

U.S.C.G. Merchant Marine Exam
Mate Uninspected Fishing Vessels
Q189 Deck Safety
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions:

1. A floating vessel will behave as if all of its weight is acting downward through which point?

- ☐ (A) The center of flotation
- ☐ (B) The metacenter
- ☐ (C) The center of buoyancy
- ☒ (D) The center of gravity

If choice D is selected set score to 1.

2. Which of the following aspects of a flooded space will most adversely affect transverse stability if it is subject to free communication?

- ☐ (A) On the centerline
- ☐ (B) Completely flooded
- ☒ (C) Off-center
- ☐ (D) Open to the sea above and below the waterline

If choice C is selected set score to 1.

3. All personnel on board a vessel should be familiar with the rescue boat's _____.

- ☒ (A) boarding and operating procedure
- ☐ (B) navigational systems
- ☐ (C) maintenance schedules
- ☐ (D) fuel consumption rates

If choice A is selected set score to 1.

4. Overhauling a fire in the living quarters on a vessel must include which action?

- ☐ (A) Sounding the "all clear" signal, no action is necessary
- ☒ (B) Opening dead spaces to check for heat or fire
- ☐ (C) Operation of the emergency generator
- ☐ (D) The immediate evacuation of the vessel

If choice B is selected set score to 1.

5. When abandoning ship, after launching the motor lifeboat which is the recommended action to take?

- ☒ (A) Stay in the immediate area
- ☐ (B) Go in one direction until fuel runs out
- ☐ (C) Take a vote on which direction you should go
- ☐ (D) Plot a course for the nearest land

If choice A is selected set score to 1.

6. Which defines the function of a spark arrestor?

- (A) Prevents sparks from getting out of an engine's exhaust system
- (B) It keeps sparks from falling into an open tank
- (C) Grounds static electricity reducing chance of explosion
- (D) Utilized to secure covers on ullage openings

If choice A is selected set score to 1.

7. A fire hose has a _____.

- (A) male coupling at the nozzle end and a female coupling at the hydrant end
- (B) female coupling at the nozzle end and a male coupling at the hydrant end
- (C) male coupling at both ends
- (D) female coupling at both ends

If choice A is selected set score to 1.

8. Fire alarm system thermostats are actuated by which means?

- (A) The difference in thermal expansion of two dissimilar metals
- (B) Smoke sensors
- (C) Pressure loss due to air being heated
- (D) An electric eye which actuates when smoke interferes with the beam

If choice A is selected set score to 1.

9. Which term defines the minimum concentration of a vapor in air which can form a mixture that ignites and burns?

- (A) Threshold limit value (TLV)
- (B) Auto-ignition point
- (C) Flash point
- (D) Lower flammable limit (LFL)

If choice D is selected set score to 1.

10. A situation has occurred where it becomes necessary for you to be towed. What action should be taken to prevent your vessel from yawing?

- (A) Shift weight to the bow
- (B) Shift weight to the stern
- (C) Shift weight to the center of the boat
- (D) Throw excess weight overboard

If choice B is selected set score to 1.

11. Aboard a vessel, what does dividing the sum of the longitudinal moments by the total weight yield?

- (A) The vessel's LCG
- (B) The inclining moments
- (C) The vertical moments
- (D) The righting moments

If choice A is selected set score to 1.

12. When a ship is abandoned and there are several liferafts in the water, which task must be done to aid in your rescue?

- (A) Transfer all the injured to one raft
- (B) Transfer all supplies to one raft and post a guard
- (C) Secure the rafts together to keep them from drifting apart
- (D) Separate the rafts by drifting away to increase chances of detection

If choice C is selected set score to 1.

13. You suspect that a crewmember has fallen overboard during the night and immediately execute a Williamson turn. What is the primary advantage of this maneuver under these circumstances?

- (A) You have extra time to maneuver in attempting to close in on the man for rescue.
- (B) The turn provides the maximum coverage of the area to be searched.
- (C) You will be on a reciprocal course and nearly on the track-line run during the night.
- (D) The turn enables you to reverse course in the shortest possible time.

If choice C is selected set score to 1.

14. How should the letter "W" be pronounced when spoken on the radiotelephone?

- (A) WISS KEY
- (B) DUB A U
- (C) WI NE
- (D) WOO LF

If choice A is selected set score to 1.

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

If choice C is selected set score to 1.

16. You are fighting a fire in a cargo hold on your vessel. Which action is most important concerning the stability of the vessel?

- ☐ (A) Maneuvering the vessel so the fire is on the lee side
- ☐ (B) Shutting off electricity to damaged cables
- ☐ (C) Removing burned debris from the cargo hold
- ☒ (D) Draining fire-fighting water and pumping it overboard

If choice D is selected set score to 1.

17. Loading cargo above the vessel's center of gravity will increase the vessel's vertical center of gravity. How will this affect the vessel?

