Fill in the blank with the appropriate choice:

1) In regards to the FT-1 and FT-2 automatic fog tips, when using these tips, the initial pattern selected should be the straight stream position (all the way to the ____________)
   A) Right
   B) Left
   C) Center

2) The FT-1 and FT-2 tips are automatically adjusting tips which provide constant flow. A baffle is connected to a spring within the tip housing. As the engine pressure is increased, the baffle moves __________, providing a __________ discharge orifice, with a corresponding increase in nozzle flow. The reverse is true if the engine pressure is reduced. Within limits, the nozzle pressure remains constant as the flow increases or decreases.
   A) Backward, smaller
   B) Forward, larger
   C) Backward, larger
   D) Forward, smaller

3) Fog tips can be of varying design. The feature of a constant flow nozzle, in which a flow will remain constant and will not vary if the discharge pattern is changed, __________ make the member operating aware that the volume discharged may be less than required.
   A) Does
   B) Does not

4) Straight Stream nozzles should be washed thoroughly with _______ and hot water. Submerge the nozzle and work the mechanism until free movement is obtained, and then rinse with water.
   A) Bleach
   B) Soap
5) An important characteristic of the FT-2 fog nozzle is that a partial loss of water in the line _______ result in the stream falling short of the target since within either operating range the nozzle will adjust to maintain tip pressure.
   A) Does
   B) Does not

6) In regards to the use and maintenance of nozzles, excessive force _______ be used to tighten components or couplings.
   A) Should
   B) Should not

7) A light coating of oil should be put on all couplings and moving parts _______ cleaning.
   A) Before
   B) After

8) In regards to Engine Company Operation Basics, the manual is based upon Engine Company staffing of an officer and 4 or 5 firefighters. In units staffed with 5 firefighters, _______ and _______ functions are each performed by an individual firefighter.
   A) Door, control
   B) Nozzle, backup
   C) Backup, control

9) In Chapter 12, Safety team members must be aware that this designation is based on their unit’s order of arrival at the box, and will ____________ as additional units arrive.
   A) Change
   B) Remain the same

10) In regards to Engine Company Operations, Immediately after the start of the tour the Engine Company Officer shall conduct a roll call. In a 5 FF Company, the following positions shall be assigned:
   1. _______ 2. _______ 3. _______ 4. _______
   A) Forcible entry, nozzle, can, roof
   B) Roof, outside vent, door, control
   C) Nozzle, backup, door, control
   D) Nozzle, backup, roof, control

11) The location and presence of all tools and equipment on the apparatus shall be known by all assigned members and shall be verified at the start of each tour. A
__________, ___________ and ____________ shall be carried by each engine company member.
A) Screwdriver, can, and hook
B) Pliers, electrical tape and rope
C) Hose strap, chock and spanner

12) The most important tools engine company firefighters use on the fire ground are serviceable hydrants, ________________, and engine apparatus.
A) Nozzles, hose and fittings
B) Extinguisher can
C) Forcible entry tools

13) The __________ tip (M.S.T.) is required for standpipe operations due to its effective performance at low pressures while a __________ tip is effective for ventilation, fires near energized electrical equipment and dispersing vapors at gas leaks.
A) Solid stream, fog
B) Fog, solid stream

14) At the start of each tour, members should examine all rubber washers and ensure they are placed correctly in the ______________ coupling and tips and are not dried out or cracked.
A) Male
B) Female

15) Company drills are the most frequent drills conducted. The company drill period is a time where new members should ______________ during which senior firefighters and company officer can impart a wide range of experience and knowledge.
A) Remain quiet
B) Feel free to ask questions

16) In Ladder Company Tools Manual, hooks come in various sizes, such as 6', 10', 12', 15, or 20'. Hooks are used mostly for ________________.
A) Pulling ceilings, opening walls and to pull up sections of a roof after a hole has been cut.
B) Forcible entry and the prying open of a bulkhead door.
C) Probe the floor while searching a smoke filled apartment.

17) When using a hook to release a drop ladder on a fire escape, use the ___________ the tool, keep pressure on the bottom rung as ladder is lowered and when possible, stand ____________ fire escape.
A) Handle of, to side of
B) Hook end of, to side of
C) handle of, under the
D) hook end of, under the

Matching:

A) Flammable or explosive limits
B) Flash point
C) Ignition temperature
D) Heat

18) ____ The minimum temperature to which a fuel in air must be heated to start self-sustained combustion without a separate ignition source.

