Keep 'em Safe, Keep 'em Sailing



# U.S.C.G. Merchant Marine Exam Master Less than 500-1600 Gross Registered Tons Rivers Q387 Deck Safety

(Sample Examination)

1.	All personnel on board a vessel should be familiar with the rescue boat's
	<ul> <li>(A) fuel consumption rates</li> <li>(B) navigational systems</li> <li>(C) maintenance schedules</li> <li>(D) boarding and operating procedure</li> </ul>
	If choice D is selected set score to 1.
2.	Accumulations of oily rags should be
	<ul> <li>(A) kept in nonmetal containers</li> <li>(B) cleaned thoroughly for reuse</li> <li>(C) discarded as soon as possible</li> <li>(D) kept in the paint locker</li> </ul>
	If choice C is selected set score to 1.
3.	Which statement describes the relationship between flash point and auto-ignition temperature?
	<ul> <li>(A) They are not necessarily related.</li> <li>(B) Both are higher than normal burning temperatures.</li> <li>(C) The flash point is always higher.</li> <li>(D) The ignition temperature is always higher.</li> </ul>
	If choice D is selected set score to 1.
4.	Convection spreads a fire by
	<ul> <li>(A) burning liquids flowing into another space</li> <li>(B) heated gases flowing through ventilation systems</li> <li>(C) the transfer of heat across an unobstructed space</li> <li>(D) transmitting the heat of a fire through the ship's metal</li> </ul>
	If choice B is selected set score to 1.
5.	Which types of portable fire extinguishers are designed for use on electrical fires?
	<ul> <li>(A) Dry chemical and soda-acid</li> <li>(B) Dry chemical and carbon dioxide</li> <li>(C) Carbon dioxide and foam (stored pressure)</li> <li>(D) Foam (stored pressure) and soda-acid</li> </ul>

If choice B is selected set score to 1.

<ul> <li>6. When electrical equipment is involved in a fire, where should the stream of dry chemicals be directed?</li> <li>(A) Fogged above the equipment</li> <li>(B) Shot off a flat surface onto the flames</li> <li>(C) Aimed at the source of the flames</li> <li>(D) Used to shield against electrical shock</li> <li>If choice C is selected set score to 1.</li> <li>7. When the handle of an all-purpose nozzle is pulled all the way back, it will</li> <li>(A) shut off the water</li> <li>(B) produce high-velocity fog</li> <li>(C) produce a straight stream</li> <li>(D) produce low-velocity fog</li> <li>If choice C is selected set score to 1.</li> <li>8. Before using a fixed CO2 system to fight an engine room fire, you must</li> <li>(A) secure the engine room ventilation</li> <li>(B) secure the machinery in the engine room</li> <li>(C) evacuate all engine room personnel</li> <li>(D) All of the above</li> <li>If choice D is selected set score to 1.</li> <li>9. 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?</li> <li>(A) When over 200 miles from a port in the danger zone, you should not darken ship.</li> <li>(B) If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port.</li> <li>(C) You should attempt to submit an AMVER report to NSA.</li> <li>(D) You should only enter a port in the danger zone during hours of darkness.</li> <li>If choice C is selected set score to 1.</li> </ul>	Illustrations: 2		
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**10.** If you must enter water on which there is an oil fire, you should \_\_\_\_\_\_.

- o (A) keep both hands in front of your face to break the water surface when diving head first
- o (B) wear very light clothing
- o (C) protect your life preserver by holding it above your head
- (D) enter the water on the windward side of the vessel

If choice D is selected set score to 1.

- 11. If more than one liferaft is manned after the vessel has sunk, which action will aid in your rescue?
  - o (A) Each raft should go in a different direction in search of land
  - o (B) The possibility of a search aircraft finding you is increased by spreading out
  - (C) Tie each of the rafts together and try to stay in a single group
  - o (D) Reduce the number of liferafts by getting as many people as possible into as few rafts as possible

If choice C is selected set score to 1.

- **12.** When approaching a fire from leeward you should shield firefighters from the fire by using
  - o (A) a straight stream of water
  - (B) high-velocity fog
  - o (C) low-velocity fog
  - o (D) foam spray

If choice B is selected set score to 1.

- **13.** If you are fighting a fire below the main deck of your vessel, which action is most important concerning the stability of the vessel?
  - o (A) Maneuvering the vessel so the fire is on the lee side
  - o (B) Shutting off electricity to damaged cables
  - o (C) Removing burned debris from the cargo hold
  - (D) Pumping fire-fighting water overboard

If choice D is selected set score to 1.

