<table>
<thead>
<tr>
<th>Question</th>
<th>Ref:</th>
<th>Answer</th>
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<tbody>
<tr>
<td>1 845</td>
<td>Damage Control, Caulking</td>
<td>C</td>
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<tr>
<td>Small hull leaks can be temporarily repaired by __________.</td>
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<tr>
<td>A. parceling</td>
<td>C. caulking</td>
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<tr>
<td>B. parbuckling</td>
<td>D. seizing</td>
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<tr>
<td>2 76</td>
<td>Damage Control, Cracks</td>
<td>B</td>
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<tr>
<td>A crack in the deck plating of a vessel may be temporarily prevented from increasing in length by</td>
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<tr>
<td>A. cutting a square notch at each end of the crack</td>
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<td>B. drilling a hole at each end of the crack</td>
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<td>C. slot-welding the crack</td>
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<td>D. welding a doubler over the crack</td>
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<tr>
<td>3 906</td>
<td>Damage Control, Extent of Damage</td>
<td>C</td>
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<tr>
<td>The BEST information on the nature and extent of damage to the vessel is obtained from __________.</td>
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<tr>
<td>A. alarms and monitoring devices</td>
<td>C. personnel at the scene of the damage</td>
<td></td>
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<tr>
<td>B. the engine room watch</td>
<td>D. the bridge watch</td>
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<td>4 72</td>
<td>Damage Control, Flooding</td>
<td>B</td>
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<tr>
<td>A continual worsening of the list or trim indicates __________.</td>
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<tr>
<td>A. negative GM</td>
<td>C. structural failure</td>
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<tr>
<td>B. progressive flooding</td>
<td>D. an immediate need to ballast</td>
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<tr>
<td>5 471</td>
<td>Damage Control, Flooding</td>
<td>B</td>
</tr>
<tr>
<td>Control of flooding should be addressed __________.</td>
<td></td>
<td></td>
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<tr>
<td>A. first</td>
<td>C. following restoration of vital services</td>
<td></td>
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<td>B. following control of fire</td>
<td>D. only if a threat exists</td>
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<tr>
<td>6 817</td>
<td>Damage Control, Flooding</td>
<td>C</td>
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<tr>
<td>Progressive flooding is controlled by securing watertight boundaries and __________.</td>
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<tr>
<td>A. transferring water ballast</td>
<td>C. pumping out flooded compartments</td>
<td></td>
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<tr>
<td>B. jettisoning cargo</td>
<td>D. abandoning ship</td>
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<tr>
<td>7 818</td>
<td>Damage Control, Flooding</td>
<td>D</td>
</tr>
<tr>
<td>Progressive flooding may be indicated by __________.</td>
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<tr>
<td>A. ballast control alarms</td>
<td>C. excessive list or trim</td>
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<tr>
<td>B. excessive draft</td>
<td>D. a continual worsening of list or trim</td>
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<tr>
<td>8 823</td>
<td>Damage Control, Flooding</td>
<td>C</td>
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<tr>
<td>Repairing damage to the hull at or above the waterline reduces the threat of __________.</td>
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<tr>
<td>A. free surface effects</td>
<td>C. continued progressive flooding</td>
<td></td>
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<tr>
<td>B. capsizing</td>
<td>D. wind heel</td>
<td></td>
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<tr>
<td>9 1580</td>
<td>Damage Control, Flooding</td>
<td>A</td>
</tr>
<tr>
<td>What must be accurately determined to assess the potential for progressive flooding after a vessel has been damaged?</td>
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<tr>
<td>A. The integrity of the water tight boundaries</td>
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<tr>
<td>B. The capacity of the water sprinkler systems</td>
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<td>C. The operation of the machinery space bilge level alarms</td>
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<tr>
<td>D. All of the above</td>
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<tr>
<td>10 2115</td>
<td>Damage Control, Flooding</td>
<td>D</td>
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<tr>
<td>Which type of hull damage should be repaired FIRST?</td>
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<tr>
<td>A. Damage below the waterline</td>
<td>C. Damage in way of machinery rooms</td>
<td></td>
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<tr>
<td>B. Damage to interior watertight boundaries</td>
<td>D. Damage at or just above the waterline</td>
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</table>
11 2526  Ref: Damage Control, Flooding
Your vessel has been damaged and is partially flooded. The first step to be taken in attempting to save the vessel is to
A. establish flooding boundaries and prevent further spread of flood water
B. plug the hole(s) in the outer shell
C. pump out the water inside the vessel
D. calculate the free surface effect and lost buoyancy to determine the vessel's stability

12 1724  Ref: Damage Control, Gaskets
When patching holes in the hull, pillows, bedding, and other soft materials can be used as
A. shores  C. strongbacks
B. gaskets  D. wedges

13 551  Ref: Damage Control, grounding
How do you determine the weight of the vessel that is supported by the ground when a vessel has run aground?
A. This requires extensive calculation and is usually performed only by a naval architect not by a ship's officer.
B. Determine the point where aground and the draft at that point, then calculate it using the grounding formula.
C. Use the hydrostatic tables and enter with the mean draft before grounding and the mean draft after grounding.
D. Use the inclining experiment formula and substitute the change of trim for the angle of list.

