

MANAGEMENT – DECK



REPUBLIC OF THE PHILIPPINES
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GUIDE QUESTIONNAIRES

for seafarers

The Annual Publication of Database of Questionnaires is mandated in Republic Act 10635 or the Act Establishing the Maritime Industry Authority (MARINA) as the Single Maritime Administration Responsible for the Implementation and Enforcement of the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended and International Agreements or Covenants related thereto and its Implementing Rules and Regulations.

These sample questions have been reviewed and validated by our respective Board of Examiners which may serve as a guide for the review of aspiring Marine Deck and Engineering Officers, towards the successful completion of the Theoretical Examination.

The following sample questions do not reflect the actual set of database of questions given during the theoretical examination. Examinees are encouraged to study the contained sample questions and probable answers as they are intended to give an indication of the format and difficulty level of the theoretical examination.

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Thank you.

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FUNCTION 1 – Competence 10

1. A breeches buoy is being rigged from the shore to a stranded vessel. The initial shot line passed to the vessel is normally made to a _____.
2. "Head reach", in stopping distance of vessels, can best be described as the :
3. A channel is stated as having a controlling depth of 38 feet. Which statement is TRUE?
4. A crewman has not been seen on board for the past three hours. What type of turn is BEST in the man overboard situation?
5. A maneuver where a known amount of helm is applied alternately to either side when a known heading deviation is reached.
6. A motor controller contains three selector push buttons labeled 'start', 'jog', and 'stop'. What happens to the motor when the 'jog' button is pushed?
7. A nickelcadmium battery is receiving a normal charge and gases freely. What should be the charging current?
8. A person who sees someone fall overboard should _____ .
9. A racetrack turn is used to recover a man overboard. The vessel is first steadied when how many degrees away from the original heading?
10. 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?
11. A ship is having a slow speed, by using the backing maneuver, when does the ship is considered to be dead on the water?
12. A ship is turning around a point called the "pivot point". What is the position of this invisible point when the ship is "dead" in the water?
13. A ship is turning around a point called the pivot point. What is the position of this invisible point when the ship is dead in the water?

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14. A sufficient amount of chain must be veered when anchoring a vessel to ensure _____ .
15. A term and it will be the position where the ship enters water so narrow that there is no room to turn or where it is not possible to retrace the track due to a falling tide and insufficient Under Keel Clearance (UKC)
16. A testing device called a 'growler' is being used to locate a shorted coil in the stator of an AC electrical machine. What happens when the 'feeler' is moved over a slot containing the shorted coil?
17. A towing vessel becomes tripped while towing on a hawser astern. What factor is MOST important when assessing the risk of capsizing?
18. A towing vessel's capability is BEST measured by horsepower, bollard pull, maneuverability and _____.
19. A towing vessel's capability is BEST measured by horsepower, maneuverability, displacement and _____.
20. A twin screw vessel is easier to maneuver than single-screw vessel with the engines half ahead. If there is no wind or current and the rudder is amidships, which of the following will happen?
21. A twin screw vessel while moving ahead has an advantage over a single vessel because:
22. A twin-screw vessel moving astern with both engines backing, with rudders amidships and negligible wind, will back:
23. A vessel brought alongside must be fended off the towing vessel by _____.
24. A vessel entering port and has a Pilot conning the vessel. The Master is unsure that the Pilot is taking sufficient action to prevent collision. Which must the Master do?
25. A vessel is equipped with a single right-handed screw. With rudder amidships and calm wind, the vessel will most likely back _____.

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26. A vessel's bow thruster is usually quite effective at a speed of up to how many knots?
27. AC circuits develop resistance, inductance, and capacitance. How do you express the inductive reactance of a circuit?
28. After maintaining correct discharge pressure, soon ceases to discharge water and what are possible causes?
29. An airplane wants a vessel to change course and proceed towards a vessel in distress. The actions of the aircraft to convey this message will NOT include:
30. As a general rule, a ULCC should not have a speed in any direction greater than what speed when touching berth?
31. As a rule, ships most configurations, when drifting in calm water with negligible current, will lie _____.
32. 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 has also a/an _____.
33. As a ship moves through the water, it drags with it a body of water called wake. The ratio of the wake speed to the ship's speed is called _____.
34. 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. How are these voids known as?
35. Besides distilled water, what other compounds that the electrolyte in a lead-acid storage battery consists of?
36. For more complete vessel protection, what other purposes when using an impressed current cathodic system?
37. From the point where the rudder is put over to any point on the turning circle, the distance a vessel moves parallel to the original course is known as:
38. Generally, you can best keep a vessel under steering control when the vessel has _____.

