

# Chapter 7 Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Directions:** Write the correct letter on the blank before each question.

- \_\_\_\_\_ 1. According to NFPA 1983, what must be used to make life safety rope? (277) [4.3.20]
- A. Sisal fibers
  - B. Cotton fibers
  - C. Block creel construction
  - D. Braided rope construction
- \_\_\_\_\_ 2. In order for life safety rope to be reused in life safety situations, it must NOT be: (278) [4.3.20]
- A. the same color as utility rope.
  - B. exposed to heat or direct flame.
  - C. made of block creel construction.
  - D. stored in apparatus compartments.
- \_\_\_\_\_ 3. Life safety rope must be removed from service if it has been: (278) [4.3.20]
- A. used for a water rescue.
  - B. used more than ten times.
  - C. subjected to an impact load.
  - D. subjected to temperatures below freezing.
- \_\_\_\_\_ 4. At an emergency incident, utility rope can be used for: (278) [4.3.20]
- A. a rescue or hoisting operation .
  - B. creating a control zone perimeter.
  - C. rescuing a victim from swift water.
  - D. supporting a firefighter who is rappelling.

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- \_\_\_\_\_ 5. What is one disadvantage of synthetic fiber rope? (279) [4.3.20]
- A. Must be replaced often
  - B. Prone to mold and mildew
  - C. Cannot support heavy loads
  - D. Melts when exposed to heat
- \_\_\_\_\_ 6. Synthetic fiber rope: (279) [4.3.20]
- A. is difficult to clean, inspect, and maintain.
  - B. has a longer life span than natural fiber rope.
  - C. is made from materials such as sisal or hemp.
  - D. should not be used for life safety applications.
- \_\_\_\_\_ 7. Natural fiber ropes: (279) [4.3.20]
- A. should not be used as utility rope.
  - B. melt when exposed to heat or flame.
  - C. should not be used for life safety applications.
  - D. are resistant to mold, mildew, and chemical damage.
- \_\_\_\_\_ 8. What is one advantage of natural fiber rope? (279)
- A. Resistant to mold and mildew
  - B. Longer life span than synthetic rope
  - C. Can be used for life safety applications
  - D. More resistant to sunlight than synthetic rope
- \_\_\_\_\_ 9. Which type of rope is used as a belay line when there is a possibility that a victim or firefighter may fall a long distance while supported by the rope? (279) [4.3.20]
- A. Braided rope
  - B. Twisted rope
  - C. Static kernmantle rope
  - D. Dynamic kernmantle rope
- \_\_\_\_\_ 10. Rope that is used exclusively for utility rope and is susceptible to abrasion and damage because a large portion of the load-bearing strands are exposed is known as: (280) [4.3.20]
- A. laid rope.
  - B. dynamic rope.
  - C. kernmantle rope.
  - D. braid-on-braid rope.

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- \_\_\_\_\_ 11. Which type of rope is commonly used as utility rope and is constructed by uniformly intertwining strands of rope together in a diagonally overlapping pattern? (280) [4.3.20]
- A. Laid rope
  - B. Braided rope
  - C. Twisted rope
  - D. Kernmantle rope
- \_\_\_\_\_ 12. Braid-on-braid rope is usually used: (281) [4.3.20]
- A. as utility rope.
  - B. as life safety rope.
  - C. for rescues where long falls are possible.
  - D. for rescues where long falls are not possible.
- \_\_\_\_\_ 13. Personnel should inspect all ropes after each use and inspect unused rope: (282) [4.5.1]
- A. at least once a year.
  - B. at least once a month.
  - C. after exposure to open flame.
  - D. at least once every six weeks.
- \_\_\_\_\_ 14. If foreign objects that can damage fibers are found in a rope during inspection, the rope: (282) [4.5.1, 4.3.20]
- A. should be downgraded to utility rope.
  - B. should be removed from service and destroyed.
  - C. must be sent to the manufacturer for further inspection.
  - D. must be thoroughly cleaned and reinspected before reuse.
- \_\_\_\_\_ 15. When inspecting kernmantle rope, look at the sheath: (282) [4.5.1]
- A. to determine the age of the rope.
  - B. for irregularities in shape or weave.
  - C. for signs of powdering between the strands.
  - D. to determine whether it has been impact loaded.

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- \_\_\_\_\_ 16. What should be done if inspection on laid rope reveals that one rope has rot? (283) [4.5.1, 4.3.20]
- A. Clean the rotten rope and return the entire rope to service.
  - B. Remove all surrounding ropes from service, then clean and reinspect them.
  - C. Remove the rotten rope and all surrounding ropes from service and destroy them.
  - D. Cut off the rotten area of the rope before returning the remainder to service.
- \_\_\_\_\_ 17. Lumps in the sheath of braid-on-braid rope indicate: (283) [4.5.1]
- A. rope rot.
  - B. core damage.
  - C. impact loading.
  - D. mildew damage.
- \_\_\_\_\_ 18. To ensure that rope stays in good working condition, it is important to: (283) [4.5.1]
- A. paint the ends of the rope.
  - B. avoid abrasion and unnecessary wear.
  - C. always coil and uncoil the rope in the same direction.
  - D. clean the rope with strong chemicals to remove oil and grease.
- \_\_\_\_\_ 19. What should be used to clean synthetic fiber ropes? (284) [4.5.1]
- A. Cold water
  - B. Bleach and hot water
  - C. Lukewarm water and mild detergent
  - D. Specially formulated industrial cleansers
- \_\_\_\_\_ 20. Which method is acceptable to use when drying synthetic rope? (285) [4.5.1]
- A. Hang it on a hose tower
  - B. Lay it flat to dry outside in the sun
  - C. Place it in a clothes dryer on a high heat setting
  - D. Use a hairdryer to dry small sections of the rope at a time