19) ____ The form of energy that raises temperature. Heat can be measured by the amount of work it does; for example, the amount of heat needed to make a column of mercury expand inside a glass thermometer.

20) ____ The percentage of a substance (vapor) in air that will burn once it is ignited. Most substances have an upper (too rich) and a lower (too lean) flammable limit.

21) ____ The minimum temperature at which a liquid fuel gives off sufficient vapors to form an ignitable mixture with the air near the surface. At this temperature, the ignited vapors will flash and will not continue to burn.

22) In Chapter 5, Rope, a ________ is a temporary method of securing an object, fastened so it can be readily undone while a ________ is formed by making a loop in the rope.
   A) Bend, bight
   B) Bend, knot
   C) Hitch, bight
   D) Hitch, knot

23) Chapter 6 of the Probationary Firefighter Manual teaches about the respiratory protection the FDNY provides which is regulated by the U.S. Department of Labor Safety and Health Act. The Scott 4.5, Positive Pressure Self Contained Breathing Apparatus (SCBA) together with full firefighting clothing makes it part of the framework of firefighters’ personal protective equipment. The face piece protects against entry of contaminants through the ________, but will not prevent entry of contaminants through a ________________.
   A) Eyes, ruptured eardrum.
   B) Ruptured eardrum, eyes.
   C) Eyes, nose.
   D) Nose, eyes.

24) According to the PFM Chapter 4, Personal Protective Clothing, it is important to clean your gear semi-annually. Additionally bunker gear is not a close proximity suit such as what is used in Airport Crash and Fire Rescues. In a flashover situation,
a bunker gear equipped member must be within ___ and ___ feet from exit in order to survive.

A) 1,5  
B) 10,15  
C) 5,10  
D) 15, 20

25) Regarding the FDNY’s policy on the wearing of hoods to reduce the number of burn injuries to members, the hood _________ be worn whether damp or saturated with moisture.

A) Shall  
B) Shall never
FDNY ACADEMY CANDIDATE PREPARATION
WEEK 1
LESSON 1  PART 1
ANSWER KEY

1. A- Right. CH 11, page 32 1st bullet

2. B- Forward, larger. CH 11, page 31 “operating principal”

3. B- does not, CH 11, page 30, C 1, constant flow

4. B-soap, CH 11, page 32, section 2.3

5. B- does not, CH 11, page 32, 5th bullet

6. B-should not, CH 11, page 33, section 2.5

7. B-after, CH 11, page 33, section 2.6

8. A-door, control. CH 12, page 1. section 1.1

9. A- change. CH 12, section 1.3

10. C- nozzle, backup, door, control. CH 12, page 3, section 2.2

11. C- hose strap, chock and spanner. CH 12, page 3, section 2.6

12. A- nozzle, hose and fittings. CH 12, page 4, section 2.8

13. A- solid stream, fog. CH 12, page 4, section 2.8.4

14. B- female, CH 12, page 4, section 2.8.4

15. B- feel free to ask questions. CH 12, page 6, section 2.9.1

16. A- pulling ceilings, opening walls and to pull up sections of a roof after a hole has been cut. CH 14, page 1, hooks

17. D- hook end of, under the. CH 14, page 4

(1)
Matching definitions found in Chapter 2 page 1:
18. C
19. D
20. A
21. B

22. C- hitch, bight. CH 5, page 1

23. A- eyes, ruptured eardrum. CH 6, page 2, section 2 - sec. 2.1.2-2.1.3

24. C-5,10. CH 4 page 1 sec. 2.4

25. A-shall. CH. 4, section 2.7
Choose the answer that is most correct based on Chapter 11, Engine Company Tools and Appliances:

1. What is the name of the firefighting tip found below?

   ![Firefighting Tip Image]

   a) Controlling nozzle  
   b) Open nozzle  
   c) FT 1 or FT 2  
   d) Solid stream tip

2. The operating ranges of the FT-1 tip can vary anywhere from:

   a) 40-100 GPM  
   b) 85-325 GPM  
   c) 60-125 GPM  
   d) 80-200 GPM
3. The operating ranges of the FT-2 tip can vary anywhere from:

   a) 40-100 GPM  
   b) 85-325 GPM  
   c) 60-125 GPM  
   d) 80-200 GPM

4. When using automatic fog tips, the GPM will ________________ during pattern changes (Straight stream through full fog).