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39. Head reach, in stopping distance of vessels, can best be described as the :
40. How can you reduce the moisture damage, as a result of condensation occurring inside of the cargo winch master switches?
41. How do you trickle charge the battery about the standard procedure for maintaining the charge in an emergency diesel starting battery?
42. How does the effect known as " bank suction " act on single-screw vessel proceeding along a narrow channel ?
43. If a crewmember has fallen overboard during the hours of darkness and you immediately execute a Williamson turn, what is the primary advantage of this maneuver under these circumstance exams?
44. If the draft is nearly equal to the depth of the water, a vessel traveling down a narrow channel may set off the nearer side. This effect is known as:
45. If the line voltage to the controller shown in the illustration is 440 volts, what is applied across the control circuit?
46. If there is no slip, what is called as the distance that a ship moves forward with each revolution of its propeller?
47. In a Williamson turn, the rudder is put over full until the:
48. In docking, when approaching the berth at one knot, how many meters is the ship's advance in one minute?
49. In maneuvering the ship in a restricted area or in a narrow channel, which side would be easier to maneuver the ship using the backing and filing maneuver?
50. In order to back a right-handed, single-screw vessel in a straight line, you will probably need to use _____.
51. In order to minimize the squat effect, what action should be done?
52. In 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?

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53. In relation to the turning circle of a ship, the term "kick" means the distance _____.
54. In relation to the turning circle of a ship, the term "transfer" means the distance _____.
55. In restricted channel, what do you call the tendency of a vessel being pushed away from the bank?
56. In shiphandling in heavy weather, you notice your vessel's screw is being lifted clear of the water and racing. One way to correct this would be to:
57. In stopping distances of vessels, "head reach" can best be described as the _____.
58. In the context of shiphandling, what would be the definition of shallow water?
59. Is the distance from the approach course to the ship's center of gravity when it has turned 180 degrees.
60. It is the maneuver of decelerating the ship by use of full backing power from any given ahead speed until the ship comes to rest.
61. It is the term used for the impact between two vessels when one of them is in motion and the other one is stationary.
62. Most of your vessel superstructure is forward. How will the vessel lie when drifting with no way on the water?
63. Most very large ocean going vessels, such as bulk carriers and large tankers, tend to squat _____.
64. On the turning path of a vessel what do you call this distance of the ship's center of gravity along the original course from commencement of rudder deflection to the point when the ship has turned ninety degrees?
65. One major anchor commonly used in merchant ships that will hold more than 10 times its own weights if the seabed of soft, silty mud, the holding power will drop to about 3 times anchor weight.

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66. One of your crew members falls overboard from the starboard side. You should IMMEDIATELY:
67. Quickwater begins to move forward, up the ship's side, when the ship is making a speed approximately _____ knot, and the quickwater reaches the ship's midships section when the ship moving at a speed of _____ knots.
68. Sidewise force of the propeller tends to throw the vessel's stern to the right or left, depending on rotation. This force is caused by _____.
69. The action necessary to transfer the steering control from the wheelhouse to local control in order to use the steering gear room trick wheel, is to:
70. The ballast valve of the fore peak tank is located in the duct keel and cannot be opened or shut by remote operation. The valves of other tanks can be operated remotely without any trouble Which of the following will be the best practice?
71. The distance a vessel moves at right angles to the original course, when turn of 180 degrees has been completed is _____.
72. 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 _____.
73. The distance from the original approach course to the ship's center of gravity when it has turned 90 degrees.
74. The distance gained in the direction of the original course when you are making a turn is known as _____.
75. The distance that a ship moves forward with each revolution of its propeller, if there is no slip, is called _____.
76. 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 _____.
77. The effect of wind on exposed areas of the vessel is most noticeable when _____.