- ☐ (A) If your vessel's stability is increasing, the rolling period will increase
- ☐ (B) If your vessel's stability is increasing, the rolling period will remain the same
- ☒ (C) If your vessel's stability is decreasing, the roll period will increase
- ☐ (D) If your vessel's stability is decreasing, the rolling period will decrease

If choice C is selected set score to 1.

18. If the cause of a sudden severe list or trim is negative initial stability, counter-flooding into empty tanks may cause which of the following?

- ☒ (A) Cause the unit to flop to a greater angle
- ☐ (B) The increase the righting moment
- ☐ (C) Bring the unit to an upright equilibrium position
- ☐ (D) Cause an increase in the righting arm

If choice A is selected set score to 1.

19. What is the purpose of rigging frapping lines on lifeboat falls?

- ☐ (A) To bring the lifeboat close alongside the rail in the embarkation position in order for passengers and crew to board
- ☒ (B) To reduce the violent swing of the lifeboat at the embarkation level when the tricing pendants are released
- ☐ (C) To secure the lifeboat in the davits when in the stowed position
- ☐ (D) To give the occupants a safety line when the boat is being lowered from the embarkation level

If choice B is selected set score to 1.

20. Inflatable liferafts are less maneuverable than lifeboats due to their _____.

- ☐ (A) shape
- ☐ (B) large sail area
- ☐ (C) shallow draft
- ☒ (D) All of the above

If choice D is selected set score to 1.

21. If you see an individual fall overboard, which action(s) should you take?

- ☐ (A) Pass the word to the bridge
- ☐ (B) Throw him/her a life buoy
- ☐ (C) Hail "man overboard"
- ☒ (D) All of the above

If choice D is selected set score to 1.

22. Your vessel is at a large angle of heel. What is the value of the righting arm at the angle of loll?

- ☐ (A) equal to GM
- ☒ (B) zero
- ☐ (C) positive
- ☐ (D) negative

If choice B is selected set score to 1.

23. The result of two forces acting in opposite directions and along parallel lines, is an example of what type of stress?

- ☐ (A) Strain
- ☐ (B) Compression
- ☒ (C) Shear
- ☐ (D) Tensile

If choice C is selected set score to 1.

24. You are picking up an unconscious person that has fallen overboard in a fresh breeze. For safety reasons how should a small craft approach?

- ☐ (A) With the victim to leeward
- ☐ (B) With the wind on your port side
- ☐ (C) With the wind on your starboard side
- ☒ (D) With the victim to windward

If choice D is selected set score to 1.

25. What can be used to measure the percentage of oxygen inside a chain locker?

- ☐ (A) Combustible gas indicator
- ☐ (B) H₂S meter
- ☐ (C) Flame safety lamp
- ☒ (D) Oxygen indicator

If choice D is selected set score to 1.

26. Heave is motion along which axis?

- (A) The vessel's vertical axis
- (B) The vessel's transverse axis
- (C) The vessel's longitudinal axis
- (D) The vessel's centerline axis

If choice A is selected set score to 1.

27. Which term is given to the brickwork surrounding the firebox of a boiler?

- (A) The fire plate
- (B) The waterwall
- (C) Refractory
- (D) The screen wall

If choice C is selected set score to 1.

28. You have a large, broken-down vessel in tow with a wire rope and anchor cable towline. Both vessels have made provision for slipping the tow in an emergency; however, unless there are special circumstances which is TRUE?

- (A) The towing vessel should slip first
- (B) The vessel towed should slip first
- (C) They should slip simultaneously
- (D) Either vessel may slip first

If choice A is selected set score to 1.

29. Of the following, which is the most important consideration for a tank vessel?

- (A) GM
- (B) The stress on the hull
- (C) The longitudinal center of gravity
- (D) The vertical center of gravity

If choice B is selected set score to 1.

30. In heavy seas how should the helmsman steer the motor lifeboat?

- (A) Broadside to the seas
- (B) In a series of figure-eights
- (C) In the same direction as the seas
- (D) Into the seas slightly off the bow

If choice D is selected set score to 1.

31. Channel 13 is primarily used for ship to ship communication. Channel 13 is also authorized for which purpose?

- (A) Lock & bridge communications
- (B) Coast to aircraft operational communications
- (C) Aircraft to ship operational communications
- (D) Aircraft to ship navigational communications

If choice A is selected set score to 1.

32. What can an oxygen indicator can be used to determine?

- (A) If combustible gases present
- (B) If hydrogen gas present
- (C) If there is sufficient oxygen in a compartment to support life
- (D) All of the above

If choice C is selected set score to 1.

33. Which statement about immersion suits is TRUE?

- (A) The suit must, without assistance, turn an unconscious person's mouth clear of the water within 5 seconds.
- (B) The suit is flameproof and provides protection to the wearer while swimming through burning oil.
- (C) The suit's oil resistance is such that it will be serviceable and be usable after exposure to gasoline or mineral spirits without needing to be specially treated.
- (D) The suit seals in body heat and provides protection against hypothermia indefinitely.