   a) Remain the same  
   b) Vary

5. The ______________ is the section of the nozzle that contains the water control valve.

   a) Working part  
   b) Open section  
   c) Control  
   d) Shut off

6. Fog tips and fog nozzles may be of varying design. Which of the following terms define what occurs to the amount of water being discharged when the pattern selection is changed?

   a) Constant flow  
   b) Variable flow  
   c) Constant pressure  
   d) Variable pressure  
   e) Both a or b
7. Fog tips and Fog nozzles may be of varying design. Which of the following terms define what occurs to the nozzle pressure when the amount of water being supplied to the tip/nozzle is increased or decreased?

a) Constant flow  
b) Variable flow  
c) Constant pressure  
d) Variable pressure  
e) Both c or d

8. Which nozzle does not require attaching an integral shut off mechanism?

a) FT-1  
b) FT-2  
c) FN  
d) MST

9. If at any time the reaction at the tip of the nozzle is too great to control, what should the firefighter do to reduce the reaction to a manageable level?

a) Partially shut off nozzle  
b) Shut off nozzle fully  
c) Communicate to the ECC there is too much pressure
10. In order to prevent an accumulation of foreign matter at the orifice (sand, grit, pebbles etc.) the FT-1 and FT-2 tips should be thoroughly cleaned and flushed:

a) Every tour  
b) Every day  
c) Once per week  
d) After each use

**True or False**

11. To verify that the FT-1 tip is in the straight stream position, place the index finger into the bore. If the finger can be inserted one-half (½) the length of the first joint, the tip is in the straight stream position.

12. To verify that the FT-2 tip is in the straight stream position, place the index finger into the bore. If the finger can be inserted to the first joint, the tip is in the straight stream position.

13. Combination Straight Stream/ Fog devices shall be placed in fog position (turned to the right) at all times when stored on apparatus or in hose bed. This will avoid possible damage to the baffle.

14. Identifying letters and numbers placed on nozzles and components shall be stamped on the coupling along the hub, adjacent to the coupling lug.
Chapter 14, Ladder Company Tools

15. Hooks come in various sizes: 6’, 10’, 12’, 15’, or 20’. The 6’ is most commonly used. Which one of the following is considered a halligan hook?

a) 

b)
16. When carrying hooks, care must be taken to avoid injuring people in front or behind. Hook should be carried with the _________________, to the rear and close to the body.

   a) Hook end straight up
   b) Hook end down

17. The halligan hook has a shaft that is made of:

   a) Wood
   b) Metal
   c) Fiberglass
   d) Both b or c

18. The hook that has a pike end has a shaft made of:

   a) Wood
   b) Metal
   c) Fiberglass
   d) Both b or c

19. Which of the following is not one of the many uses of a hook? (more than one answer)

   a) Opening up concealed spaces
   b) Pulling ceilings
   c) Releasing drop ladders
   d) Prying open windows
   e) Prying open doors
   f) Venting windows
True or False

20. When pulling sheet rock ceilings, be aware they may fall in large heavy sections.

21. When venting windows from above stand directly above window to be vented.

22. Use the handle of the hook or the point to make small probing holes to check for extension or to allow water to flow out as opposed to pulling.

23. When pulling ceilings, penetrate the ceiling with one firm stroke with the hook end ______________ to the lath.
   a) Parallel
   b) Perpendicular

24. When pulling through the lath, always pull with ____________ strokes close to the beam.
   a) Long
   b) Short

25. The________________ is usually carried by the forcible entry firefighter, married together with the halligan tool.
   a) Hook
   b) Halligan hook
   c) Pike head axe
   d) Flat head axe
26. Besides being used as a striking tool against the halligan, axes can be used to cut floors and roofs. When cutting a floor, cut at a __________ degree angle and on a bias.

a) 30  
b) 45  
c) 60  
d) 75

27. When cutting a roof with an axe, which of the following is an incorrect procedure?

a) Determine the location of the hole  
b) Cut through the roof covering and remove it exposing the sheathing  
c) Roof sheathing is placed at right angles to the beam and generally run front to rear  
d) Cut through the sheathing at opposite sides of the proposed opening close to the beam to lessen the bounce of the axe.  
e) After making hole, push down top floor ceiling with the axe

28. The most versatile tool in the FDNY arsenal is the:

a) 6’ hook  
b) Axe  
c) 6” halligan hook  
d) Halligan tool
29. Which one of the following members would not carry a halligan?

