

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

1. There are two primary types of rope in the fire service, each dedicated to a distinct function. What is one of the types?
  - a) Pulling rope   b) Knot-tying rope   c) Life safety rope   d) Anti-slip rope
2. When is utility rope used?
  - a) When it will not be necessary to tie any knots in the rope
  - b) When it is not necessary to support the weight of a person
  - c) When there is no chance of introducing a shock load to the rope
  - d) When the rope will be used to bind rather than support a load
3. What is the term for a rope that is intended to be used by a fire fighter only for self-rescue from an extreme situation?
  - a) PELSR   b) Personal bail rope   c) Escape rope   d) Personal rescue rope
4. What is the term for a rope used on an extension ladder to raise a fly section?
  - a) Running line   b) Hoisting sheet   c) Extension rope   d) Ladder halyard
5. How, if at all, should fire fighters be able to recognize the category of a rope?
  - a) From the tag on the mill end of the rope
  - b) From the paperwork that came with the rope
  - c) From the appearance and markings of the rope
  - d) They cannot be expected to make this distinction
6. With natural fiber ropes, the fibers are twisted together to form a structure. What is this structure called?
  - a) A braid   b) A plait   c) A strand   d) A pearl
7. Under what conditions do natural fiber ropes deteriorate with age?
  - a) Only if stored wet
  - b) Only if allowed to mildew
  - c) Only if run over rough surfaces
  - d) They deteriorate even if stored properly

8. Exposure to a certain type of light can damage synthetic ropes. What type of light?  
a) Ultraviolet b) Infrared c) Incandescent d) Fluorescent
9. What is the most common synthetic fiber used in life safety rope?  
a) Hemp b) Teflon c) Nylon d) Vinyl
10. What is the lightest of the synthetic fibers?  
a) Polyethylene b) Polybutylene c) Polypentylene d) Polypropylene
11. What is the kern of a kernmantle rope?  
a) The core b) The sheath c) The end d) The weave
12. About how much of a kernmantle rope's strength is provided by the mantle?  
a) 15% b) 30% c) 45% d) 60%
13. What is one type of harness?  
a) Jacob b) Invertible c) Open d) Chest
14. There are four parts to the maintenance formula for ropes. What is one of those?  
a) Store b) Shore c) Coil d) Curl
15. Why should rope be protected from prolonged exposure to sunlight?  
a) Because exposure to ultraviolet radiation can damage rope  
b) Because the inside of a rope heats up to damaging temperatures  
c) Because the heat causes delamination of the sheath of ropes  
d) Because the rope can easily become hot enough to the touch to cause burns
16. What is the usual method of choice for drying ropes?  
a) Use of mechanical drying device c) Air drying  
b) In-the-bag drying d) Stretching rope very taut

17. When inspecting a kermantle rope, what finding should alert fire fighters to possible damage in the rope?
- a) Color change of the kern
  - b) Apparent intactness of the mantle
  - c) Depressions of the kern
  - d) Color change of the stress threading in the mantle
18. What is one item that would be included in a life safety rope's rope record?
- a) Each time it was used
  - b) Each person's name who has checked it out
  - c) Who purchased the rope
  - d) The rope's life expectancy
19. What is one of the questions to consider when inspecting life safety ropes?
- a) Has the rope ever parted under load?
  - b) Has the rope been inactive for more than three months?
  - c) Has the rope been exposed to shock loads?
  - d) Is the rope routinely used as barrier rope at scenes?
20. When placing a life safety rope into a bag for storage, what knot, if any, should be tied in the end of the rope that is going into the bag first?
- a) A monkey's fist
  - b) A full sheepshank
  - c) A figure eight on a bight
  - d) An anchorman's tri-loop
21. What effect do knots in ropes have on their load-bearing capacity?
- a) They lessen it
  - b) They strengthen it
  - c) They have no effect
  - d) It depends on the knot
22. What is the term for that part of a rope used for forming a knot?
- a) The whipping end
  - b) The overhand
  - c) The underhand
  - d) The working end
23. What knot feature is formed by making a circle in a rope?
- a) A cinch
  - b) A snub
  - c) A loop
  - d) A coil

24. What is another term for a safety knot?

- a) A rescue knot   b) A finishing knot   c) An overhand knot   d) A double hitch

25. What is the application of a safety knot?

- a) To finish the other basic knots  
b) To keep a rope from running completely through a pulley or eye  
c) To form a loop that does not tighten, for rescue  
d) To attach a rope to a pole in a way that cannot vibrate loose

## **Answer Key**

1. c
2. b
3. c
4. d
5. c
6. c
7. d
8. a
9. c
10. d
11. a
12. b
13. d
14. a
15. a
16. c
17. c
18. a
19. c
20. c
21. a
22. d
23. c
24. c
25. a