

FIRE OFFICER ONE AUGUST 2004

1. Air pressure trip point in a dry pipe system is 15-20 psi. FP p50
2. Know and understand the differential valve operation in a dry pipe system. The multiple choice answers given were a) big water small air, b) small water big air c) small air big water d) big air small water. FP p29-30
3. According to Brannigan, there are 2 ways to prestress concrete. Post tensioning and pretensioning BC p339
4. Travel distance for a Class D fire extinguisher is 75'. All class, with the exception on class B, is 75'. Class B is 30-50, depending on the hazard. FI p245
5. An extinguisher over 40#, place top no greater than 3 ½' from the floor and the bottom no less than 4 inches from the floor FI p246
6. How often is a carbon dioxide system inspected? Annually FI p256
7. A pressure tank is 2/3 full of water, 1/3 full of air and 75psi
8. To overcome the boredom of teaching a subject repeatedly: be flexible, vary the location and environment, and watch others teach it. AT p215
9. A disadvantage of a dry chemical system is the mess that it makes with the residual that is remaining. FP p160
10. Aerial ladder is best for rescue and quicker to raise than the aerial tower. The aerial tower/platform is best used for elevated streams. T/S p244-245
11. In a recycling plant, keep 18' clearance from sprinkler heads FI p80
12. Keep 18" clearance from sprinkler heads in general. FP p45
13. Most common seating arrangement in the world for a classroom is the horseshoe AT p219
14. Drucker is the "Management by Objectives" guy, Maslow is Heirarchy of Needs (know the order of the needs), McGregor has the X and Y theory (X dislikes work, Y likes it) and Blanchard "The One Minute Manager."
15. NFPA 220 is the Types of Building Construction (Type I-IV) FI p115
16. Rate of rise detector depends almost solely on the expansion characteristics.
17. Leaving questions unanswered will cause the student to reflect.
18. Besides finding out how participants viewed the training program, you need to know what attitudes, knowledge and skills they acquired. AT p297

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AT
20. Deadload is the building itself and anything permanently attached to it. BC p16
21. Rescue company carries special equipment and has training to deal w/ emergencies other than fires. Routine transportation of invalid persons should not be termed a rescue. T/S p60
22. The horizontal shaft pump gallonage varies from 500-1500 gpm. FP p94
23. The exhauster on a dry pipe system functions by quickly expelling air from the system. FFP p30
24. Paper and cloth smoke appear light gray, almost all smoke appears white in very cold weather. T/S p108
25. The physical setup of the training facility is the first impression the participants have. AT p216
26. In a perfect training room with unlimited budget, you would have magnetized walls, PC hookups to a network, and reliable temperature controls. (this was an "all of the above question") AT p216
27. Fusible vents on flammable liquid portable tanks should operate at a temperature not to exceed 300 degrees. FI p334
28. A Halon system should be inspected semiannually. FI p252
29. Tents should not cover more than 75% of the premises. FI p110
30. If a small group finished an activity long before time is up, the most likely reason is that they have had trouble processing and wrapped up their reactions too quickly. AT 274
31. Personal barriers to communication arise from judgments, emotions, and social values we place on people. CO 27
32. The qualities a subordinate looks for in his company officer is flexibility, fairness, friendliness, but not love. (multiple choice)
33. In buildings 5 stories and above, the first line goes to the standpipe, the second goes to the sprinkler.
34. Know the process for testing a wet system, specifically "the inspector should open the alarm bypass valve to test the alarm without unseating the valve. FP p51
35. Define convection. T/S p8
36. Steel is equally strong in compression and tension. BC p255
37. Concrete is low in tensile strength, strong in compression BC p325
38. Steel is 15 times stronger in compression strength than concrete.
39. Company officer is planning when they decide which objectives and goals they will pursue.