- \_\_\_\_\_ 21. Rope logs: (285) [4.5.1]
- A. are required for both life safety and utility rope.
  - B. must be updated daily with inspection information.
  - C. should be completed by the department's training officer.
  - D. should include information about incidents that result in impact loading.
- \_\_\_\_\_ 22. What is the best way to store rope? (286) [4.5.1]
- A. An open-air carrying case
  - B. On reels outside the station
  - C. In an apparatus compartment
  - D. A nylon or canvas storage bag
- \_\_\_\_\_ 23. Which type of webbing is primarily used for straps and harnesses at rescue incidents? (286) [4.3.20]
- A. Flat webbing
  - B. Tubular webbing
  - C. Shuttle-loom webbing
  - D. Spiral weave webbing
- \_\_\_\_\_ 24. How should long lengths of webbing be stored? (287) [4.5.1]
- A. Placed in a mesh bag
  - B. Rolled or daisy-chained
  - C. Folded in an apparatus compartment
  - D. Placed in air-tight and water-tight bins
- \_\_\_\_\_ 25. Which part of a rope hangs free and is used for pulling or hoisting? (287) [4.3.20]
- A. Hitch end
  - B. Working end
  - C. Running part
  - D. Standing part
- \_\_\_\_\_ 26. What is involved in *dressing* a knot? (287) [4.3.20]
- A. Beginning with a temporary hitch
  - B. Creating the bight to start the knot
  - C. Tightening the knot and removing slack
  - D. Untying the knot and straightening the rope

- \_\_\_\_\_ 27. What part of a knot is formed by crossing the side of a bight over the standing part of the rope? (288) [4.3.20]
- A. Loop
  - B. Hitch
  - C. Safety
  - D. Round turn
- \_\_\_\_\_ 28. An overhand safety knot: (288) [4.3.20]
- A. is the best knot to use for hoisting and rescue operations.
  - B. is not used in the fire service because of its ineffectiveness.
  - C. must always be used in conjunction with another knot in order to be effective.
  - D. can be used to keep the running end of the rope from slipping through the first knot that is tied.
- \_\_\_\_\_ 29. Which type of knot is used primarily on life safety ropes to tie ropes of equal diameters together? (290) [4.3.20]
- A. Clove hitch
  - B. Overhand safety
  - C. Figure-eight bend
  - D. Figure-eight on a bight
- \_\_\_\_\_ 30. Which knot is a good choice to use when a closed loop is needed? (290) [4.3.20]
- A. Clove hitch
  - B. Water knot
  - C. Overhand safety knot
  - D. Figure-eight on a bight
- \_\_\_\_\_ 31. Which is the preferred knot for joining two pieces of webbing together? (291) [4.3.20]
- A. Half hitch
  - B. Water knot
  - C. Clove hitch
  - D. Figure-eight

- \_\_\_\_\_ 32. A metal snap link that is used to connect ropes to other mechanical gear is called a: (293) [4.3.20]
- A. hitch.
  - B. pulley.
  - C. carabiner.
  - D. winch cable.
- \_\_\_\_\_ 33. What can be used to create a mechanical advantage for rope rescue or when hoisting heavy objects? (293) [4.3.20]
- A. Lever
  - B. Pulley
  - C. Pike pole
  - D. Figure-eight
- \_\_\_\_\_ 34. When hoisting tools and equipment, always remember to: (293) [4.3.20]
- A. charge a hoseline before hoisting it.
  - B. use a carabiner to create a mechanical advantage.
  - C. use a team of three people for every hoisting operation.
  - D. make sure that all personnel are clear of the hoisting area.
- \_\_\_\_\_ 35. How should a pike pole be hoisted? (294) [4.3.20]
- A. Pike pointing up
  - B. Pike pointing down
  - C. Secured to the ladder
  - D. Attached to another tool
- \_\_\_\_\_ 36. What is a guideline for hoisting a hoseline? (294) [4.3.20]
- A. Never hoist a charged hoseline.
  - B. Never hoist an uncharged hoseline.
  - C. Remove the nozzle and hoist it separately.
  - D. Avoid causing damage to the nozzle or couplings.
- \_\_\_\_\_ 37. When hoisting a power saw, attach the tag line: (294) [4.3.20]
- A. through the handle.
  - B. to the center part of the saw.
  - C. to the largest part of the saw.
  - D. in a circle around the body of the saw.

- \_\_\_\_\_ 38. What should life safety rope be used for at a rescue incident? (295)  
*[4.3.9]*
- A. Laying a search line
  - B. Establishing a perimeter
  - C. Lifting victims and rescuers
  - D. Stabilizing tools being hoisted
- \_\_\_\_\_ 39. Which type of rope is traditionally used to establish the perimeter of scene control zones? (295) *[4.3.3, 4.3.20]*
- A. Utility rope
  - B. Search lines
  - C. Branch lines
  - D. Life safety rope
- \_\_\_\_\_ 40. What should be used in a confined space in order to help firefighters remain in contact with one another and find their way to the exit? (295) *[4.3.3, 4.3.20]*
- A. Tag line
  - B. Search line
  - C. Life safety rope
  - D. Wire rope or cable
- \_\_\_\_\_ 41. When using wire rope or cable from a winch, rescuers must: (296)  
*[4.3.3]*
- A. use a tag line to help stabilize the rope or cable.
  - B. use a redundant utility rope system in case of failure.
  - C. ensure that personnel are clear from the operating area.
  - D. avoid tying the rope or winch cable to a stationary object.