a) Roof firefighter  
b) Outside vent firefighter  
c) Forcible entry firefighter  
d) Can firefighter

30. Which of the following is incorrect regarding the hydra ram?

a) Can only be used to force inward opening doors  
b) Can be used under water  
c) Jaws open from ¾” to a max of 4”  
d) Exerts a maximum of 10,000 lbs. of force
Answer Key

Chapter 11, Engine Tools and appliances

1. C pg. 31 FT1 and FT2
2. D pg. 31 bullet 2
3. B pg. 31 bullet 2
4. A pg. 31 bullet 1
5. D pg. 27 sec 1.1.5
6. E pg. 30 sec. 1.1.6
7. E pg. 31 sec. 1.1.6
8. C pg. 29 sec. 1.1.6 B3
9. A pg. 32 bullet 7
10. D pg. 32 bullet 4
11. T pg. 32 bullet 2
12. T pg. 32 bullet 3
13. F pg. 33 sec. 2.3A
14. T pg. 33 sec. 2.7

Chapter 14, Ladder Company Tools

15. B pg. 1
16. A pg. 1 bullet 3
17. D pg. 1 sec. 2
18. A pg. 1 sec. 1
19. D,E pg. 2-4
20. T pg. 2 note
21. F pg. 4
22. T pg. 3
23. A pg. 2
24. B pg. 2
25. D pg. 5 bullet 2
26. C pg. 5 axes
27. E pg. 6
28. D pg. 7
29. D pg. 7
30. A pg. 8
Fill in the blank with the appropriate choice:

1) Pursuant to the requirements determined by the Bureau of Operations, each engine company should maintain _____ lengths of 2 ½ “, _____ lengths of 1 ¾ “ and _____ lengths of 3 ½ “ hose. This includes hose for winter operations, standpipe operations and replacement lengths stored in quarters or on apparatus. (PFF CH 11)
   A) 10, 20, 30
   B) 20, 30, 40
   C) 5, 15, 25
   D) 30, 20, 10

2) Each member should know lengths of hose should be marked with the company and registry numbers stamped on the ______________. (CH 11)
   A) Female coupling
   B) Male coupling
   C) Both ends of hose, not less than 4’ from couplings

3) The most common sizes of hose carried by engine companies are ____ feet in length and have a maximum working pressure of 250 PSI. (CH 11)
   A) 25’
   B) 40’
   C) 50’
   D) 100’

4) The 1 ¾” hand line is the primary attack line used at structural fires. This hose when used in conjunction with the 15/16” main stream tip and controlling nozzle, provides an adequate fire stream and has better maneuverability and easier handling than the larger 2 ½” hand line. At a nozzle pressure of 50 PSI, the 1 ¾” hand line will flow approximately _____ GPM. (CH 11)
   A) 80
   B) 150
   C) 180
   D) 210
Week 1 Lesson 2

5) All hose lines stretched from standpipes shall be ______diameter hose with controlling nozzle and _____ main stream tip. All hose lines stretched from standpipes shall be connected to outlets on floors below the fire floor. (CH 11)
   A) 1 ¾”, 15/16”
   B) 2 ½”, 1 1/8”
   C) 3 ¼”, 1 ¼”

6) The general responsibility of the 1st Ladder Company to arrive is to locate the fire and determine life hazard on the ___________. (CH 16)
   A) Fire floor
   B) Basement
   C) Floor above
   D) Roof

7) The general responsibility of the 2nd Ladder Company to arrive is to search and remove victims, ventilate and check for fire extension on the ___________. (CH 16)
   A) Fire floor
   B) Basement
   C) Floor above
   D) Roof

8) The compliment of basic gear for the CAN FF weighs approximately 100 lbs. The tools for the CAN FF includes the ____________and _____________. (CH 16)
   A) Maul, hydra ram
   B) 6’ hook, extinguisher
   C) Axe, halligan
   D) Halligan, halligan hook

9) The basic tools for the ROOF FF include ____________, ____________, ____________, and ____________. (CH 16)
   A) Halligan, halligan hook, Life saving rope.
   B) Officers tool, C.O. detector, Thermal imaging camera.
   C) Axe, Halligan, Hydra ram
   D) Halligan, halligan hook, saw