- **14.** What is the primary danger when dealing with a helicopter fire?
  - (A) Loss of stability
  - (B) Heat damage to helicopter structure
  - (C) Burning jet fuel running on to quarters or other areas
  - o (D) Rotating and flying debris

If choice C is selected set score to 1.

- **15.** You are evacuating crew members from a survival craft that has been adrift in the North Atlantic for several days. What could occur if a person suffering from hypothermia is vertically lifted in a rescue sling to the helicopter?
  - o (A) A decrease in the symptoms of hypothermia
  - o (B) Temporary blindness from the altitude change
  - (C) Severe shock or cardiac arrest
  - o (D) Frostbite on exposed areas

If choice C is selected set score to 1.

- **16.** Your vessel is conducting helicopter evacuation operations for an injured crew member. Which of the following statements is true concerning the hoisting line?
  - o (A) A tag line is required to be attached to the hoist cable for securing
  - o (B) As a safety measure wrap the line around the patient before attaching it to the basket
  - (C) Allow the line to touch the deck to discharge the static electricity
  - o (D) Secure the graining line to the deck railings

If choice C is selected set score to 1.

- **17.** While underway in thick fog you are on watch and hear the cry "man overboard". Which type of maneuver should you make?
  - o (A) Racetrack turn
  - o (B) Round turn
  - o (C) figure eight turn
  - (D) Williamson turn

If choice D is selected set score to 1.

- **18.** You are using a racetrack turn to recover a man overboard. The vessel is first steadied when how many degrees away from the original heading?
  - o (A) 60° to 70°
  - o (B) 90°
  - o (C) 135°
  - (D) 180°

If choice D is selected set score to 1.

- **19.** The vessel shown in illustration D025DG has broken down and you are going to take her in tow. The wind is coming from her starboard beam. You are making more leeway than she. Where should you position your vessel when you start running lines?
  - (A) A
  - o (B) B
  - o (C) C
  - o (D) D

If choice A is selected set score to 1.

- **20.** 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, which action should you take?
  - o (A) Install chafing gear on the towline
  - (B) Compare the rate of drift between the ships
  - o (C) Secure the bitter end of the towing hawser to prevent loss if the tow is slipped
  - o (D) Have traveling lizards rigged to guide the towline while it is paid-out

If choice B is selected set score to 1.

- 21. How should the letter "D" be pronounced when spoken on the radiotelephone?
  - o (A) DA VID
  - (B) DELL TAH
  - o (C) DOG
  - o (D) DUKE

If choice B is selected set score to 1.

- **22.** When the GMDSS Radio Operator on watch hears "SECURITE" spoken three times he can expect to receive a message concerning \_\_\_\_\_\_.
  - o (A) the safety of a vessel or a person is in jeopardy
  - o (B) a coast station traffic list
  - o (C) a vessel in need of immediate assistance
  - (D) the safety of navigation or important meteorological warnings

If choice D is selected set score to 1.

- 23. What does the lifesaving signal indicated by a horizontal motion of a white light or white flare mean?
  - o (A) "Negative"
  - o (B) "Landing here highly dangerous"
  - o (C) "Avast hauling"
  - (D) All of the above

If choice D is selected set score to 1.

- **24.** During a training exercise a submarine indicating that a torpedo has been fired will send up smoke from a float. What color will the smoke be?
  - (A) Black
  - o (B) Orange
  - o (C) Yellow
  - o (D) Red

If choice A is selected set score to 1.

- **25.** The deck beam brackets of a transversely framed vessel resist which stresses?
  - o (A) Hogging stresses
  - o (B) Sagging stresses
  - o (C) Shearing stresses
  - (D) Racking stresses

If choice D is selected set score to 1.

- **26.** To reduce the number of strakes at the bow, two strakes are tapered and joined at their ends by a single plate. What is the name of this plate?
  - o (A) Joiner
  - o (B) Cover plate
  - (C) Stealer plate
  - o (D) Lap strake

If choice C is selected set score to 1.

- 27. Where is the molded depth measured from on a vessel?
  - (A) The inside of the shell
  - o (B) The outside of the shell
  - o (C) The top of the garboard stake
  - o (D) The top of the center vertical keel

If choice A is selected set score to 1.

- 28. Which term is given to the fittings used to secure a watertight door?
  - o (A) Clasps
  - o (B) Latches
  - (C) Dogs
  - o (D) Clamps

If choice C is selected set score to 1.

