Fire Attack and Foam

1. How many fire fighters are in the optimal hose line crew? p. 553

A.) Two
*B.) Four
C.) Three
D.) Five

2. Which type of hose is typically limited to trash dumpster fires? p. 553

*A.) Booster hose
B.) Supply hose
C.) Forestry lines
D.) Attack hose

3. Which class foam is used to fight fires involving ordinary combustibles? p. 573

A.) Class D
B.) Class B
C.) Class C
*D.) Class A

4. Which of the following is NOT considered an advantage of the smooth-bore nozzle? p. 569

A.) They operate at a lower pressure
*B.) It absorbs heat more readily than fog streams
C.) It is easier to handle and operate
D.) There is less air movement with usage

5. How much of the triple-layer hose load should be pulled from the bed before you drop the fold? p. 558

A.) One-third of it
B.) Half of it
*C.) All of it
D.) One-quarter of it

6. Which statement is NOT correct about extending an attack line? p. 566

A.) Additional lengths of hose can be added
*B.) Having too much hose is a hazard on the fire ground
C.) A standpipe kit can be used to supply the added section of hose
D.) Another length of hose can be added to the discharge end of the hose

7. Ideally, what is the minimum number of members inside the building when advancing an attack line? p. 559

A.) Four
*B.) Three
C.) Two
D.) Five

8. Where is the stream placed when using the sweep method of foam application? p. 577

A.) Above the target
B.) In the center of the target
*C.) Just in front of the target
D.) Just behind the target

9. What mixes the foam concentrate into the fire stream in proper percentage? p. 575

A.) Foam injector
B.) Foam eductor
*C.) Foam proportioner
D.) Foam mixer

10. Where should sufficient extra hose be located when advancing the attack line up a stairway? p. 562

A.) Outside of the building
B.) In the middle of the stairway
C.) At the top of the stairs
*D.) Close to the bottom of the stairs

11. What is the high end of the concentration of a Class A foam? p. 574

A.) 3 percent
B.) 2 percent
C.) 4 percent
*D.) 1 percent

12. Which foam application method could be used on an open-top storage tank? p. 577

A.) Raindown method
B.) Sweep method

*C.) Bankshot method
D.) Roll-over method

13. Where in the stack should the officer of the crew be located during attack line operations? p. 553

A.) First or fourth person
B.) Third or fourth person
*C.) Second or third person
D.) First or second person

14. How does foam extinguish a flammable-liquid fire? p. 574

A.) Reduces the surface tension of the water
B.) Removes oxygen from the atmosphere
C.) Interrupts the chemical reaction
*D.) Separates the fuel from the fire

15. At what approximate interval should fire fighters pick up the hose to help advance it up the ladder? p. 563

*A.) 25 feet (7 meters)
B.) 50 feet (14 meters)
C.) 75 feet (21 meters)
D.) 100 feet (28 meters)

16. In what amount of time can discharging 1 gallon of water in 100 cubic feet (3 liters in 2 cubic meters) of involved interior space extinguish a fire when using a fog nozzle? p. 570

A.) 10 seconds
B.) 20 seconds
C.) 15 seconds
*D.) 30 seconds

17. Which type of fog nozzle can deliver a wide range of flows? p. 570

*A.) Automatic-adjusting
B.) Adjustable-gallonage
C.) Fixed-gallonage
D.) Semi-automatic-adjusting

18. Which is NOT correct about the placement of the extra attack hose line outside of the fire building? p. 559

A.) It should be flaked out before it is charged
B.) It should be set back from the doorway
*C.) It should be perpendicular to the building
D.) It should be flaked out in a serpentine pattern

19. What should be connected to the end of the preconnect hose line with a flat load? p. 557

A.) End cap
B.) Female coupling
*C.) Nozzle
D.) Male coupling

20. Where will you notice heat coming through when you are advancing the attack line? p. 559

*A.) Facepiece
B.) Gloves
C.) Coat
D.) Helmet

21. Where should the nozzle be placed when a hose line must be advanced up a ladder? p. 563

A.) On a waist rope
B.) In the turnout coat
*C.) Over the right shoulder
D.) Over the left shoulder

