

U.S.C.G. Merchant Marine Exam

Master or Mate Less than 200 Gross Registered Tons

Q151 Deck Safety

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. 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.

2. The governor brake on a lifeboat winch shall be capable of controlling the speed of lowering a fully equipped lifeboat from a cargo ship at _____.
- (A) not more than 120 feet per minute
 - (B) not less than 120 feet per minute
 - (C) a safe speed only specified
 - (D) not more than 90 feet per minute

If choice A is selected set score to 1.

3. 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.

4. The order of importance in addressing damage control is _____.
- (A) control fire, restore vital services, control flooding
 - (B) restore vital services, control fire, control flooding
 - (C) control fire, control flooding, repair structural damage
 - (D) control flooding, control fire, repair structural damage

If choice C is selected set score to 1.

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

If choice B is selected set score to 1.

6. 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.

7. Upon completion of fueling a gasoline driven vessel it is necessary to _____.

- (A) keep ports, doors, windows, and hatches closed
- (B) ventilate before starting engine
- (C) start engines immediately
- (D) None of the above

If choice B is selected set score to 1.

8. 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.

9. 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.

10. 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) approximately one-third of the way up the bulkhead
- (B) approximately halfway up the bulkhead
- (C) evenly over the surface of the bulkhead
- (D) at the bottom of the bulkhead

If choice A is selected set score to 1.

11. The ceiling is _____.

- (A) a wooden protection placed over the tank top
- (B) material driven into seams or cracks to prevent leaking
- (C) the overhead in berthing compartments
- (D) None of the above are correct

If choice A is selected set score to 1.

12. The wooden planking that protects the tank top from cargo loading is called _____.

- (A) toms
- (B) ceiling
- (C) frames
- (D) shores

If choice B is selected set score to 1.

13. 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.

14. 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.

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 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.

17. The greatest effect on stability occurs from loose liquids flowing _____.

- (A) from fore to aft in the tanks of a vessel
- (B) from side to side in the tanks of the vessel
- (C) in and out of a vessel that is holed in a wing tank
- (D) in and out of a vessel that is holed in a peak tank

If choice C is selected set score to 1.

18. Progressive flooding is controlled by securing watertight boundaries and _____.

- (A) transferring water ballast
- (B) abandoning ship
- (C) pumping out flooded compartments
- (D) jettisoning cargo

If choice C is selected set score to 1.

19. Free communication will adversely affect transverse stability only when the flooded space is _____.

- (A) completely flooded
- (B) open to the sea above and below the waterline
- (C) off-center
- (D) on the centerline

If choice C is selected set score to 1.

20. If you are unable to stop a diesel engine by any other means, you should _____.

- (A) pull off the distributor cap
- (B) discharge a CO2 extinguisher in the air inlet
- (C) secure the starting air supply valve
- (D) secure the jacket water

If choice B is selected set score to 1.

21. What condition will result in the automatic shutdown of a diesel engine?

- (A) High lube oil pressure
- (B) Excessive turbo charger speed
- (C) High jacket water pressure
- (D) Low lube oil pressure

If choice D is selected set score to 1.

22. 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.

23. A spark arrestor _____.

- (A) grounds static electricity
- (B) prevents sparks from getting out of an engine's exhaust system
- (C) secures covers on ullage openings
- (D) keeps sparks from falling into an open tank

If choice B is selected set score to 1.

24. 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.

25. Maintaining good working order of fuel pumps and injectors in auxiliary diesel engines requires the use of _____.

- (A) fuel/water separators
- (B) fuel filters
- (C) day tanks
- (D) an injector test stand

If choice B is selected set score to 1.

26. What is the function of wearing rings found on some centrifugal pumps?

- (A) Isolate the outlet side from the inlet side
- (B) Dampen the turbulent discharge flow
- (C) Absorb erosion of high velocity discharge stream
- (D) Seal pump shaft against entry of air

If choice A is selected set score to 1.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

33. 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.

34. If you are forced to abandon ship in a rescue boat, you should _____.

- (A) head for the nearest land
- (B) head for the closest sea-lanes
- (C) remain in the immediate vicinity
- (D) vote on what to do, so all hands will have a part in the decision

If choice C is selected set score to 1.

35. 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.

36. 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.

37. When a man who is conscious has fallen overboard is being picked up by a lifeboat, the boat should approach with the wind _____.

- (A) ahead and the victim just off the bow
- (B) just off the bow and the victim to leeward
- (C) just off the bow and the victim to windward
- (D) astern and the victim just off the bow

If choice B is selected set score to 1.

38. 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.

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. Signs of racking stresses generally appear at the _____.

- (A) bow and stern shell frames and plating
- (B) junction of the frames with the beams and floors
- (C) thrust bearing of the main shaft
- (D) garboard strake, at each side of the keel

If choice B is selected set score to 1.

41. 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.

42. Which vessel(s) is(are) required to comply with the vessel bridge-to-bridge radiotelephone regulations while navigating?

- (A) All passenger vessels of 50 gross tons or less, carrying one or more passengers
- (B) Power-driven vessels 20 meters in length or longer
- (C) All towing vessels 25 feet or less in length
- (D) An intermittently manned floating plant under the control of a dredge

If choice B is selected set score to 1.

43. 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.

44. 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.

45. 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.

46. The required amount of water for each person in a lifeboat on an oceangoing vessel, on an international voyage, is _____.

- (A) 1 liter
- (B) 2 liters
- (C) 3 liters
- (D) 4 liters

If choice C is selected set score to 1.

47. The service use of pyrotechnic distress signals measured from the date of manufacture shall be limited to a period of _____.

- (A) 24 months
- (B) 36 months
- (C) 42 months
- (D) 60 months

If choice C is selected set score to 1.

48. 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.

49. 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.

50. 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.