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78. The force exerted by a propeller that tends to throw the stern right or left is called _____.
79. The forward movement of a vessel in one revolution of its propeller is measured by the _____.
80. The helm command " ease the rudder " means to _____.
81. The helm command " hard right rudder " means _____.
82. The helm command " meet her " means _____.
83. The holding capability of an anchor is primarily determined by the _____.
84. The machinery associated with heaving in and running out anchor chain is the _____.
85. The major components which determine the length of catenary in a deployed anchor cable are water depth, cable weight, and _____.
86. The major components which determine the length of catenary in a deployed anchor cable are water depth, cable tension, and _____.
87. The maneuver of accelerating the ship from the rest or from any specified ahead speed to a higher ahead speed.
88. The maneuver which will return your vessel in the shortest time to a person who has fallen overboard is:
89. The measurement of the amount of force a towing vessel is capable of applying to a motionless tow is called _____.
90. The period of roll is the time difference between _____.
91. The pivot point of a vessel when going ahead is located:
92. The pivot point of the vessel when backing down with sternway is located:
93. The pivoting point of a fully loaded vessel with normal trim proceeding ahead at sea speed is _____.

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94. The propeller stopped with the rudder in hard over position. The vessel is turning slowly. In order to make her turn faster without increasing forward speed, give:
95. The sails are properly set and trimmed. As a vessel heads up from a beam reach to close-hauled the _____.
96. The single turn method of returning to a man overboard should be used ONLY if _____.
97. The tendency of a vessel being attracted bodily towards the bank is known as:
98. The term "kick", in relation to the turning circle of a ship, means the distance or throw of a vessel's stern from her line of advance upon putting the helm to _____.
99. The turning circle of a vessel making a turn over 360 degrees is the path followed by the _____.
100. The use of an anchor to assist in turning in restricted water is _____.
101. These propeller are in turning but the shaft revolves always in the same direction the astern power being obtained by reversing the pitch of the screws:
102. This is called the length of the track or track reach when decelerating the ship by use of full backing power from "full ahead sea-speed" until the ship comes to rest.
103. To recover a man overboard in a racetrack turn, the vessel is steadied for the SECOND time after a turn of how many degrees from the original heading?
104. What are reef points used for?
105. What are the forces that act and play a role in determining the position of pivot point?
106. What charging process produces where battery charging rooms should be well ventilated?

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107. What do you add as the proper way to mix the electrolyte for a battery?
108. What do you call this maneuver of accelerating the ship from rest to a given astern speed or distance?
109. What do you call when the cable nips round the stern and breaks the anchor out of its holding ground?
110. What do you use on vessels instead of impressed current cathodic protection?
111. What fact you must be aware of when using the anchor to steady the bow while approaching a dock?
112. What happens when electrical cables penetrate watertight bulkheads?
113. What instrument you are going to use aboard ship, to determine a grounded field coil in an AC motor?
114. What is a common occurrence when a vessel is running into a shallow water?
115. What is an electrical device which employs a stationary armature and a rotating electromagnetic field that is used aboard ship?
116. What is called as the use of an anchor to assist in turning in restricted waters?
117. What is commonly means the abbreviation 'PCB' in electronic circuitry?
118. What is known as a device which prints out a permanent record of the plant operating conditions?
119. What is mean by the multiple prefix 'kilo'?
120. What is one function of the movable cams in a drumtype winch motor controller?
121. What is that common occurrence when a vessel is running into shallow water?

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122. What is the CORRECT way to do when making way in heavy seas and you notice that your vessel's screw is being lifted clear of the water and racing?
123. What is the diameter of a circle called which traversed by a vessel after running through 360 degrees and maintaining the same speed and rudder angle?
124. What is the function of a full torque electric brake on an electric cargo winch?
125. What is the greatest detrimental effect on idle electrical equipment, such as cargo pump motors?
126. What is the number of cells in a 12 volt leadacid battery?
127. What is the proper way to apply plastic electrical tape to an electric cable splice?
128. What is the purpose of an impressed current cathodic protection system aboard ship?
129. What is the recommended method if you must land on a beach with an oarpropelled lifeboat through a heavy surf?
130. What is the resistance of a replacement wire having twice the length and onehalf the crosssectional area of the original wire?
131. What is used aboard ship as an electrical device which employs a stationary armature and a rotating electromagnetic field?
132. What maneuver will return your vessel in the shortest possible time to a person who has fallen overboard?
133. What must you be aware of the fact when using the anchor to steady the bow while approaching a dock?
134. What should be done by the first person to notice a man overboard incident?
135. What should be done to a discolored capacitor due to excessive heat should be?