22. At which fold should the first loop be made when performing a minuteman load? p. 554

A.) Fourth
*B.) Second
C.) Third
D.) First

23. Which type of load is used when performing the minuteman load? p. 554

A.) Horseshoe
B.) Accordion
C.) Reverse
*D.) Flat

24. In what shape should the hose be laid in the hose bed with the triple-layer hose load? p. 558

A.) L
*B.) S
C.) T
D.) U

25. Which of the following cannot be produced by the fog nozzle? p. 570

A.) Straight stream
B.) 90-degree fog cone
*C.) Solid stream
D.) 45-degree fog cone

26. Through which of the following do most fire departments apply foam? p. 576

A.) Portable extinguishers
B.) Deluge system
*C.) Handlines
D.) Foam skids

27. Which type of carry should be used to advance an attack line up the stairs? p. 562

*A.) Shoulder
B.) Elbow
C.) Head
D.) Waist

28. Up to what length is the most commonly used attack line? p. 554

*A.) 250 feet (76 meters)
B.) 200 feet (61 meters)
C.) 300 feet (91.4 meters)
D.) 150 feet (45.7 meters)

29. How does the Bresnan distributor nozzle discharge water? p. 570

A.) Narrow circular pattern
B.) Solid stream
*C.) Wide circular pattern
D.) Straight stream

30. Which type of Class B foam is particularly suitable for spill-related fires involving gasoline and light hydrocarbon fuels? p. 575

A.) Fluoroprotein foam
B.) Film-forming fluoroprotein foam
*C.) Aqueous film-forming foam
D.) Protein foam

31. Which size attack lines are used on larger fires? p. 552

A.) 2-inch (50 mm)
*B.) 2 1/2-inch (64 mm)
C.) 1-inch (25 mm)
D.) 1 1/2-inch (38 mm)

32. Where should the hose be flaked when connecting to a standpipe outlet? p. 567

A.) Into the hallway towards the fire room
*B.) Up the stairs to the floor above
C.) On the stair landing on the fire floor
D.) Down the stairs to the floor below

33. What is the difference between the types of available fog nozzles? p. 570

A.) Length of hose line needed
B.) Type of operation handle
*C.) Water delivery capability
D.) Number of fire fighters needed

34. Through how many rungs should the hose line be placed when operating the attack line from a ladder? p. 566

A.) One
*B.) Two
C.) Three
D.) None

35. Which class foam can be applied to the surface of a flammable-liquid spill to prevent ignition? p. 574

A.) Class C
B.) Class A
C.) Class D
*D.) Class B

36. Where should the hose line be placed when advancing it up a ladder? p. 563

A.) Center of the ladder
B.) Right side of the ladder
*C.) Left side of the ladder
D.) Underside of the ladder

37. What is grasped first when deploying the minuteman load? p. 554

A.) Grouped hose line in the middle
B.) Loop or ear from the first section
C.) Male/female coupled end
*D.) Nozzle and the folds on top of it

38. Which fire fighter is responsible for pulling more hose when advancing the attack line into a building? p. 559-562

*A.) At the nozzle
B.) At the apparatus
C.) Outside the building
D.) In the middle

39. At what interval must attack hose be tested at a pressure of at least 300 psi (1896 kPa)? p. 552

A.) Monthly
*B.) Annually
C.) Quarterly
D.) Bi-annually

40. Which is NOT a correct statement about compressed air foam (CAF)? p. 574

*A.) Hose lines containing CAF are heavier than with water alone
B.) CAF adheres to most surfaces
C.) CAF decreases the amount of fuel available to ignite by isolating the fuel
D.) CAF absorbs more heat than water

41. Where are standpipe outlets often located? p. 567

A.) Hallways
*B.) Stairways
C.) Pipe chases
D.) Lobby

42. Where does the eductor draw the foam concentrate into? p. 575

A.) Delay switch tank
*B.) Moving stream of water
C.) Mixing bin
D.) Storage tank

