U.S.C.G. Merchant Marine Exam

Towing Vessels – Western Rivers

Q423 Deck General

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

1. What is the function of a face line?
   - (A) To secure barges side-by-side
   - (B) To prevent barge movement in a lock
   - (C) To secure barges to the towboat
   - (D) To secure two barges end-to-end

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

2. You are proceeding at a slow speed with your starboard side near the right bank of a channel. If your vessel suddenly sheers toward the opposite bank, which would be the BEST action to take?
   - (A) Put engine full ahead, hard left rudder
   - (B) Put engine full astern, hard right rudder
   - (C) Put engine full ahead, hard right rudder
   - (D) Put engine full astern, hard left rudder

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

3. Your tow is proceeding through a narrow section in the river. What actions can you take to avoid any sudden sheers of the vessel?
   - (A) Increase speed and stay in the shallow section of water
   - (B) Increase speed and stay to the outer limits of the channel
   - (C) Reduce speed and stay in the deepest part of the channel
   - (D) Reduce speed and stay to the outer limits of the channel

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

4. Failure to notify the Coast Guard of an oil spill can carry a prison sentence of what duration?
   - (A) Not more than 1 year
   - (B) Not more than 2 years
   - (C) Not more than 3 years
   - (D) Not more than 5 years

   *If choice D is selected set score to 1.*
5. Using a safety factor of 6, determine the safe working load of a line with a breaking strain of 30,000 pounds.
   - (A) 5,000 lbs.
   - (B) 100,000 lbs.
   - (C) 4,000 lbs.
   - (D) 20,000 lbs.
   
   *If choice A is selected set score to 1.*

6. What is used to help prevent damage to barges, locks, and landings when you are locking or landing a tow?
   - (A) Possums (fenders)
   - (B) Landing bars
   - (C) Dock cushions
   - (D) Springers

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

7. In accordance with U.S. regulations which of the following is the proper label name for a class 2.2 substance?
   - (A) Inert gases
   - (B) Non-flammable gases
   - (C) Flammable gases
   - (D) Poison gases

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

8. Who is responsible for any wake damage caused by a passing vessel?
   - (A) The person deemed competent to steer the vessel
   - (B) No one is responsible for wake damage
   - (C) The person is charge of the passing vessel
   - (D) The owner of the damaged vessel

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

9. Which term describes the process of moving a towboat sideways?
   - (A) Downstreaming
   - (B) Twisting
   - (C) Back and Fill
   - (D) Flanking

   *If choice D is selected set score to 1.*
10. For insurance purposes, which is a requirement for a general average act?

- (A) There must be no imminent peril
- (B) It must be a successful venture
- (C) There are no losses
- (D) All of the above

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

11. Which barge in your tow would require a cargo information card to be carried in the pilothouse?

- (A) An open hopper barge carrying coal
- (B) A tank barge with a sign reading "No Visitors, No Smoking, No Open Lights"
- (C) A gas-free chlorine barge
- (D) An empty (not gas-free) barge that last carried benzene

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

12. Which deck fitting is designed to hold a line down by running it through the closed center?

Illustration WR001DG

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

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

13. Which term describes the distance a vessel moves parallel to the original course from the point where the rudder is put over to any point on the turning circle?

- (A) Advance
- (B) Drift angle
- (C) Transfer
- (D) Pivoting point

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

14. Which agency must approve the Safety equipment on board inspected vessels?

- (A) The Occupational Safety and Health Administration (OSHA)
- (B) The National Safety Council
- (C) The U.S. Coast Guard
- (D) The Safety Standards Bureau

*If choice C is selected set score to 1.*
15. Which is the principal danger from ice collecting on a vessel?

- (A) The loss of stability
- (B) The decrease in displacement
- (C) The adverse effect on trim
- (D) The decrease in capabilities of radar

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

16. How many type hand portable fire extinguishers are required in the machinery space of a towing vessel with 1,400 B.H.P.?