- **29.** What does the gross tonnage of a vessel indicate?
  - o (A) Total weight including cargo
  - (B) Volume in cubic feet
  - o (C) Displacement in metric tons
  - o (D) Draft in feet

If choice B is selected set score to 1.

- **30.** A ship's forward draft is 22'-04" and its after draft is 24'-00". The draft amidships is 23'-04". This indicates a concentration of weight is located at which of the following areas?
  - (A) Amidships
  - o (B) In the lower holds
  - o (C) At the bow
  - o (D) At the ends

If choice A is selected set score to 1.

- **31.** In the presence of external forces, the center of buoyancy of an inclined vessel is vertically aligned with which item?
  - o (A) The center of flotation
  - o (B) The keel
  - (C) The metacenter
  - o (D) The center of gravity

If choice C is selected set score to 1.

- **32.** Which term defines the difference between the forward and aft drafts?
  - (A) Trim
  - o (B) Flotation
  - o (C) List
  - o (D) Heel

If choice A is selected set score to 1.

- **33.** Which of the following aspects of a flooded space will most adversely affect transverse stability if it is subject to free communication?
  - (A) Off-center
  - o (B) Completely flooded
  - o (C) Open to the sea above and below the waterline
  - o (D) On the centerline

If choice A is selected set score to 1.

- **34.** When should the control of flooding of your vessel be addressed?
  - o (A) Only if a threat exists
  - (B) Following control of fire
  - o (C) Following restoration of vital services
  - o (D) First

If choice B is selected set score to 1.

- **35.** Which term describes the strengthening of damaged bulkheads by using wood or steel?
  - (A) Shoring
  - o (B) Blocking
  - o (C) Bracing
  - o (D) Battening

If choice A is selected set score to 1.

- **36.** When two generators are operating in parallel, what will happen if one engine driving a generator shuts down?
  - o (A) The generator that's still running will motorize.
  - o (B) The running generator's circuit breaker will immediately trip on overload.
  - (C) The stalled generator's circuit breaker will trip on reverse power.
  - o (D) Both generators will immediately shut down.

If choice C is selected set score to 1.

- **37.** According to the Code of Federal Regulations, which of the following statements is correct regarding the steering gear on a vessel contracted for after June 9, 1995?
  - (A) On hydraulic type steering gears, a suitable arrangement of check valves in the main piping system may be considered as a means of steadying the rudder.
  - (B) A separate auxiliary means of steering is not required where the main gear is of the dual power hydraulic type, having two independent pumps and connections.
  - o (C) Hydraulic structural rudder stops are mandatory.
  - o (D) All of the above.

If choice B is selected set score to 1.

- **38.** What is the purpose of a striker plate?
  - o (A) Provides surface for applying force on machinery
  - o (B) Absorbs machinery vibration
  - o (C) Prevents valve stem over-travel
  - (D) Provides landing surface for the sounding bob

If choice D is selected set score to 1.

- **39.** What does a pyrometer measure on a diesel engine?
  - o (A) Water pressure
  - (B) Exhaust temperature
  - o (C) Water temperature
  - o (D) Air box pressure

If choice B is selected set score to 1.

- **40.** Overspeed of the diesel engine driving an electric generator could cause which to occur?
  - o (A) A reverse power trip
  - (B) Excessive exhaust temperatures
  - (C) Damage to windings
  - o (D) A low voltage trip

If choice C is selected set score to 1.

- 41. Why are diesel engines considered safer than gasoline engines?
  - o (A) They are more heavily built
  - o (B) They can be easily reversed
  - o (C) They operate at a lower speed
  - (D) The fuel used is less volatile

If choice D is selected set score to 1.

- **42.** Your vessel has been taking on water but now the breached hole has been repaired. Which effects can the flooding have on your vessel's GM?
  - o (A) Flooding will always increase GM
  - o (B) Flooding will always decrease GM
  - (C) Flooding can either increase or decrease GM
  - o (D) Flooding will neither increase or decrease GM

If choice C is selected set score to 1.

- **43.** Which is TRUE concerning the painter of an inflatable liferaft?
  - o (A) Stowed under the raft to protect from the elements
  - (B) Secured to permanent object on deck via weak link
  - o (C) Faked out next to the case on deck
  - o (D) Staged for free running on the deck

If choice B is selected set score to 1.

