

U.S.C.G. Merchant Marine Exam
Master Less than 100 Gross Registered Tons
Q348 Deck Safety
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. 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 a flash point of _____.
(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.

2. An emergency sea anchor may be constructed by using _____.
- (A) a boat bucket
 - (B) an air tank filled with water
 - (C) an oar and canvas weighted down
 - (D) All of the above

If choice D is selected set score to 1.

3. To safely enter a compartment where CO₂ has been released from a fixed extinguishing system, you should _____.
- (A) wear a canister type gas mask
 - (B) wear a self-contained breathing apparatus
 - (C) test the air with an Orsat apparatus
 - (D) test the air with a pure air indicator

If choice B is selected set score to 1.

4. What is NOT a motion of the vessel?
- (A) Pitch
 - (B) Yaw
 - (C) Roll
 - (D) Trim

If choice D is selected set score to 1.

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

If choice C is selected set score to 1.

6. You have abandoned ship and are in charge of a liferaft. How much water per day should you permit each occupant to drink after the first 24 hours?

- (A) 1 pint
- (B) 1 can
- (C) 1 quart
- (D) 1 gallon

If choice A is selected set score to 1.

7. The minimum concentration of a vapor in air which can form an explosive mixture is called the _____.

- (A) threshold limit value (TLV)
- (B) lower explosive limit (LEL)
- (C) auto-ignition point
- (D) flash point

If choice B is selected set score to 1.

8. You are at sea and have received a General Emergency message announcing the outbreak of war in Europe. You are directed to comply with the instructions in NGA (NIMA) PUB 117, Chapter Eight. Which statement is TRUE?

- (A) If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port.
- (B) You should only enter a port in the danger zone during hours of darkness.
- (C) You should attempt to submit an AMVER report to NSA.
- (D) When over 200 hundred miles from a port in the danger zone, you should not darken ship.

If choice C is selected set score to 1.

9. 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 _____.

- (A) signal the engine room to stop the engines
- (B) call the engine room
- (C) call the Master
- (D) shift the selector switch to the other steering pump

If choice D is selected set score to 1.

10. The horizontal port or starboard movement of a vessel is called _____.

- (A) heave
- (B) surge
- (C) yaw
- (D) sway

If choice D is selected set score to 1.

11. 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 _____.

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

If choice B is selected set score to 1.

12. A vessel's "quarter" is that section which is _____.

- (A) on either side of the stern
- (B) abeam
- (C) just aft of the bow
- (D) dead astern

If choice A is selected set score to 1.

13. The distance between the waterline of a vessel and the main deck is called _____.

- (A) freeboard
- (B) camber
- (C) buoyancy
- (D) draft

If choice A is selected set score to 1.

14. A short ton is a unit of weight consisting of _____.

- (A) 2,205 pounds
- (B) 2,000 pounds
- (C) 1,000 pounds
- (D) 2,240 pounds

If choice B is selected set score to 1.

15. Normally It is desirable to have screens on the vents of potable water tanks to _____.

- (A) prevent backups
- (B) prevent explosions
- (C) filter the incoming air
- (D) stop insects from entering

If choice D is selected set score to 1.

16. The term that indicates how many tons of cargo a vessel can carry is _____.

- (A) bale cubic
- (B) deadweight
- (C) loaded displacement
- (D) gross tonnage

If choice B is selected set score to 1.

17. With no environmental forces acting on the vessel, the center of gravity of an inclined vessel is vertically aligned with the _____.

- (A) center of flotation
- (B) metacenter
- (C) original vertical centerline
- (D) longitudinal centerline

If choice B is selected set score to 1.

18. The enclosed area defined as the intersection of the surface of the water and the hull of a vessel is the _____.

- (A) amidships plane
- (B) longitudinal reference plane
- (C) waterplane
- (D) baseline

If choice C is selected set score to 1.

19. The forward draft of your ship is 27'-11" and the after draft is 29'-03". The draft amidships is 28'-05". Your vessel is _____.

- (A) listed
- (B) hogged
- (C) sagged
- (D) trimmed by the head

If choice B is selected set score to 1.