10) ____________ is an ongoing evaluation of the problems confronted within a fire situation. It starts with the receipt of the alarm and continues until the fire is under control.
    A) Check-up
    B) Monitoring
    C) Size-up
11) Members are under the __________________ of an Officer when they are within sight and/or hearing of the officer, OR they are working with a search line or hose line which is under the supervision of an officer. (CH 7)
   A) Immediate supervision
   B) Functional supervision
   C) Direct supervision

12) When members cannot contact their officer via Handie talkie, the next contact person should be their: ________________.
   A) Incident commander
   B) Battalion Chief
   C) Company chauffeur

13) The importance of communications between units and the Incident Commander cannot be over emphasized. However, discretion must be used. Information of a ___________ nature should be communicated to the company officer while ___________ information should go directly to the IC.
   A) Routine, more serious
   B) Serious, routine

14) Members operating on the roof must, among many other duties, communicate to the IC the ______________ of the building and __________ showing out windows not visible from the street.
   A) Shape, fire
   B) Configuration, fire
   C) Height, fire

15) Members on the roof must also make IC aware of any unusual heat, smoke or fire in the ____________.
   A) Cockloft
   B) Apartment
   C) Basement
   D) elevator

16) The system that uses a series of numbers and letters to develop a code which is directly related to the building or occupancy the communicator is talking about is called __________________________.
   A) Exposure identification
   B) Handie talkie lingo.
   C) Ease of communication.

17) Buildings separated by more than _____ feet from the fire building should not be identified as exposures unless the volume of fire or complexity of the incident causes an exposure problem.
   A) 15
   B) 20
   C) 25
   D) 30
18) In the identification of buildings and the surrounding properties the number _____ when facing the fire building is to the left and the number _____ indicates area to the right.
   A) 2, 4  
   B) 1,3  
   C) 4,2  
   D) 3,1

19) A(n) __________ is a solid fitting with a N.Y. Fire Department coupling on one end and a different (usually National Standard) coupling on the other.
   A) Appliance  
   B) Reducer  
   C) Increaser  
   D) Adapter

20) Female coupling threads are located ____________, where as male coupling threads are located ____________.
   A) Externally, internally  
   B) Internally, externally

21) A(n) ____________ is a solid fitting with a larger size male coupling than female coupling.
   A) Reducer  
   B) Increaser

22) The length of measurement to tie a Bowline on a Bight is ____________.
   A) 2 arms lengths  
   B) 1 ½ arms lengths  
   C) 1 arms length  
   D) ½ arms length

23) The Bowline on a Bight is a very important knot used to lower a firefighter to rescue persons trapped or lift a person from ________________.
   A) Excavations  
   B) Sewers  
   C) Both A and B  
   D) None of the above

24) SCBA’s must be inspected immediately ________________ of Multi-Unit Drill.
   A) Before the start  
   B) After the end

25) SCBA’s must also be inspected _____________ the 0900 and 1800 hour Roll Calls.
   A) Before  
   B) After  
   C) During
FDNY ACADEMY CANDIDATE PREPARATION
WEEK 1
LESSON 2  PART 1
ANSWER KEY

1) D- Ch 11, section 1.5
2) B- Ch 11, section 2.1
3) C- Ch 11, section 1.1
4) C- Ch 11, section 4.1
5) B- Ch 11, section 4.7
6) A- Ch 16, page 1
7) C- Ch 16, page 1
8) B- Ch 16, page 1
9) A- Ch 16, page 2
10) C- Ch 16, page 4
11) A- Ch 7, section 2.1
12) C- Ch 7, section 2.2, B.
13) A- Ch 7, section 3
14) B- Ch 7, section 3.2
15) A- Ch 7, section 3.2
16) A- Ch 7, page 35 section 2
17) D- Ch 7, page 35 section 2.1
18) A- Ch 7, page 35, section 5
19) D- Ch 11, page 17, definitions
20) B- Ch 11, page 17, definitions
21) B- Ch 11, page 17, definitions
22) B- Ch 5, page 6
23) C- Ch 5, page 6
24) A- Ch 6, page 24, section 4
25) B- Ch 6, page 24, section 4
Choose the answer that is most correct based on Chapter 16, Ladder Company Operations:

1. Ladder Company assignments are given to each member _________________.
   - a) Upon arrival at the fire scene
   - b) At roll call
   - c) Upon reporting for duty
   - d) Upon arrival at an emergency

