U.S.C.G. Merchant Marine Exam

Master Near Coastal Less than 100 Gross Registered Tons

Q161 Deck Safety

(Sample Examination)
Choose the best answer to the following Multiple Choice Questions.

1. Which system is most likely to be subject to fading or static interference?
   - (A) HF SITOR
   - (B) INMARSAT
   - (C) VHF ARQ
   - (D) Digital Selective Calling on channel 70

   *If choice A is selected set score to 1.*

2. Which statement is TRUE concerning fire hose on a small passenger vessel?
   - (A) All fittings on hoses shall be of steel or other ferrous metal.
   - (B) One length of fire hose shall be provided for every two fire hydrants.
   - (C) A length of hose with nozzle attached shall be attached to each fire hydrant at all times.
   - (D) Fire hose shall be at least 3/4” outside diameter.

   *If choice C is selected set score to 1.*

3. A 50-foot passenger vessel not limited to daylight operation is required to be equipped with at least which item?
   - (A) 1 ring life buoy with a water light
   - (B) 2 ring life buoys with a water light
   - (C) 2 ring life buoys with 2 water lights
   - (D) 3 ring life buoys with 2 water lights

   *If choice A is selected set score to 1.*

4. Deballasting a double bottom has what effect on KG?
   - (A) KG increases at light drafts and decreases at deep drafts.
   - (B) KG is not affected.
   - (C) KG is decreased.
   - (D) KG is increased.

   *If choice D is selected set score to 1.*

5. Which statement is TRUE concerning the number of portable fire extinguishers required at the operating station of a small passenger vessel? (small passenger vessel regulations)
   - (A) One B-II extinguisher is required.
   - (B) None are required.
   - (C) One B-I extinguisher is required.
   - (D) Two B-I extinguishers are required.

   *If choice C is selected set score to 1.*
6. 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?

- (A) To leeward of the disabled vessel
- (B) At three times the drifting speed of the disabled vessel
- (C) To windward of the disabled vessel
- (D) Directly astern of the disabled vessel

*If choice C is selected set score to 1.*

7. Which type of fire is the foam (stored-pressure type) fire extinguisher effective on?

- (A) Classes A & B
- (B) Classes A & C
- (C) Classes B & C
- (D) All of the above

*If choice A is selected set score to 1.*

8. Which term indicates how many tons of cargo a vessel can carry?

- (A) Bale cubic
- (B) Loaded displacement
- (C) Deadweight
- (D) Gross tonnage

*If choice C is selected set score to 1.*

9. The safety discs on carbon dioxide cylinders are set to release at 2,700 psi. Under normal circumstances this pressure will be reached at which temperature?

- (A) 70°F
- (B) 100°F
- (C) 125°F
- (D) 135°F

*If choice D is selected set score to 1.*

10. How are fusible link fire dampers operated?

- (A) A break-glass and pull-cable system
- (B) Electrical controls on the bridge
- (C) The heat of a fire melting the link
- (D) A mechanical arm outside the vent duct

*If choice C is selected set score to 1.*
11. What is the color of the signal flare sent up by a submarine indicating that a torpedo has been fired in a training exercise?

- (A) Green
- (B) Yellow
- (C) White
- (D) Red

*If choice A is selected set score to 1.*

12. Which is/are required of the painter on a life float or buoyant apparatus? (small passenger vessel regulations)

- (A) Shall be resistant to ultraviolet sunlight deterioration
- (B) Be stowed to pay out freely if the vessel sinks
- (C) Have a minimum breaking strength of 3,000 lbs. if the capacity of the lifesaving gear is 50 persons or greater
- (D) All of the above

*If choice D is selected set score to 1.*

13. When a vessel has grounded which of the following could result from the forces acting upward on the bottom?

- (A) The trim of the vessel could change
- (B) The vessel could take on a list
- (C) The vessel could heel to one side
- (D) All of the above

*If choice D is selected set score to 1.*

14. What is the name given to the canvas covering of fire hose?

- (A) Line cover
- (B) Casing
- (C) Jacket
- (D) Outer hose

*If choice C is selected set score to 1.*

15. Which officer is responsible for the sanitary condition of the engineering department?

- (A) Chief Mate
- (B) First Assistant
- (C) Master
- (D) Chief Engineer

*If choice D is selected set score to 1.*
16. The flash point of a liquid means the temperature __________.
   - (A) at which a liquid will burn steadily
   - (B) that a liquid must reach before it will flow readily
   - (C) at which a liquid will give off flammable vapors
   - (D) at which a liquid will explode

   If choice C is selected set score to 1.

17. The result of two forces acting in opposite directions and along parallel lines, is an example of what type of stress?
   - (A) Shear
   - (B) Tensile
   - (C) Strain
   - (D) Compression

   If choice A is selected set score to 1.