20. To find the cause of a gasoline engine's failure to start, you should _____.

- (A) break the joint in the fuel line at the engine and let the gas run in the bilges
- (B) ventilate the space, then check the battery, spark plugs, carburetor, and fuel line
- (C) prime the engine with ether through spark plug openings
- (D) disconnect the wires at the spark plugs and make the spark jump the gap

If choice B is selected set score to 1.

21. If passengers are on board when an abandon ship drill is carried out, they should _____.

- (A) take part
- (B) stay out of the way and do what they want
- (C) watch
- (D) go to their quarters

If choice A is selected set score to 1.

22. In weighing CO₂ cylinders, they must be recharged if weight loss exceeds _____.

- (A) 15% of weight of full bottle
- (B) 10% of weight of charge
- (C) 10% of weight of full bottle
- (D) 20% of weight of charge

If choice B is selected set score to 1.

23. For the purpose of training and drills, if reasonable and practicable, how frequently should rescue boats be launched with their assigned crew?

- (A) once a year
- (B) once a week
- (C) once a month
- (D) twice a year

If choice C is selected set score to 1.

24. The outlet at a fire hydrant may be positioned anywhere from horizontal to pointing _____.

- (A) vertically upward
- (B) 45° upward
- (C) vertically downward
- (D) all of the above

If choice C is selected set score to 1.

25. An "ABC" dry chemical fire extinguisher would be LEAST effective against a fire in _____.

- (A) high voltage electrical gear
- (B) a trash can
- (C) a mattress
- (D) spilled liquids such as oil or paint

If choice C is selected set score to 1.

26. You have carbon tetrachloride as part of the cargo. If a fire breaks out in the general area, what is the major danger from the carbon tetrachloride?

- (A) Phosgene gas may be formed if it comes in contact with hot metal.
- (B) You cannot use water to fight the fire because it will react with the carbon tetrachloride.
- (C) It will explode if exposed to a flame.
- (D) It will burn rapidly once ignited.

If choice A is selected set score to 1.

27. A fire starting by spontaneous combustion can be expected in which condition?

- (A) Oily rags are stowed in a metal pail.
- (B) Inert cargoes such as pig iron are loaded in a wet condition.
- (C) Clean mattresses are stored in contact with an electric light bulb.
- (D) Paints, varnish, or other liquid flammables are stowed in a dry stores locker.

If choice A is selected set score to 1.

28. A fire in a pile of canvas is classified as class _____.

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

If choice A is selected set score to 1.

29. Carbon dioxide as a fire fighting agent has which advantage over other agents?

- (A) It is cheaper.
- (B) It is safer for personnel.
- (C) It is most effective on a per unit basis.
- (D) It causes minimal damage.

If choice D is selected set score to 1.

30. A fire hose with a nozzle attached must be connected to each hydrant except when exposed to heavy weather or when the _____.

- (A) fire hose might be damaged by cargo operations
- (B) vessel is in port
- (C) fire pumps are used for purposes other than supplying water to the fire main
- (D) fire-main system is not charged

If choice A is selected set score to 1.

31. To lubricate the swivel or remove corrosion from a fire hose coupling, you should use _____.

- (A) kerosene
- (B) graphite
- (C) glycerine
- (D) fresh water and soap

If choice D is selected set score to 1.

32. If help has not arrived in 10-12 hours after abandoning a vessel in a rescue boat, you should _____.

- (A) go in one direction until the fuel runs out
- (B) shut down the engines if installed and put out the sea anchor
- (C) steer a course for the nearest land
- (D) steer a course for the nearest sea lane

If choice B is selected set score to 1.

33. 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 _____.

- (A) to the forward part of the deckhouse
- (B) to the forward-most bitts
- (C) to the base of the foremast
- (D) at the stern

If choice B is selected set score to 1.

34. 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 _____.

- (A) compare the rate of drift between the ships
- (B) install chafing gear on the towline
- (C) secure the bitter end of the towing hawser to prevent loss if the tow is slipped
- (D) have traveling lizards rigged to guide the towline while it is paid-out

If choice A is selected set score to 1.