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136. What should you do to repair a small electrical motor that has been submerged in saltwater?
137. What will be the freezing point of the electrolyte in a fully charged leadacid battery?
138. What will happen to the bow when your vessel is backing on the starboard screw, and going ahead on the port screw?
139. What will happen to the pump flow rate by increasing the rotational speed of a cargo pump?
140. What will you do if you are helmsman and the OOW (officer on watch) gives you the order: "Hard a starboard" and after a while the order: "Meet her"
141. What will you do if you are helmsman and the OOW (officer on watch) gives you the order: "Port 20" and after a while the order: "Ease your helm"
142. What will you do if you are helmsman and the OOW (officer on watch) gives you the order: "Starboard ten"
143. When a parallel track search pattern is being carried out, the course of the search units should normally be which of the following?
144. When a tug is pulling on a hawser at right angles to the ship, on the ship's engine, what care must be taken by the pilot?
145. When a vessel is using one anchor her bow and stern line to the "L" Jetty she said to be:
146. When a vessel with single-screw, right-handed propeller backs to port, the_____.
147. When attempting to free an anchor jammed in the hawspipe, the simplest method of freeing it maybe by _____.
148. When does a leadacid battery is considered fully charged?
149. 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:

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150. When navigating in 'deep water' you experience a shallow sounding which is not indicated on the chart. What would you do?
151. When relieving the helm, the new helmsman should find it handy to know the _____.
152. When steering a vessel, a good helmsman does NOT _____.
153. When towing, a tow hook is used to _____.
154. When troubleshooting AC motors, where do you use a portable growler for locating?
155. When troubleshooting electronic equipment, why should you use a high impedance multimeter?
156. When turning a ship in restricted space with strong wind, it is normally best to _____.
157. When underway with a tow, you are required to notify the Coast Guard in which casualty situation?
158. When your ship is going full speed ahead with no wind and no current, where do you think the "pivot point" is located?
159. Where can an ohmmeter be used to measure?
160. Where do you obtain the electrical energy necessary to transmit a person's voice over a soundpowered telephone circuit?
161. Where is the direction of rotation of an induction motor?
162. Which device will stop the motor shown in the illustration in case of a shortcircuit (high current) motor overload?
163. Which of the electrical properties listed will always be the same across each component in a parallel circuit?
164. Which of the following actions should you take if a crew member has just fallen overboard off your port side?

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165. Which of the following conditions will occur if the solenoid coil burns out on a cargo winch with an electrical brake?
166. Which of the following V/V cannot be overhauled in place without removing piping?
167. Which of the listed devices is used to measure pressure and convert it to an electrical signal?
168. Which of the listed instruments can be best used to locate a grounded field coil in a synchronous motor?
169. Which one among the statement is NOT true about the Williamson turn?
170. Which statement concerning the handling characteristics of a fully loaded vessel as compared with those of a light vessel is FALSE?
171. Which type of AC singlephase motor will also operate on direct current?
172. Which water effect will increase dramatically if you increase your ship's speed past its "critical speed"?
173. While alongside port side the dock, your vessel's bow line parts due to strong winds and begins to fall away from the docks. What should you do?
174. While approaching berth without the assistance of tugs, what is the usual precautions made by pilot to make sure that your vessel is in safe situation?
175. While charging, when is a leadacid battery may become hotter than normal?
176. Why does a synchronous motor maintains synchronism with the rotating field?
177. Why is copper tubing is used in refrigerant system?
178. Why should you use a high impedance multimeter when troubleshooting electronic equipment?
179. With rudders amidships and negligible wind, a twinscrew vessel moving astern with both engines backing will back:

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180. 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?
181. You are approaching a pier and intend to use the port anchor to assist in docking port side to. When would you NOT use the anchor?
182. 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?
183. 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?
184. 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?
185. 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. What should you ensure?
186. You are docking a vessel. What is the aspect wind and current are most favorable?
187. You are docking an oceangoing single-screw vessel under normal circumstances with a single tug. What is the tug usually used to?
188. You are going astern (single-screw, righthanded propeller) with the anchor down at a scope of twice the depth of the water. What should you expect as the anchor dredges?
189. You are heading in a northerly direction when you come across an easterly current. Your vessel will _____.
190. You are in charge of a twin-screw vessel going ahead with rudders amidships. If suddenly the port screw stops turning, the bow will:
191. You are in the confined waters. What is the danger in this situation if you should lose engine power?

