 |              |
| 2548 | Your vessel is docking, but not yet alongside. Which line will be the most useful when maneuvering the vessel alongside the pier?   | Bow breast line   | <b>Bow spring line</b>   | Inshore head line  | Offshore head line   |              |
| 2549 | Your vessel is equipped with mechanical davits. When stowing the lifeboat after a drill while underway, you should _____.   | leave the tricing pendants slack  | <b>ensure the falls are taut</b>   | leave the outboard part of the cradle in the down position   | secure the inboard gripes only   |              |

| ID # | Question   | Choice A   | Choice B  | Choice C   | Choice D   | Illustration  |
|------|--|--|---|--|--|---------------|
| 2550 | Your vessel is going from a warm climate to a cold climate with a hygroscopic cargo. Which statement is TRUE?  | <b>You must ventilate constantly and vigorously to combat ship sweat.</b>  | You should ventilate; there is little danger of ship sweat, but a possibility of cargo sweat. | There is danger of heavy cargo sweat if you ventilate.                                   | There is little danger of any sweat problem.   |               |
| 2551 | Your vessel is in a foreign port and you find that one of the crew members has been incarcerated for drunkenness. The Official Logbook shows that the seaman doesn't have funds to cover the costs of the fine. Which action should the Master take? | Inventory his gear and send it and a pay voucher ashore with the agent.  | Leave the seaman in jail and log him as a fail to join after the vessel sails.                | Leave the seaman in jail and log him as a deserter after the vessel sails.               | <b>Pay the seaman's fine.</b>  |               |
| 2552 | Your vessel is in Charleston, S.C. You need not clear Customs if _____.  | <b>all the cargo on board is of U.S. origin and destined for New York</b>  | you took on no new cargo in Charleston, S.C. and are bound for Puerto Rico and thence foreign | you did not discharge any cargo in Charleston and are bound for Panama                   | you did not load any cargo in Charleston and are bound for Halifax                     |               |
| 2553 | Your vessel is issued a load line certificate dated 27 May 1992. What is NOT an acceptable date for one of the surveys for endorsements?   | 28 February 1993   | <b>27 November 1993</b>   | 26 August 1994   | 27 May 1995  |               |
| 2554 | Your vessel is loaded with nonhygroscopic cargoes and is going from a cold to a warm climate. You should _____.  | start the exhaust blowers  | start the intake blowers  | <b>not ventilate the cargo holds</b>   | ventilate the cargo holds  |               |
| 2555 | Your vessel is off a lee shore in heavy weather and laboring. Which action should you take?  | <b>Put the sea and wind about two points on either bow and reduce speed.</b>                                       | Heave to in the trough of the sea.  | Put the sea and wind on either quarter and proceed at increased speed.                   | Put the bow directly into the sea and proceed at full speed.                           |               |
| 2556 | Your vessel is on a voyage from Ogdensburg, NY, to Chicago, IL, via the Great Lakes. The date is October 3 of the current year. If your vessel is subject to the load line requirements, to which of her marks should she be loaded?                 | Fresh water - Winter   | Salt water - Intermediate   | <b>Fresh water - Intermediate</b>  | Salt water - Winter  | <b>D031DG</b> |
| 2557 | Your vessel is on an extended foreign voyage. Several vacancies have occurred in your unlicensed crew through sickness and repatriation. Which statement is correct?   | Aliens may be employed except that all U.S. flag vessels must maintain no less than 90% U.S. citizens in the crew. | <b>Qualified aliens may be employed to fill the vacancies.</b>                                | Seamen to fill vacancies must be flown from U.S. to join the vessel in the foreign port. | Vacancies can only be filled by U.S. citizens with valid Merchant Mariner's Documents. |               |
| 2558 | Your vessel is port side to a pier with a spring line led aft from the bow. In calm weather, putting the engines ahead with the rudder hard left should bring _____.   | <b>the bow in and the stern out</b>  | both the bow and stern in   | the bow out and the stern in   | both the bow and stern out   |               |
| 2559 | Your vessel is proceeding along a narrow channel. The effect called bank cushion has which effect on the vessel?   | <b>Forces the bow away from the bank</b>   | Forces the stern away from the bank   | Forces the entire vessel bodily away from the bank                                       | Decreases the draft at the bow   |               |