40. Top member of a truss is called a chord. BC p519
41. 2 Classes of refrigerant: Class A and B. Know what each one is. FI p90
42. Don't use carbon steel to construct cryogenic tank. FI p356
43. Storage tanks are a vessel greater than 60 gallons and in a fixed location. FI p325
44. Fire stopping is of a suitable material put between studs and in channels. BC p106
45. Siding goes on top of sheathing. BC p120
46. Know the law of heat flow. T/S p2
47. The first step in the burning process is for the fuel and oxygen to mix in proper proportions to support combustion. FI p51
48. The 4th side of the fire tetrahedron is a radical chain reaction (uninhibited chemical chain reaction) T/S p56
49. The most common indicating valve in the OS&Y. FP p18
50. Only qualified technicians should service a CO₂ system. FI p256
51. Repack explosives at least 50' away from magazines. FI p346
52. Class II standpipe is for occupant use only. FP p74
53. A thorough evaluation of a training program might involve 4 levels: reaction, learning, behavior, and results. AT p295
54. Know the results of good communications. (Multiple choice was feedback, understanding, and 2 other choices). CO p24
55. Barriers to communication include semantic, behavioral. Know what each is. CO p27-28
56. Know the difference between vapor and a gas. Vapors evolve from solids and liquids, and gas is in its natural state at various temperatures.
57. When pressure on standpipes exceed 100psi, a pressure reducing valve is required. FP p79
58. Horizontal command is tactically based. Vertical command is geographic. T/S p79
59. The 1st thirty minutes is the most important time in your presentation. AT p223
60. In new construction, 32" is minimum width of doors. FI p140
61. Training course evaluation should be numerical.
62. Fog spray is effective for liquids with a flash point above 100 degrees.
63. A footing is a short thick pad that provides support for columns. BC p328
64. A girder is a beam that supports other beams. BC p56

65. A 25% reduction is given for pressure treated wood. BC p111
66. According to NFPA 251, a flame test for a sawn beam burns through at a rate of 5 minutes per inch. BC p181
67. When rack storage is 25' high, in rack sprinklers are required. FP p43
68. On a sprinkler, an adequate residual pressure of 10psi is required at the highest head. T/S 228
69. Bricks laid lengthwise are called a stretcher course. BC p146
70. Check valve insures flow goes one way. FP p19
71. A 6' pike pole is a tool recommended for overhaul operations. T/S p146
72. In lumber yards, know factors for protecting exposures. T/S p431
73. Know notable observable factors for a fire officer at a fire.
74. First step in overhauling a car is disconnecting the battery. BC p144
75. The rate of reaction doubles for every 18 degrees. T/S p6
76. The amount of carbon that combines with O₂ makes 2.6lbs. T/S p7 (look this one up to understand ☺)
77. Heat is emitted in an exothermic reaction. T/S p7
78. The three questions for determining the general strategic plan is What is to be done, What is needed to do it and Who is to do it? T/S p69
79. Know what lapse is. BC p480
80. Atmospheric temperature affects firefighters more than it does the fire. The main effects of weather are wind, temperature, humidity. Strong winds accelerate fire with more O₂. Wind determines which side of the fire has more heat. T/S p98
81. After a group debate, instead of declaring a winner, intergrate the groups back together. AT p262 #7
82. Recommended height of a parapet wall is 3'. T/S p334
83. Know the definition of ethics. CO p90
84. How do you start a discussion after a lecture.
85. When you are ventilating an entire building, start at the top and work down. T/S p126
86. Flammable and combustible liquids fall under Class B. FI p230
87. Carbon monoxide forms 50 times more readily in a confined space than in the open. NC p164
88. The finest aggregate is sand. BC p327
89. In overhaul, it is the supervisor's job to supervise, not help with the overhaul.
90. Garden apartments are usually limited to 3 stories. BC p216
91. LPG vapor cloud, the flammability extends beyond the visible cloud. LPG gas can usually be dissipated by water streams. T/S p382-383

92. Controlling in the managerial process involves monitoring the process to ensure that the work in accomplishing the intended goals and objectives. CO p78