2. Each member shall personally check how many of the following items after Roll Call? (more than one)
   - a) Firefighting gear
   - b) Mask
   - c) Pass alarm
   - d) Flashlight
   - e) Personal rope
   - f) Assigned tools

3. Members shall inform their ________________of the results of their apparatus, tool and equipment inspections.
   - a) Battalion Chief
   - b) Senior firefighter
   - c) Officer
   - d) Senior firefighter on duty
4. If the second Ladder Company will not arrive within a reasonable time, who is responsible to make an interior search and removal of endangered occupants above the fire?

   a) 1st Ladder company  
   b) 1st Engine company  
   c) 2nd Engine company  
   d) 1st Battalion Chief  

5. What building type represents the bulk of the FDNY’s responses?

   a) Taxpayer buildings  
   b) Row frame buildings  
   c) Brownstones  
   d) Private dwellings  
   e) Non-fireproof multiple dwellings  
   f) Vacant buildings  
   g) High rise office buildings  
   h) Fireproof multiple dwellings  

6. Which one of the following ladder company members would not be considered part of the outside team?

   a) Extinguisher (can)  
   b) Chauffeur  
   c) OV  
   d) Roof  

7. Which one of the following ladder company members would not be considered part of the inside team?

   a) Officer  
   b) FE (irons)  
   c) Extinguisher (can)  
   d) OV
8. Which of the following are the tools of the first arriving Ladder Company Chauffeur?

   a) Thermal Imaging Camera  
   b) Halligan and Halligan Hook  
   c) Halligan and Life Saving Rope  
   d) What he/she deems necessary to complete their assignment

9. For top floor fires in some occupancies the OV position will vary. Which of the following is a possible change in his/her procedure?

   a) Proceed to roof with the saw  
   b) Proceed to rear with saw  
   c) Proceed to roof with life saving rope  
   d) Proceed to rear with life saving rope

10. In some situations, the OV will take what tool in place of the halligan hook?

   a) Thermal imaging camera  
   b) Maul  
   c) Pike axe  
   d) Hydra ram

11. Which of the following tools has become more common in initial operations and can be utilized by any member?

   a) RAD 50  
   b) Duckbill  
   c) Life saving rope  
   d) Thermal Imaging Camera
12. A length of 1 ¾” hose weighs 22lbs., once charged, the weight increases to approximately 52lbs. A
length of 2 ½” hose weighs 35lbs., once charged the weight increases to approximately _____________lbs.

   a) 65lbs.
   b) 75lbs.
   c) 100lbs.
   d) 135lbs.

13. What is the most serious factor at any fire?

   a) Building construction
   b) Water supply
   c) Fire location
   d) Life hazard
   e) Weather

Chapter 8, Building Construction:

14. The extension of fire in or on the exterior of a building from fire originating in the same building is
called ________________.

   a) Air shaft
   b) Auto exposure
   c) Variation
   d) Channeling

15. A story partly underground but having at least one-half its height measured from finished floor to
finished ceiling above the curb level is called a ________________.

   a) Sub-cellar
   b) Cellar
   c) Sub-basement
   d) Basement
16. A story having more than one-half its height from finished floor to finished ceiling below the curb level is called a _______________.

   a) Sub-cellar  
   b) Cellar  
   c) Sub-basement  
   d) Basement

17. A _______________ is a horizontal member used to carry loads perpendicular to its length.

   a) Beam  
   b) Joist  
   c) Stud  
   d) “H” column

18. A _______________ is a bevel cut at the end of roof beams in brick walls which leave the beams free to fall if burned through without causing the walls to fall.

   a) Bevel cut beam  
   b) Fire cut beam  
   c) Concave cut beam  
   d) Collapse preventer cut beam
19. The picture at the bottom depicts what type of support on a bearing wall?

a) Within a brick cavity  
b) Fire cut  
c) Corbel shelf  
d) Bevel cut

20. The picture at the bottom depicts what type of support on a bearing wall?

a) Within a brick cavity  
b) Fire cut  
c) Corbel shelf  
d) Bevel cut
21. A building housing 3 or more families in which residency is permanent in nature is called a
________________.

a) Class “A” Multiple dwelling
b) Class “B” Multiple Dwelling
c) Class “C” Multiple Dwelling
d) Class “D” Multiple Dwelling

22. A multiple dwelling which is occupied transiently is called a ________________.

a) Class “A” Multiple dwelling
b) Class “B” Multiple Dwelling
c) Class “C” Multiple Dwelling
d) Class “D” Multiple Dwelling