43. How should you descend the stairway with PPE and SCBA on? p. 563

*A.) Feet first
B.) Head first
C.) Squatting
D.) Normally

44. At what concentration is Class B foam usually when being used on a polar solvent? p. 575

*A.) 6 percent
B.) 0.1 percent
C.) 3 percent
D.) 1 percent

45. With what amount of the hose loaded in the bed will you make the first loop at the end of the hose bed when performing a preconnected flat load? p. 556

*A.) One-third
B.) One-quarter
C.) One-half
D.) Two-thirds

46. What is the primary difference between the 1 1/2-inch (38 mm) and 1 3/4-inch (45 mm) attack lines? p. 553

A.) Operating pressure that is sustainable
B.) Size of the couplings on the hose lines
*C.) Amount of water that can flow through the hose
D.) Number of fire fighters needed to handle the hose line

47. On which type of nozzle is the control valve usually separate from the nozzle itself? p. 569

A.) Handline
*B.) Master stream
C.) Booster
D.) Low-volume

48. What should be connected together when the minuteman load is completed? p. 554

A.) Female coupling from the second section of hose to the male coupling from the last section of hose
*B.) Female coupling from the last section of hose to the male coupling from the first section of hose
C.) Male coupling from the last section of hose to the female coupling from the first section of hose
D.) Male coupling from the second section hose to the female coupling from the last section of hose

49. How far apart should the wyed lines be when being unloaded? p. 559

A.) They should be on top of each other
*B.) You should be able to walk between them
C.) The width of the apparatus
D.) One shoe's width between them

50. What is mixed with the foam concentrate to make firefighting foam? p. 573

A.) Air, water, and binders
*B.) Air and water
C.) Water alone
D.) Air alone

51. What flow does the 2 1/2-inch (65 mm) hose line generally deliver? p. 553

A.) 350 gpm (1591 lpm)
B.) 500 gpm (2272 lpm)
*C.) 250 gpm (1136 lpm)
D.) 650 gpm (2954 lpm)

52. At what pressure are most smooth-bore nozzles designed to operate? p. 569

A.) 100 psi (689 kPa)
B.) 75 psi (517 kPa)
*C.) 50 psi (344 kPa)
D.) 150 psi (1033 kPa)

53. What is the maximum flow of the low-volume nozzle? p. 569

A.) 20 gpm (91 lpm)
B.) 60 gpm (273 lpm)
*C.) 40 gpm (182 lpm)

D.) 80 gpm (364 lpm)

54. At what point along the hose should you pick it up to carry it back to the apparatus when performing the triple-layer hose load? p. 558

A.) One-half of the distance from the discharge to the hose nozzle
B.) One-quarter of the distance from the discharge to the hose nozzle
*C.) Two-thirds of the distance from the discharge to the hose nozzle
D.) One-third of the distance from the discharge to the hose nozzle

55. Which is NOT a correct statement about advancing an attack line? p. 559

A.) Charge the line once the hose is flaked out
*B.) Don your SCBA as soon as the hose line is charged
C.) Stand away from the doorway when it is opened
D.) Check your partner's PPE

56. Where should extra attack hose be flaked out when it is stretched into a building? p. 554

*A.) The fire building entrance
B.) The apparatus
C.) Near the seat of the fire
D.) Near the staging area

57. How many fire fighters should be on each fly section when advancing a hose line up the ladder? p. 563

*A.) One
B.) None
C.) Three
D.) Two

58. Which type of foam is most often used in aircraft hangars? p. 576

A.) Medium-expansion foams
B.) Ultra-expansion foams
*C.) High-expansion foams
D.) Low-expansion foams

59. What is the maximum distance that the in-line eductor should be placed from the nozzle? p. 576

*A.) 150 feet (46 meters)
B.) 50 feet (15 meters)

C.) 200 feet (61 meters)
D.) 100 feet (30 meters)