U.S.C.G. Merchant Marine Exam

Master or Mate Less than 200 Gross Registered Tons

Q461-Assistance Towing Endorsement

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

1. You are using tackle number 12 shown in illustration D029DG below to lift a weight of 300 lbs. If you include 10 percent of the weight for each sheave for friction, what is the pull on the hauling part required to lift the weight?

   - (A) 80 lbs.
   - (B) 69 lbs.
   - (C) 50 lbs.
   - (D) 55 lbs.

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

2. When running before a heavy sea, what will moving weights aft on the vessel accomplish?

   - (A) Reduce the yawing of the vessel
   - (B) Reduce the rolling of the vessel
   - (C) Increase the rolling of the vessel
   - (D) Increase the yawing of the vessel

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

3. What does the term "overriding" or "overrunning" when applied to towing, imply?

   - (A) The tow has overtaken its tug
   - (B) There is more crew on board than required
   - (C) The towing hawser comes out of the water
   - (D) The Norman pins are not effective

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

4. When must the owner or master of a towing vessel retest a towline or remove it from service?

   - (A) When the record of its material condition lapses for 3 months or more.
   - (B) After it drags on the bottom.
   - (C) When it has not been used for over 60 days.
   - (D) After it jams on the towing winch.

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

5. Of which type of material may a towing hawser be constructed?

   - (A) Polyester
   - (B) Nylon
   - (C) Wire rope
   - (D) All of the above

   *If choice D is selected set score to 1.*
6. 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
  - (B) B
  - (C) C
  - (D) D

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

7. Which is TRUE of a long splice in a three strand line?

- (A) It can be used in running rigging
  - (B) The splice is very weak
  - (C) The splice doubles the size of the line
  - (D) The splice is only used on fiber rope

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

8. What is the name of the metal, teardrop-shaped object sometimes used within an eye-splice?

- (A) Grommet
  - (B) Splice form
  - (C) Reinforcement
  - (D) Thimble

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

9. When working with any synthetic line, you should keep well clear of which situation?

- (A) When a line is being eased out under control
  - (B) When lines that are coiled down
  - (C) When a line is under a heavy strain
  - (D) None of the above are correct

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

10. Why is it good practice to use long towlines for ocean tows?

- (A) The weight of the towline increases the towing force
  - (B) The dip (catenary) in the towline absorbs shock loads
  - (C) The danger of overriding is reduced
  - (D) The wear on the towline is equalized

*If choice B is selected set score to 1.*
11. What is the name of the circular steel structure installed around the propeller(wheel) of a towboat?

- (A) Hood
- (B) Shroud
- (C) Kort nozzle
- (D) Strut

If choice C is selected set score to 1.

12. 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?

- (A) Install chafing gear on the towline
- (B) Compare the rate of drift between the ships
- (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 B is selected set score to 1.

13. When towing astern, what is the effect of increasing the catenary?

- (A) An increase control of the tow
- (B) Reduce shock stress on the towing hawser
- (C) Prevents the towing vessel from going in irons
- (D) Makes the towing vessel less maneuverable

If choice B is selected set score to 1.

14. A towing vessel becomes tripped while towing on a hawser astern. What factor is LEAST important when assessing the risk of capsizing?

- (A) Length of the towline
- (B) Length of the barge
- (C) Height of the towline connection
- (D) Direction of opposing force

If choice B is selected set score to 1.

15. You are on a ship that has broken down and are preparing to be taken in tow. You will use your anchor cable as part of the towline. Which statement is TRUE?

- (A) The strain of the tow is taken by the riding pawl, chain stopper, and anchor windlass brake.
- (B) The anchor cable should be veered enough to allow the towline connection to be immediately astern of the towing vessel.
- (C) The anchor cable should be veered enough to allow the towline connection to be just forward of your bow.
- (D) The anchor cable should be led out through a chock, if possible, to avoid a sharp nip at the hawsepipe lip.

If choice A is selected set score to 1.
16. 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) Push gear
- (C) Face wires
- (D) Spring lines

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

17. Which action reduces the yawing of a vessel in a following sea?

- (A) Pumping out tanks aft
- (B) Increasing GM
- (C) Shifting weights to the stern
- (D) Shifting weights to the bow

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

18. Which type of line would have the LEAST resistance to mildew and rot?

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

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

19. Which describes yawing?

- (A) Corkscrew motion of the tow due to wave action
- (B) Jumping on the towline as the tow slams into waves
- (C) Veering from side to side on the end of the towline
- (D) Jumping on the towline as the tow pitches

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

20. Which is the primary advantage of using a chain bridle when towing astern offshore?

- (A) It provides an effective catenary and absorbs shock due to its weight
- (B) It prevents the tow from yawing by the drag of the chains in a seaway
- (C) It makes rigging a swivel unnecessary
- (D) The chain is easy to connect

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