| ID # | Question   | Choice A   | Choice B  | Choice C  | Choice D  | Illustration |
|------|--|--|---|---|---|--------------|
| 2560 | Your vessel is required to have a slop chest. Which of the following articles is NOT required by law to be carried in the slop chest?  | Foul weather clothing  | <b>Candy</b>  | Tobacco products  | Blankets  |              |
| 2561 | Your vessel is taking on cargo oil when a small leak develops in the hose. You order the pumping stopped. Before you resume pumping, you should _____.   | notify the terminal superintendent   | place a large drip pan under the leak and plug the scuppers                 | repair the hose with a patch  | <b>replace the hose</b>   |              |
| 2562 | Your vessel is to dock bow first at a pier without the assistance of tugboats. Which line will be the most useful when maneuvering the vessel alongside the pier?  | Bow breast line  | <b>Bow spring line</b>  | Inshore head line   | Stern breast line   |              |
| 2563 | Your vessel is to dock bow first at a pier. Which line will be the most useful when maneuvering the vessel alongside the pier?   | <b>Bow spring line</b>   | Bow breast line   | Stern breast line   | Inshore head line   |              |
| 2564 | Your vessel is to dock bow first at a pier. Which line will be the most useful when maneuvering the vessel alongside the pier?   | Stern breast line  | <b>Bow spring line</b>  | Bow breast line   | Inshore head line   |              |
| 2565 | Your vessel is to dock bow in at a pier without the assistance of tugboats. Which line will be the most useful when maneuvering the vessel alongside the pier?   | Bow breast line  | Stern breast line   | <b>Bow spring line</b>  | Inshore head line   |              |
| 2566 | Your vessel is underway and approaching an overhead obstruction on Lake Superior. Given the following information, determine the clearance between your vessel and the obstruction. Highest point on vessel: 74 ft. Lowest point of obstruction: 126 (LWD) Monthly lake level: +2 (LWD) International Great Lakes Datum: 600.0 (182.88 meters) | 474 feet   | 400 feet  | 175 feet  | <b>50 feet</b>  |              |
| 2567 | Your vessel must moor port side to a berth limited by vessels ahead and astern using a single tug. You are stemming a slight current and there is a light breeze of the dock. Your tug should be made up to the vessel's _____.  | stern on a hawser  | quarter   | waist   | <b>bow</b>  |              |
| 2568 | Your vessel was damaged and initially assumed a significant list and trim; however, further increase has been slow. Based on this data, what should you expect?  | The slowing is only temporary and the vessel will probably suddenly capsize or plunge from loss of stability due to change in the waterplane area. | <b>The vessel can probably be saved if further flooding can be stopped.</b> | The vessel will continue to slowly list and/or trim due to the free surface effect and free communication effect. | The vessel will suddenly flop to the same or greater angle of list on the other side and may capsize. |              |

| ID # | Question   | Choice A                                  | Choice B                                    | Choice C                                    | Choice D                        | Illustration |
|------|--|---|---|---|---------------------------------|--------------|
| 2569 | Your vessel's available bale cubic capacity is 625,000 and her available cargo capacity is 10,000 deadweight tons. Disregarding broken stowage, how many tons of pyrite (stowage factor - 13) and how many tons of cork (s.f. - 150) must be loaded to be full and down? | <b>6387 tons pyrite, 3613 tons cork</b>   | 6721 tons pyrite, 3279 tons cork            | 7500 tons pyrite, 2500 tons cork            | 9133 tons pyrite, 867 tons cork |              |
| 2570 | Your vessel's operators send a message that your vessel has been consigned to Naval Control of Shipping. The message will refer you to _____.  | <b>Radio Aids to Navigation (PUB 117)</b> | the Coast Pilot                             | the International Code of Signals (PUB 102) | the Light List                  |              |
| 2571 | Your vessel's operators send a message that your vessel has been consigned to Naval Control of Shipping. The message will refer you to _____.  | the Light List                            | <b>Radio Aids to Navigation (PUB 117)</b>   | the International Code of Signals (PUB 102) | the Coast Pilot                 |              |
| 2572 | Your vessel's operators send a message that your vessel has been consigned to Voluntary Naval Control of Shipping. The message will refer you to _____.  | the Light List                            | the International Code of Signals (PUB 102) | <b>Radio Aids to Navigation (PUB 117)</b>   | the Coast Pilot                 |              |



























































































































































































































































































































































































































































