- **44.** What statement about immersion suits is TRUE?
  - o (A) Any tear or leak will render the suit unserviceable and it must be replaced.
  - (B) No stowage container for immersion suits may be capable of being locked.
  - (C) During the annual maintenance, the front zipper should be lubricated using light machine oil or mineral oil.
  - o (D) Immersion suits should be worn while performing routine work on deck.

If choice B is selected set score to 1.

- **45.** In illustration D016SA below, what number indicates the frapping line?
  - o (A) 1
  - (B) 2
  - o (C) 3
  - o (D) 4

If choice B is selected set score to 1.

- **46.** Which is required to be marked on the vessel's life preservers?
  - o (A) The crew member's article number
  - (B) The vessel's name
  - o (C) The vessel's home port
  - o (D) The stowage space assigned

If choice B is selected set score to 1.

- **47.** Each distress signal and self-activated smoke signal must be replaced not later than the marked date of expiration, or, from the date of manufacture, not later than which time frame?
  - o (A) 6 months
  - o (B) 12 months
  - o (C) 24 months
  - (D) 42 months

If choice D is selected set score to 1.

- **48.** A 750 foot passenger vessel operating on the Great Lakes, not subject to SOLAS regulations, is required to carry how many ring life buoys?
  - (A) 24
  - o (B) 18
  - o (C) 12
  - o (D) 6

If choice A is selected set score to 1.

- **49.** In general, how often are sanitary inspections of passenger and crew quarters made aboard passenger vessels in river service?
  - o (A) Once each day
  - o (B) Once each week
  - (C) Once each month
  - o (D) Once each trip

If choice C is selected set score to 1.

- **50.** How does good housekeeping prevent fires on a vessel?
  - o (A) Allowing better access in an emergency
  - o (B) Eliminating trip hazards
  - o (C) Improving personnel qualifications
  - (D) Eliminating potential fuel sources

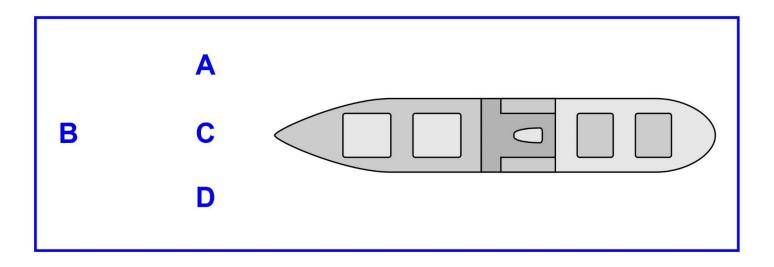
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### **D025DG**

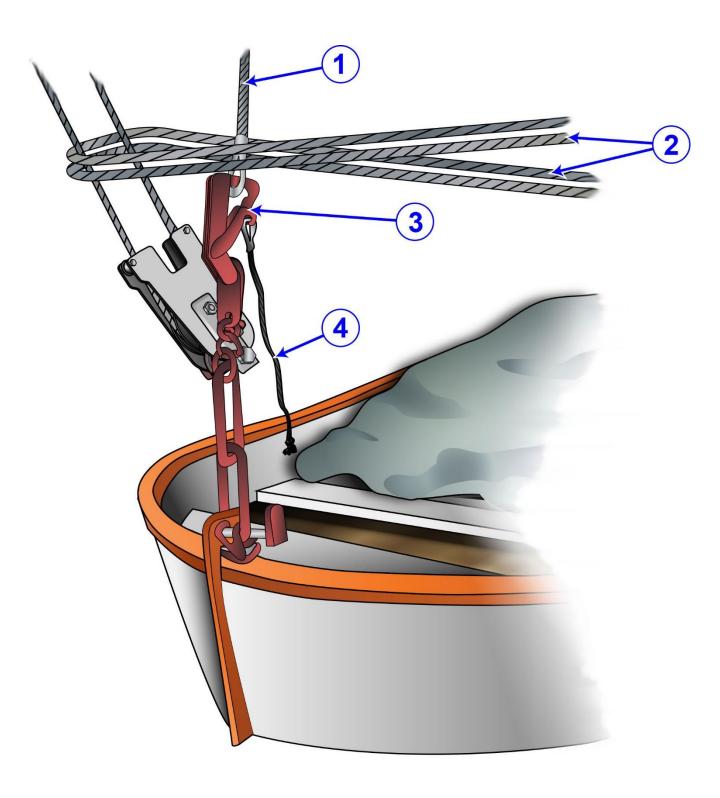


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### **D016SA**



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