18. One method of controlling rats on vessels is by rat-proofing. Rat-proofing is accomplished by __________.
   - (A) eliminating possible living spaces for rats when the ship is constructed
   - (B) installing rat guards on the mooring lines when in port
   - (C) keeping foods protected and avoiding the accumulation of garbage
   - (D) trapping and/or poisoning the rats

   If choice A is selected set score to 1.

19. What factor is essential to the proper operation of a radiator cooled engine?
   - (A) Cooling water pressure
   - (B) Low heat of combustion
   - (C) Jacket water treatment
   - (D) Air flow through the radiator

   If choice D is selected set score to 1.

20. When launching an inflatable liferaft, which is TRUE concerning the operating cord?
   - (A) It should be fastened to the raft container
   - (B) It should not be fastened to anything
   - (C) It should be fastened to some substantial part of the vessel
   - (D) It should be secured to the hydrostatic release

   If choice C is selected set score to 1.
21. A tank which carries liquid is dangerous to the stability of a vessel when it is in which condition?
   - (A) Completely empty
   - (B) Slack
   - (C) Completely full
   - (D) Low in the vessel

   If choice B is selected set score to 1.

22. On a small passenger vessel, if an inlet or discharge pipe is not accessible, which is a requirement of the shut off valve?
   - (A) Be operable from any accessible location above the bulkhead deck
   - (B) Must be operable from the weather deck
   - (C) Be labeled at its operating point to show its identity and direction of closing
   - (D) All of the above

   If choice D is selected set score to 1.

23. How shall Lifesaving equipment be stowed?
   - (A) Readily accessible for use
   - (B) On the topmost deck of the vessel at all times
   - (C) Inaccessible to passengers
   - (D) Locked up for safety

   If choice A is selected set score to 1.

24. What term indicates a curvature of the decks in a longitudinal direction?
   - (A) Deadrise
   - (B) Sheer
   - (C) Camber
   - (D) Flare

   If choice B is selected set score to 1.

25. Fixed carbon dioxide fire extinguishing systems shall be installed to protect enclosed machinery and fuel tank spaces of all vessels using gasoline or other fuel having which flash point? (small passenger vessel regulations)
   - (A) 0°F or lower
   - (B) 75°F or lower
   - (C) 90°F or lower
   - (D) 110°F or lower

   If choice D is selected set score to 1.
26. U.S.C.G. approved buoyant work vests are considered to be items of safety equipment and may be worn by members of the crew. When can crewmembers wear these work vests?

- (A) In lieu of life preservers during an actual emergency
- (B) In lieu of life preservers during boat drills
- (C) In lieu of life preservers during fire drills
  - (D) When carrying out duties near a weather deck’s edge

*If choice D is selected set score to 1.*

27. You are proceeding to a distress site. The survivors are in liferafts. What will make your ship more visible to the survivors?

- (A) Steering a zig-zag course
- (B) Steering a sinuous course
- (C) Dumping debris over the side to make a trail to your vessel
  - (D) Turning on all available deck lights at night

*If choice D is selected set score to 1.*

28. Assuming an even transverse distribution of weight in a vessel, which condition could cause a list?

- (A) Having a small positive righting arm
  - (B) Empty double bottoms and lower holds, and a heavy deck cargo
- (C) Having KG smaller than KM
- (D) Flooding the forepeak to correct the vessel’s trim

*If choice B is selected set score to 1.*

29. The vertical motion of a floating vessel in which the entire hull is lifted by the force of the sea is known by which term?

- (A) Sway
- (B) Pitch
- (C) Surge
  - (D) Heave

*If choice D is selected set score to 1.*

30. The maneuver which will return your vessel to a person who has fallen overboard in the shortest time is __________.

- (A) engine(s) crash astern, no turn
- (B) a Williamson Turn
- (C) two 180° turns
  - (D) a single turn with hard rudder

*If choice D is selected set score to 1.*
31. How is the external flotation bladder of an immersion suit inflated?

- (A) It is inflated by blowing through an inflation tube.
  - (B) It is inflated by a small CO2 bottle that is manually tripped.
  - (C) It is inflated by a small CO2 bottle that is automatically tripped when the front zipper is at the top of the zipper track.
  - (D) It inflates by seawater bleeding into the inflation bladder and reacting with a chemical.

*If choice A is selected set score to 1.*

32. Your vessel is conducting a "Vessel Grounded Drill". Where is the plan indicating the vessel's watertight boundaries required to be located?