35. What is the MOST important consideration when determining how to fight an electrical fire?

- (A) Whether the fire is in machinery or passenger spaces
- (B) Maintaining electrical power
- (C) The amount of toxic fumes created by the extinguisher
- (D) Danger of shock to personnel

If choice D is selected set score to 1.

36. Fire in an engine compartment is best extinguished with carbon dioxide gas (CO₂) and by _____.

- (A) closing the compartment except for the ventilators
- (B) leaving the compartment open to the air
- (C) increasing the air flow to the compartment by blowers
- (D) completely closing the compartment

If choice D is selected set score to 1.

37. 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?

- (A) Scharnow
- (B) Racetrack
- (C) Round
- (D) Single turn of 180°

If choice A is selected set score to 1.

38. You are on watch and see a man fall overboard. Which man overboard turn should NOT be used in this situation?

- (A) Racetrack
- (B) Scharnow
- (C) Single turn
- (D) Williamson

If choice B is selected set score to 1.

39. Normally Before taking drinking water on board in the U.S. or its possessions, the responsible person from the vessel should determine that the source _____.

- (A) is used by a city
- (B) is approved by the Public Health Service
- (C) is not from surface water
- (D) has been treated with chlorine

If choice B is selected set score to 1.

40. What would be used to call all stations in your vicinity by radiotelephone?

- (A) Kilo
- (B) Calling all stations
- (C) Charlie Quebec
- (D) Alpha Alpha

If choice C is selected set score to 1.

41. You see an iceberg that has not been reported. What kind of radio message do you transmit to warn others?

- (A) Routine message
- (B) Safety message
- (C) Distress message
- (D) Urgency message

If choice B is selected set score to 1.

42. The color of rockets, shells, or rocket parachute flares used to indicate that the vessel is in distress and requires immediate assistance is _____.

- (A) white
- (B) green
- (C) yellow
- (D) red

If choice D is selected set score to 1.

43. By day, what is the signal meaning, "This is the best place to land"?

- (A) white smoke signal
- (B) vertical motion of a red flag
- (C) white star rocket
- (D) vertical motion of a white flag or the arms

If choice D is selected set score to 1.

44. Small passenger vessels on rivers routes in cold water must be provided with life floats of an aggregate capacity to accommodate _____.

- (A) not less than 50% of all passengers on board at the time
- (B) 25% of the crew and 50% of all passengers allowed to be carried
- (C) at least 50% of all persons on board or meet certain construction standards
- (D) All persons on board (100% of all passengers and crew)

If choice C is selected set score to 1.

45. Aboard small passenger vessels the number of childrens' life jackets carried must be at least what percentage of the total number of persons aboard?

- (A) 4%
- (B) 7.5%
- (C) 10%
- (D) 15%

If choice C is selected set score to 1.

46. Regulations require that approved buoyant work vests _____. (small passenger vessel regulations)

- (A) shall be stowed in a place inaccessible to passengers
- (B) shall be stowed separately from the required life jackets
- (C) may not be carried on inspected vessels
- (D) may be substituted for 10% of the required life jackets

If choice B is selected set score to 1.

47. What is placed on the underside of an inflatable liferaft to help prevent it from being skidded by the wind or overturned?

- (A) Strikes
- (B) Sea anchor
- (C) A keel
- (D) Ballast bags

If choice D is selected set score to 1.

48. Number 3 lifeboat would be _____.

- (A) the forward boat on the starboard side
- (B) behind boat number 2 on the port side
- (C) behind boat number 1 on the starboard side
- (D) behind boat number 1 on the port side

If choice C is selected set score to 1.

49. To disengage a survival craft suspended from the cable above the water, you must pull the safety pin and _____.

- (A) pull the hook release handle and use the ratchet bar
- (B) pull the hook release handle
- (C) use the ratchet bar and depress the retainer
- (D) pull the hook release handle and depress the retainer

If choice A is selected set score to 1.

50. What would be an example of a B-I extinguisher? (small passenger vessel regulations)

- (A) 2 pound dry chemical
- (B) 2.5 gallon foam
- (C) 10 pound carbon dioxide
- (D) 5 pound foam

If choice A is selected set score to 1.