- (A) Two B-II (Post 2016 Regulation Equivalent is Two 40-B:C)
- (B) Three B-II (Post 2016 Regulation Equivalent is Three 40-B:C)
- (C) Four B-II (Post 2016 Regulation Equivalent is Four 40-B:C)
- (D) Five B-II (Post 2016 Regulation Equivalent is Five 40-B:C)

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

17. Which term describes a piece of small stuff (small line) secured to an object to prevent it from going adrift?

- (A) stopper
- (B) keeper
- (C) noose
- (D) lanyard

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

18. What is the main reason to slush a wire rope?

- (A) Keep the wire soft and manageable
- (B) Prevent kinking
- (C) Prevent rotting
- (D) Lubricate the inner wires and prevent wear

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

19. Parting which wire is one of the greatest hazards of pushing ahead? Illustration D024DG

- (A) A
- (B) B
- (C) F
- (D) I

*If choice D is selected set score to 1.*
20. What type of knot in illustration D030DG below is indicated by the Letter "J"?

- (A) Becket bend
- (B) Plain whipping
- (C) Bowline
- (D) Marline hitch

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

21. What is the minimum number of hand portable fire extinguishers required on board a 105 GT towboat with a 7500 B.H.P. plant (including the machinery space)?

- (A) Six B-II (Post 2016 Regulation equivalent Six 40-B:C)
- (B) Eight B-II (Post 2016 Regulation equivalent Eight 40-B:C)
- (C) Nine B-II (Post 2016 Regulation equivalent Nine 40-B:C)
- (D) Eleven B-II (Post 2016 Regulation equivalent Eleven 40-B:C)

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

22. Which knot shown in illustration D030DG below represents a square knot?

- (A) P
- (B) H
- (C) R
- (D) W

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

23. You are in the process of adding a barge to your tow. A line run from your power capstan and around timber heads on your tow is made fast on the new barge so that it can be pulled into position. What is this line called?

- (A) Capstan line
- (B) Scissors wire
- (C) Fore and aft line
- (D) Spring line

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

24. Which fitting is a timberhead? Illustration WR001DG

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

*If choice A is selected set score to 1.*
25. Which statement is TRUE when comparing manila line, size for size, to nylon?

- (A) Nylon has more strength than manila line
- (B) Nylon has less strength than manila line
- (C) Nylon will rot quicker than manila line
- (D) Nylon is equivalent to manila line

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

26. In accordance with U.S. regulations which of the following is the proper label name for a class 4.1 substance?

- (A) Flammable solid
- (B) Flammable liquid
- (C) Non-flammable gases
- (D) Dangerous when wet

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

27. Which is the requirement for the name and hailing port of a documented commercial vessel?

- (A) It is required to be marked on both bows and on the keel
- (B) It is required to be marked on the stern with the name of the vessel marked on both bows
- (C) It is not required to be marked anywhere on the vessel
- (D) It is required to be marked on the keel, stern, and both bows

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

28. Which of the following is issued a Towing Safety Management System (TSMS) Certificate?

- (A) The Master of the vessel
- (B) TSMS Certificates are not issued
- (C) TSMS are issued to the vessel
- (D) The owner or managing operator

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

29. The owner or Master of a vessel pushing ahead or towing alongside must ensure that each of the following is appropriate for the vessel's horsepower and tow arrangement EXCEPT which item?

- (A) Hydraulic couplings
- (B) Spring lines
- (C) Push gear
- (D) Face wires

*If choice A is selected set score to 1.*
30. Which item is rigged to transmit the thrust from one barge to another barge when going ahead? Illustration D024DG

- (A) I
- (B) H
- (C) E
- (D) B

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

31. You are making tow. A loaded, open-hopper barge with independent tanks has placards, with alternating red and white quadrants, located at each side and end. You inspect the barge and find slight traces of water in the wing voids due to condensation. What should you do?

- (A) Accept the barge and when weather conditions permit run with the wing voids open to ventilate the spaces.
- (B) Refuse to accept the barge until all wing voids are dry.
- (C) Return the barge to the fleet and depart without the barge.
- (D) Accept the barge and periodically check the wing voids.

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

32. How long is a credential issued by the U.S. Coast Guard for apprentice mate (steersman) of Towing Vessels valid for?

- (A) 2 years and must be renewed
- (B) 3 years and must be renewed
- (C) 5 years and must be renewed
- (D) None of the above

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

33. In relation to the turning circle of a vessel, which defines the term “transfer”?

- (A) The distance the ship moves sidewise from the original course away from the direction of the turn after the rudder is first put over
- (B) The distance gained at right angles to the original course
- (C) The distance around the circumference of the turning circle
- (D) The distance gained in the direction of the original course

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

34. 33 CFR 156 deals with matters concerning which of the following topics?

