

U.S. Fire Administration / National Fire Academy

*Coffee Break's Over!***Self-Evaluation**

(Answers are on last page. Reference numbers in parentheses pertain to the Coffee Break Training bulletin of the same number.)

Student Name _____

Student ID # _____

Date _____

1. Chapter 13 of NFPA 1, Uniform Fire Code™, requires a minimum clearance of 5 feet (1,524 mm) around all fire protection system control valves. (Reference 2007-26)
T or F
2. All electrical wiring, including low-voltage fire alarm systems, must be installed (Reference 2007-14)
 - a. in rigid metal conduit.
 - b. in rigid plastic conduit.
 - c. in flexible metal conduit.
 - d. in a neat and workmanlike manner.
3. All electrical wiring, including low-voltage fire alarm systems, that are installed on the surface of walls or ceilings must be supported by structural components so they will not be damaged by normal activities within the occupancy. (Reference 2007-14)
T or F
4. If not installed in conduit nor protected by a steel plate or bushing, fire alarm cables run through wood joists or studs must be at least _____ inches (mm) from the nearest edge of the wood. (Reference 2007-14)
 - a. 1-1/4 (31.8 mm)
 - b. 1-1/2 (38.1 mm)
 - c. 1-5/8 (41.3 mm)
 - d. 1-3/4 (44.5 mm)
5. To convert a British thermal unit (Btu) to a Joule, one must multiply the Btu by (Reference 2007-15)
 - a. 1,000.
 - b. 1,054.8.
 - c. 2.2658.
 - d. πr^2
6. To convert a liter to a gallon, one must multiply a liter by (Reference 2007-15)
 - a. 3.7583.
 - b. 100.
 - c. $L^{1.35}$.
 - d. 0.26418.
7. The Underwriters Laboratories standard for evaluating fuel-dispensing hoses for motor vehicle service stations is (Reference 2007-24)
 - a. UL 110, Standard for Safety for Gasoline Hose.
 - b. UL 115, Standard for Safety for Gasoline, Diesel, Hydrogen and CNG Hose.
 - c. UL 227A, Standard for Safety for Fuel Dispensing Hoses For Motor Vehicle Service Stations.
 - d. UL 330, Standard for Safety for Hose and Hose Assemblies for Dispensing Flammable Liquids.
8. Michael Faraday's observations and lectures on burning candles helped with our understanding of (Reference 2007-16)
 - a. convective air currents.
 - b. capillary action.
 - c. carbon's influence on flame visibility.
 - d. all of the above.
9. A fire pump suction line must be designed and installed to optimize (Reference 2007-17)
 - a. hydrodynamic flow.
 - b. asynchronous flow.
 - c. laminar flow.
 - d. precavitalational subsidence flow.

10. Outdoor storage of combustible materials should be not more than _____ feet (mm) high. (Reference 2007-23)
- 20 (6,096 mm)
 - 25 (7,620 mm)
 - 30 (9,144 mm)
 - 40 (12,192 mm)
11. In order to minimize turbulence in a fire pump suction line, valves (except OS&Y), fittings, strainers, elbows, and other obstructions must be at least _____ pipe diameters ahead of the suction flange. (Reference 2007-17)
- 10
 - 12
 - 14
 - 16
12. According to UL 330, *Standard for Safety for Hose and Hose Assemblies for Dispensing Flammable Liquids*, the term “gasoline” includes gasoline with small amounts of additives such as detergents, solvents for detergents, and anti-icing chemicals, and gasoline with up to 15 percent ethanol or MTBE. (Reference 2007-24)
- T or F**
13. Once each month, an aircraft fueling hose should be fully extended from the vehicle and given a (Reference 2007-20)
- hydrostatic pressure test.
 - thorough inspection.
 - cleaning with high-pressure water and water-soluble detergent.
 - all of the above.
14. A fire pump assembly needs to have an inline 8-inch (203 mm) diameter strainer installed between the water tank and suction flange. How many inches ahead of the suction flange must the strainer be located to satisfy NFPA 20, *Standard for the Installation of Stationary Fire Pumps for Fire Protection*? (Reference 2007-17)
- 40 inches (1,016 mm).
 - 60 inches (1,524 mm).
 - 75.4 inches (1,915 mm).
 - 80 inches (2,032 mm).
15. Diesel-drive fire pump assemblies must have a relief valve when the net rated shutoff (churn) pressure plus the maximum static suction pressure, adjusted for elevation, exceeds _____ percent of the pressure for which the system components are rated. (Reference 2007-18)
- 100
 - 110
 - 120
 - 121
 - none of the above
16. When the total quantity of liquefied petroleum gas (LPG) at a consumer exchange outlet is less than 720 pounds (328.8 kg), the cylinders must be located at least _____ feet from openings into the building. (Reference 2007-22)
- 3 (914 mm)
 - 5 (1,524 mm)
 - 10 (3,038 mm)
 - none of the above.
17. Outdoor storage of combustible materials is never allowed adjacent to a property line. (Reference 2007-23)
- T or F**
18. The term “workmanlike manner” is defined in the model codes and standards as: (Reference 2007-25)
- the way work is customarily done in the community.
 - the way work is customarily done throughout the Nation.
 - meeting all of the adopted codes and standards.
 - meeting only the approval of the local code official.
 - none of the above.
19. Electric variable-speed pressure-limiting control fire pump drivers are always required to have a pressure relief valve on the downstream side of the pump. (Reference 2007-18)
- T or F**