- (A) On the navigation bridge
  - (B) In the damage control locker
  - (C) In the ship's library
  - (D) In the engine room

*If choice A is selected set score to 1.*

33. A fire in the radio transmitter would be of what class?

- (A) A
- (B) B
- (C) C
- (D) D

*If choice C is selected set score to 1.*

34. In illustration D015SA below, which item number correctly identifies the weak link?

- (A) 1
- (B) 4
- (C) 6
- (D) 8

*If choice D is selected set score to 1.*

35. Which is TRUE concerning fixed ballast, on small passenger vessels?

- (A) Only moved under the supervision of the owner, Master or shipyard
- (B) Discharged or moved at any time
- (C) Moved under any condition except extreme emergency
- (D) Moved temporarily for examination or repair of the vessel, when done under the supervision of an inspector

*If choice D is selected set score to 1.*
36. What type of messages should the "urgent" priority be used for?

- (A) A message containing information concerning the safety of a mobile unit or person
- (B) A message detailing important navigational warnings
- (C) A series of messages concerning on-scene communications
- (D) A message concerning the Safety of Life at Sea (SOLAS)

*If choice A is selected set score to 1.*

37. Which is the requirement on small passenger vessels for each inlet or discharge pipe penetrating the hull less than six inches above the deepest load waterline?

- (A) Except for engine exhausts must have a means to prevent water from entering the vessel if the pipe fails
- (B) It must have a globe valve to prevent water from entering
- (C) It must be fitted with a gate valve
- (D) It must be sealed

*If choice A is selected set score to 1.*

38. Which is TRUE concerning immersion suits and their use?

- (A) A puncture in the suit will not appreciably reduce its value.
- (B) Only a light layer of clothing may be worn underneath.
- (C) They provide sufficient flotation to do away with the necessity of wearing a life jacket.
- (D) They should be tight fitting.

*If choice C is selected set score to 1.*

39. Upon completion of fueling a gasoline driven vessel it is necessary to perform which task?

- (A) Ventilate before starting engine
- (B) Start the engines immediately
- (C) Keep ports, doors, windows, and hatches closed
- (D) None of the above

*If choice A is selected set score to 1.*

40. Which is TRUE concerning immersion suits and their use?

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*If choice B is selected set score to 1.*
41. On small passenger vessels which parts of a water-cooled gasoline or diesel engine must be water-jacketed and cooled?
   - (A) The engine’s head
   - (B) The exhaust manifold
   - (C) The block
   - (D) All of the above

   *If choice D is selected set score to 1.*

42. You have abandoned ship and are in charge of a liferaft or survival craft. How much water per day should you permit each person to have after the first 24 hours?
   - (A) 1 can
   - (B) 1 pint
   - (C) 1 quart
   - (D) 1 gallon

   *If choice B is selected set score to 1.*

43. When abandoning ship, after launching the motor lifeboat which is the recommended action to take?
   - (A) Stay in the immediate area
   - (B) Plot a course for the nearest land
   - (C) Go in one direction until fuel runs out
   - (D) Take a vote on which direction you should go

   *If choice A is selected set score to 1.*

44. Before starting any diesel or gasoline engine, which of the following must be checked?
   - (A) Exhaust discharge
   - (B) Oil level
   - (C) Flow of cooling water
   - (D) All of the above

   *If choice B is selected set score to 1.*

45. Individual wires, used in systems greater than 50 volts, shall meet which requirement?
   - (A) The wire should be supported at 24 inch intervals with plastic tie wraps
   - (B) The wires must be installed in conduit
   - (C) The wires should never be located in a tank
   - (D) All of the above

   *If choice B is selected set score to 1.*
46. How should the letter "O" be pronounced when spoken on the radiotelephone?

- (A) OCK TOW BER
- (B) O RI AN
- (C) OSS CAH
- (D) OA KAM

*If choice C is selected set score to 1.*

47. Which is a requirement for electrical wiring on all "T-Boats"?

- (A) Wiring must be protected from the weather
- (B) Wiring must be in an accessible place behind the ceiling
- (C) Wiring must be concealed so the boat can be maintained more easily
- (D) Wiring must be concealed to prevent mechanical damage

*If choice A is selected set score to 1.*

48. On vessels subject to the provisions of 46 CFR Subchapter T, which statement is TRUE concerning life jackets?

- (A) They shall be inaccessible to passengers
- (B) They shall be kept locked up at all times when underway
- (C) They shall be on the topmost deck of the vessel at all times
- (D) They shall be stored in convenient places throughout the accommodation spaces

*If choice D is selected set score to 1.*

49. After a liferaft is launched, the operating cord __________.

- (A) detaches automatically
- (B) is used to rig the boarding ladder
- (C) serves as a sea painter
- (D) is cut immediately as it is of no further use

*If choice C is selected set score to 1.*

50. How many escape routes must normally exist from all general areas accessible to the passengers or where the crew may be quartered or normally employed? (small passenger vessel regulations)

- (A) Two
- (B) Three
- (C) Four
- (D) Five

*If choice A is selected set score to 1.*