- (A) Operation of nautical school ships
- (B) Lifesaving and firefighting equipment
- (C) Oil and hazardous material transfer operations
- (D) Vessel construction and design

*If choice C is selected set score to 1.*
35. Which is the Best way to reduce your wake in a narrow channel?

- (A) Apply enough rudder to counter the effect of the current
- (B) Change your course to a zigzag course
- (C) Reduce your speed
- (D) Shift the weight to the stern

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

36. Which type of line melts the easiest?

- (A) Nylon
- (B) Dacron
- (C) Wire
- (D) Polypropylene

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

37. Which of the following in the illustration is a jockey wire? Illustration D024DG

- (A) B
- (B) C
- (C) F
- (D) H

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

38. Which term describes the amount of force a tug can exert on a stationary pull?

- (A) Brake horsepower
- (B) Indicated horsepower
- (C) Bollard pull
- (D) Shaft horsepower

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

39. Your towboat is voluntarily enrolled in a Safety Management System as noted in 33 CFR. Who is issued the Document of Compliance?

- (A) The Master of the towboat
- (B) The lienholder of the vessel
- (C) A responsible person or the company which owns the vessel
- (D) Only the Coast Guard holds the Document of Compliance Certificate for a vessel

*If choice C is selected set score to 1.*
40. Your towboat has been chartered to the Down River Towing Company. The Down River Towing Company agrees to pay all expenses and employ and pay the crew. Which type of contract is involved?

- (A) Time Charter Party
- (B) Voyage Charter Party
- (C) Lease Charter Party
- (D) Bareboat Charter Party

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

41. What is used to prevent wear on towlines that bear on hard surfaces?

- (A) Chafing gear
- (B) Chocks
- (C) Boots
- (D) Grease

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

42. What imminent danger results from tripping?

- (A) The stern of the tug submerges causing flooding into engine room
- (B) The barge(s) collide with the stern
- (C) Your tug being pulled backwards by the tow
- (D) Capsizing the tug

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

43. Which statement is TRUE concerning the placard entitled "Discharge of Oil Prohibited"?

- (A) It is required on all vessels.
- (B) It must be located at the bilge and ballast pump control station.
- (C) It must be located in a conspicuous place in the wheelhouse.
- (D) All of the above

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

44. Before welding in a tank barge that has carried petroleum products, who must certify the tank to be safe for hot work?

- (A) The Coast Guard
- (B) The shipyard fire department
- (C) The American Bureau of Shipping
- (D) A certified marine chemist

*If choice D is selected set score to 1.*
45. When do the towing vessel fire protection regulations allow a towing vessel to carry portable fuel systems on board?

- (A) When used for outboard engines
- (B) When used for portable equipment such as bilge and fire pumps
- (C) If the portable tanks used for portable equipment meet published safety standards
- (D) All of the above

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

46. You are operating a non-ocean going vessel, how much of the accumulated oily waste must you be able to retain on board?

- (A) 25%
- (B) 50%
- (C) 75%
- (D) 100%

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

47. Where is the pivoting point located on a towboat pushing barges ahead proceeding at normal speed?

- (A) One-half the length from the head of the tow
- (B) One-third the length from the head of the tow
- (C) Right at the head of the tow
- (D) Two-thirds the length from the head of the tow

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

48. You are berthed at a cargo facility where you have just completed discharging a dangerous cargo. You must complete topside repairs involving hot-work before sailing. Which of the following statements is TRUE?

- (A) You can make repairs with permission of the facility owner since you are empty and the cargo is on the facility.
- (B) The Captain of the Port may give specific approval to make hot-work repairs.
- (C) Hot-work repairs at such a facility are prohibited.
- (D) The repair area must be inspected by a marine surveyor to ensure that it can be done safely.

*If choice B is selected set score to 1.*
49. A snatch block would most likely be used in which application?

- (A) As a riding pawl
- (B) As a topping lift
- (C) As a boat fall
- (D) As a fairlead

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

50. In cleaning up an oil spill, which term depicts the main function of straw?

- (A) It acts as a chemical agent
- (B) It acts as a blocker
- (C) It acts as a sorbent
- (D) None of the above

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