20. When a relief valve is required, a fire pump assembly rated at 1,250 gpm (4,731 lpm) must have a relief valve at least _____ inches (mm) discharging to an outlet not less than _____ inches (mm). (Reference 2007-18)
- 3 (76 mm); 5 (127 mm)
 - 4 (102 mm); 6 (152 mm)
 - 6 (152 mm); 6 (152 mm)
 - 6 (152 mm); 8 (203 mm)
21. According to the International Fire Code®, the aggregate area of spray booths in a building may not exceed _____ percent of the actual floor area, or the basic allowable area for a Group _____, Division 2 occupancy without allowable increases. (Reference 2007-19)
- 5; F
 - 10; F
 - 5; H
 - 10; H
22. Hoses on aircraft fueling vehicles should be inspected (Reference 2007-20)
- before each use.
 - after each use.
 - before and after each use.
 - daily before they are used.
23. Aisles in retail consumer fireworks salesrooms should be not less than _____ inches (mm) wide. (Reference 2007-21)
- 48 (1,219 mm)
 - 36 (910 mm)
 - 24 (610 mm)
 - 22 (559 mm)
24. If a building has only one means of egress, LPG cylinders in consumer exchange programs must be located at least _____ feet (mm) from the doorway. (Reference 2007-22)
- 3 (914 mm)
 - 5 (1,524 mm)
 - 10 (3,038 mm)
 - none of the above
25. Egress doors in retail consumer fireworks salesrooms should be not less than _____ inches (mm) wide, with a clear width of _____ inches (mm). (Reference 2007-21)
- 36 (910 mm); 22 (559 mm)
 - 36 (910 mm); 34 (863 mm)
 - 36 (910 mm); 32 (813 mm)
 - 48 (1,219 mm); 44 (1,117 mm)
26. Each month, aircraft fueling hose strength should be checked within _____ inches (mm) of the couplings by pressing the circumference to reveal soft spots. (Reference 2007-20)
- 6 (152 mm)
 - 10 (254 mm)
 - 12 (305 mm)
 - 18 (455 mm)
27. The separation distance between outdoor combustible storage and property lines can be reduced to 3 feet (914 mm) if the storage height does not exceed _____ feet (mm). (Reference 2007-23)
- 3 (914 mm)
 - 5 (1,524 mm)
 - 6 (1,829 mm)
 - 10 (3,048 mm)
28. The requirements of UL 330, Standard for Safety for Hose and Hose Assemblies for Dispensing Flammable Liquids, apply to all flammable and combustible liquids. (Reference 2007-24)
- T or F

Answers: 1. F; 2. d; 3. T; 4. a; 5. b; 6. d; 7. d; 8. d; 9. c; 10. a; 11. a; 12. T; 13. b; 14. d; 15. d; 16. b; 17. F; 18. e; 19. F; 20. d; 21. d; 22. d; 23. a; 24. c; 25. c; 26. c; 27. c; 28. F