14 2531  Ref: Damage Control, Grounding
Your vessel has gone aground in waters where the tide is falling. The BEST action you can take is to
A. set out a kedge anchor
B. shift the vessel's load aft and repeatedly surge the engine(s) astern
C. shift the vessel's load forward and wait until the next high tide
D. slowly bring the engine(s) to full speed astern

15 2532  Ref: Damage Control, Grounding
Your vessel has grounded on a bar. What should you do?
A. If you cannot get clear immediately, lighten the ship by pumping all ballast overboard.
B. Run the engine full astern to keep from being set further onto the bar.
C. Switch to the high suction for condenser circulating water, if it is submerged.
D. All of the above

16 2533  Ref: Damage Control, Grounding
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?
A. Discharge forward deck cargo.  C. Shift deck cargo aft.
B. Pump out the forepeak tank.  D. Flood an after double-bottom tank.

17 2534  Ref: Damage Control, Grounding
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?
A. Continue backing to scour out the bottom.
B. Wait for high tide and then try backing.
C. Flood empty tanks to increase bottom pressure and prevent inshore creep.
D. Shift weight aft to reduce the forward draft.

18 2010  Ref: Damage Control, Holes in the Hull
Which statement about damage control is TRUE?
A. 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.
C. Water flowing into a lower compartment on a ship is more dangerous than water on deck or flowing into an upper compartment.
D. Water flowing over the forecastle bulwark is more dangerous than a hole in the hull at the waterline.
19 352 Ref: Damage Control, Order of Importance A
After an explosion, repair of emergency machinery and services should be accomplished __________.
A. after control of fire, flooding, and structural repairs
B. immediately, before the emergency is under control
C. after control of fire, but before control of flooding
D. after stability is restored

20 1127 Ref: Damage Control, Order of Importance D
The order of importance in addressing damage control is __________.
A. control flooding, control fire, repair structural damage
B. restore vital services, control fire, control flooding
C. control fire, restore vital services, control flooding
D. control fire, control flooding, repair structural damage

21 336 Ref: Damage Control, Plugging A
A wooden plug fitted tightly in the vent of a damaged tank may prevent the tank from __________.
A. filling completely C. developing free surface moment
B. developing free surface D. collapsing

22 662 Ref: Damage Control, Plugging D
In plugging submerged holes; rags, wedges, and other materials should be used in conjunction with plugs to __________.
A. reduce the water pressure on the hull C. prevent progressive flooding
B. reduce the possibility of stress fractures D. reduce the water leaking around the plugs

23 1312 Ref: Damage Control, Plugging A
The wooden plug inserted in the vent of a damaged tank should be removed if you are going to __________.
A. pump from the damaged tank C. abandon ship
B. fight a fire D. use the crossover system

24 1730 Ref: Damage Control, Plugging C
When plugging holes below the waterline you should __________.
A. eliminate all water entering the hole
B. only plug holes in machinery or other vital spaces
C. reduce the entry of water as much as possible
D. plug the largest holes first

25 2528 Ref: Damage Control, Sagging D
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 __________.
A. pump fuel oil from amidships to the ends of the vessel
B. reduce speed
C. take a course which most eases the vessel
D. All of the above

26 478 Ref: Damage Control, Shoring A
Damaged bulkheads often take a permanent set which is independent of the panting or bulge caused by water pressure. To control this, you should __________.
A. install shoring so the shoring supports the damaged bulkheads without pushing on them
B. install shoring so that it pushes on the damaged bulkhead while supporting it
C. use jacks or chain falls to remove the set before installing shores
D. place sandbags by the bulkhead without installing shores

27 854 Ref: Damage Control, Shoring D
Strengthening damaged bulkheads by using wood or steel is called __________.
A. bracing C. blocking
B. battening D. shoring
28 1114 Ref: Damage Control, Shoring
The objective of shoring a damaged bulkhead is to ________.
A. force the warped, bulged, or deformed sections back into place
B. support and hold the area in the damaged position
C. withstand subsequent additional damage
D. make a watertight seal at the damaged area

29 1745 Ref: Damage Control, Shoring
When shoring a damaged bulkhead, effort should be taken to spread the pressure over the ________.
A. maximum possible area
B. minimum possible area
C. nearest watertight door
D. nearest longitudinal girder

30 2469 Ref: Damage Control, Shoring
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 ________.
A. evenly over the surface of the bulkhead
B. approximately one-third of the way up the bulkhead
C. approximately halfway up the bulkhead
D. at the bottom of the bulkhead

31 2470 Ref: Damage Control, Shoring
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 ________.
A. evenly over the surface of the bulkhead
B. approximately two-thirds of the way up the bulkhead
C. approximately halfway up the bulkhead
D. at the bottom of the bulkhead

32 2527 Ref: Damage Control, Shoring
Your vessel has been damaged and you must shore a bulkhead. You should cut the shore ________.
A. 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
C. approximately 1/2 inch shorter per foot of shoring to allow for wet expansion
D. to the same length as the measured length

33 2568 Ref: Damage Control, Stability
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?
A. 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.
C. The vessel will continue to slowly list and/or trim due to the free surface effect and free communication effect.
D. The vessel will suddenly flop to the same or greater angle of list on the other side and may capsize.

34 1283 Ref: Damage Control, Underwater Hull Damage
The two courses of action if the underwater hull is severely damaged are to plug the openings or to ________.
A. establish and maintain flooding boundaries
B. dewater the compartment
C. secure power to the compartment
D. ballast to maintain even keel

35 1284 Ref: Damage Control, Underwater Hull Damage
The two factors which make underwater hull repair difficult are accessibility and the ________.
A. availability of tools
B. shape of the hull
C. pressure exerted by the water
D. threat of progressive flooding