If choice A is selected set score to 1.

34. Which action will affect the trim of a vessel?

- (A) Moving high weights lower
- (B) Adding weight at the tipping center
- (C) Moving a weight forward
- (D) Removing weight at the tipping center

If choice C is selected set score to 1.

35. A ship station license for your radiotelephone is valid for which of the following terms?

- (A) One year
- (B) Two years
- (C) Ten years
- (D) The life of the vessel

If choice C is selected set score to 1.

36. Your lifeboat has been adrift for several days when land is sighted. Which procedure should you use to survey a potential site to beach your lifeboat?

- ☐ (A) sail parallel to the coast on the windward side of land studying the terrain for possible sites
- ☐ (B) drift landward on the sea anchor and when in the surf row out to safe water
- ☒ (C) sail parallel to the coast on the leeward side of land studying the terrain for possible sites
- ☐ (D) make a series of maneuvers advancing into land and turning out once in the surf

If choice C is selected set score to 1.

37. Which describes the difference between the height of the metacenter and the height of the center of gravity of a vessel?

- ☒ (A) Metacentric height
- ☐ (B) Fore and aft perpendicular
- ☐ (C) Height of the center of buoyancy
- ☐ (D) Height of the righting arm

If choice A is selected set score to 1.

38. When launching a lifeboat, how should the tricing pennants be released?

- ☐ (A) Before the boat is lowered from the stowed position
- ☒ (B) Before the boat is lowered from the embarkation level
- ☐ (C) After the boat is released into the water
- ☐ (D) As the boat-fall blocks break clear of the davit head

If choice B is selected set score to 1.

39. What is the most important characteristic of the extinguishing agent in fighting a class "C" fire?

- ☐ (A) Temperature
- ☐ (B) Weight
- ☐ (C) Cost
- ☒ (D) Electrical nonconductivity

If choice D is selected set score to 1.

40. When lowering a boat with gravity davits, it will be initially pulled into the embarkation deck by which item?

- ☐ (A) The falls
- ☒ (B) Tricing pendants
- ☐ (C) Boat hooks
- ☐ (D) Frapping lines

If choice B is selected set score to 1.

41. Which is TRUE concerning drinking salt water?

- ☐ (A) Saltwater protects against heat cramps
- ☐ (B) Saltwater prevents seasickness
- ☐ (C) It is safe to drink if mixed with fresh water
- ☒ (D) Consuming saltwater will dehydrate you

If choice D is selected set score to 1.

42. An "ABC" dry chemical fire extinguisher would be LEAST effective against a fire in which situation?

- ☐ (A) Burning spilled liquids such as oil or paint
- ☐ (B) High voltage electrical gear burning
- ☒ (C) A burning mattress
- ☐ (D) A trash can with contents on fire

If choice C is selected set score to 1.

43. You hear the general alarm and ship's whistle sound for over 10 seconds. What does this signal mean?

- ☒ (A) Fire and emergency
- ☐ (B) Abandon ship
- ☐ (C) Dismissal from fire and emergency stations
- ☐ (D) Man overboard

If choice A is selected set score to 1.

44. 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) Red
- ☒ (B) Green
- ☐ (C) Yellow
- ☐ (D) White

If choice B is selected set score to 1.

45. What is the signal used with shore lifesaving equipment to indicate, "Affirmative"?

- ☒ (A) Vertical motion of the arms
- ☐ (B) Code signal "C" sent by light or sound signaling apparatus
- ☐ (C) Firing of a red star signal
- ☐ (D) None of the above

If choice A is selected set score to 1.

46. The two courses of action if the underwater hull is severely damaged are to plug the openings or to take which action?

- ☐ (A) Secure power to the compartment
- ☒ (B) Establish and maintain flooding boundaries
- ☐ (C) Dewater the compartment
- ☐ (D) Ballast to maintain even keel

If choice B is selected set score to 1.

47. You are involved in an emergency landing of a helicopter on the water. When should you inflate your life jacket?

- ☐ (A) After reaching the water, but prior to exiting the helicopter
- ☐ (B) Upon entering the helicopter
- ☐ (C) Prior to reaching the water
- ☒ (D) After exiting clear of the helicopter

If choice D is selected set score to 1.

48. A magnesium fire is classified as class _____.

- ☐ (A) A
- ☐ (B) B
- ☐ (C) C
- ☒ (D) D

If choice D is selected set score to 1.

49. 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 fo'c'sle bulwark is more dangerous than a hole in the hull at the waterline.

If choice A is selected set score to 1.

50. To prevent the spread of fire by convection you should take which action?

- ☒ (A) Close all openings to the area
- ☐ (B) Shut off all electrical power
- ☐ (C) Remove combustibles from direct exposure
- ☐ (D) Cool the bulkhead around the fire

If choice A is selected set score to 1.