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192. You are in the confined waters. What is the danger in this situation if you should lose engine power?
193. 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. What would you expect the vessel to do?
194. 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, what would you expect the vessel to do?
195. 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?
196. 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?
197. You are maneuvering a vessel with a right-hand propeller. The rudder is amidships. What will generally back the vessel's bow?
198. You are meeting with another ship in confined waters. What can happen as the ships approach each other?
199. You are mooring to a buoy. You should approach the buoy with the current from where?
200. You are on a course of 000°T and put the rudder right 30°. In which direction will the transfer be measured?
201. You are on watch and see a man fall overboard. Which man-overboard turn should NOT be used in this situation?
202. You are on watch at sea on course 90 degrees. A man falls overboard on your starboard side. You immediately execute a Williamson turn. Which step is NOT a part of a Williamson Turn?
203. You are performing an overtaking maneuver in confined waters. What should you watch out for?

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204. You are planning to anchor in an area where several anchors have been lost due to fouling. As a precaution, what should you do?
205. You are proceeding along the right bank of a narrow channel aboard a righthanded singlescrew vessel. The vessel starts to sheer due to bank suction/cushion effect. You should:
206. You are pushing a tow ahead and passing close to another towboat which is pushing ahead in the same direction (you are overtaking). After the towheads pass close alongside _____.
207. You are pushing a tow ahead, at high speed, near the right hand bank of a canal. The forces affecting your towboat and tow will tend to _____.
208. 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 degrees to board your Pilot. How should you use the engines and rudder to turn the ship fastest in the least amount of space?
209. You are the Master on a single screw vessel, docking port side with no tug assist. You decide to drop the offshore anchor to help in docking. The amount chain you must pay-out is:
210. You are transiting a narrow channel. What can happen in this situation?
211. You are using the anchor to steady the bow while maneuvering. When do you have the proper scope of anchor cable?
212. You are using the anchor to steady the bow while maneuvering. When do you expect to have the proper scope of anchor cable?
213. You have made a turning circle at full speed in deep water. You are now going to make one with initial speed, slow ahead. Do you think the diameter will differ from that of initial full ahead?
214. You have made a turning test on full speed in deep water. You are now going to make a test in shallow water. Do you think the turning diameter will be the same?
215. Your course of action if you have to abandon ship and enter a liferaft should be:

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216. Your engine is going astern and you pick-up sternway. The rudder is amidships and you are operating on a single, right-handed fixed screw. How will your ship react?
217. Your ship is dead in the water with the rudder amidships. As the right-handed screw starts to turn ahead, where does the bow will tend to go?
218. Your ship is drifting in open sea with temporary engine malfunction. You are equipped with precise navigation equipment. What should you do in this situation?
219. Your ship is going full astern and making sternway. Where will the "pivot point" be located? No wind, current.
220. Your vessel is a large twin-screw ship. You are stopped at the pilot station with no way upon your vessel. You must come around 180° to board your Pilot. How must you use the engines and rudder to turn the ship fastest in the least amount of space?
221. Your vessel is a single-screw ship with a right-hand propeller. There is no current. What is the easiest way to make a landing?
222. Your vessel is backing on the starboard screw, and going ahead on the port screw. What will happen to the bow?
223. Your vessel is being towed and you are using a tripping rope. What is the use of a tripping rope of fiber or wire?
224. Your vessel is going alongside a pier. Two tugs will assist at the mooring. Which position and how do you want to use the tugs?
225. Your vessel is going alongside. One tug will assist at the mooring. Which position and how do you want to use the tug?
226. Your vessel is navigating along a narrow channel at a slow speed with your starboard side near the right bank of a channel. What would be the best maneuver if your vessel suddenly sheers toward the opposite bank?
227. Your vessel is navigating along a narrow channel. The effect called "bank cushion" has which effect on the vessel?

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228. Your vessel is off a lee shore in heavy weather and laboring. Which action should you take?
229. Your vessel is port side to a pier with a spring line led aft from the bow. In calm weather, which direction when putting the engines ahead with the rudder hard left?
230. Your vessel is port side to a pier with a spring line led aft from the bow. In calm weather, what will happen to the bow and stern when putting the engines ahead with the rudder hard left?
231. Your vessel is port side to a pier with a spring line led aft from the bow. In calm weather, what will happen to the bow and stern when putting the engines ahead with the rudder hard left?
232. Your vessel is port side to a pier with a spring line led aft from the bow. In calm weather, which direction when putting the engines ahead with the rudder hard left?
233. Your vessel is proceeding along a narrow channel. The effect called bank cushion has which effect on the vessel?
234. 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?
235. Your vessel is to turn in a narrow canal by use of one tug (turn to port with the bow). In which position and how would you use the tug?
236. Your vessel is to unmoor. Two tugs will assist at the unmooring. Which position and how do you want to use the tugs?