23. A building in which the walls, floors, structural members and stairway enclosures are made of
incombustible materials with fire resistive ratings as required by the Building Code is called
a_______________.

a) Brownstone building
b) Limestone building
c) Fireproof building
d) Concrete building

24. A fire partition protects life by furnishing an area of exit, or refuge, and has a fire resistive rating of at
least how many hours under the 1938 Building Code?

a) 2
b) 3
c) 4
d) 5
25. A fire wall resists the passage of fire from one structure to another or from one area of a structure to another, and has a fire resistive rating of at least how many hours under the 1968 Building Code?

a) 2  
b) 3  
c) 4  
d) 5
Chapter 16, Ladder Company Operations

1. B
2. All
3. C
4. A
5. E
6. A
7. D
8. D
9. A
10. B
11. A&D
12. D
13. D

Chapter 8, Building Construction

14. B
15. D
16. B
17. A
18. B
19. B
20. C
21. A
22. B
23. C
24. B
25. C
Fill in the blank with the appropriate choice:

Chapter 12  Motivation alley

1) Properly trained firefighters should be able to perform certain tactics without the officer’s personal supervision. Some of which include ________ estimate and _________ the apparatus.
   a. Fire, repacking hose on
   b. Hose, removal from

2) After ordering the first hoseline stretched, the engine officer should enter the fire building and begin gathering information that will assist the unit in stretching rapidly and accurately to the fire area. This information should include the type of stairway present (i.e. return stairs, straight run stairs) and the presence or absence of a ____________.
   a. Lifesaving rescue
   b. Wellhole

3) If the ladder company is forcing the door to the fire area, the engine officer should proceed directly to the area immediately ____________ the fire in order to determine the layout of the apartment.
   a. Above
   b. Below

4) Doors to the fire area should be closed immediately to prevent the products of combustion from entering the hallway and contaminating the upper floors. Door control is ____________ to the safety of any firefighters operating on the floors above the fire.
   a. Critical
   b. Mandatory
   c. Required

5) The nozzle team must begin every interior fire attack through the door to the fire area crouched low, near the floor, ________________.
   a. Regardless of conditions
   b. Unless the fire is minor

Match the following system of touch signals used in conjunction with verbal commands to relay orders from the engine officer to the nozzle firefighter:

6) ____ Opening or closing the nozzle
7) ____ Direction of stream
8) ____ Advancement of hoseline
9) ____ Halt or stop advance

a. Steady push on back or mask cylinder
b. Tug or pull on the arm or nozzle, either left or right
c. One or two slaps on the back or shoulder
d. Pull back on shoulder, bunker coat or mask assembly

10) If an emergency situation develops which requires the immediate withdrawal of the nozzle team, the officer or other member aware of the situation should indicate this fact by using _____ strong slaps on the shoulder of the other members and then pull them in the direction of retreat.
   a. 2
   b. 3
   c. 4
   d. 5

11) When conditions permit, the engine officer may order a fog or broken stream directed out a window in the fire area to assist in removal of heat and smoke conditions. The stream is directed out the selected window with the nozzle held _____ feet back and the stream filling the opening. If the FT-2 was used for extinguishment, the tip is adjusted so the fog pattern fills the window.
   a. 2-3
   b. 3-4
   c. 4-5
   d. 5-6

12) The nozzle team is composed of the ____________ and ________________ firefighters.
   a. Nozzle and back-up
   b. Nozzle, back-up and door
   c. Nozzle, back-up, door and control
   d. Nozzle and control

13) An example of a decision that may be delegated by the engine officer to the nozzle team is ________________.
   a. Calling for water
   b. Use of fog for attack
   c. Necessity to back hoseline out
   d. Sweeping the floors with stream

Ch 16 Search

14) Ventilation for ________________ is the controlled and coordinated ventilation tactic which facilitates the engine company’s extinguishment of the fire. This tactic must coincide with the application of water on the seat of the fire. Once a building is horizontally ventilated the time for effective extinguishment is limited since the fire will rapidly expand.
15) Ventilation for search is a horizontal ventilation tactic performed to facilitate the movement of a member into an area in order to conduct a search for a life hazard, which has the inherent risk of pulling fire towards the ventilation/entry point. This action needs to be communicated to the ______________ as the ventilation may also negatively impact the members operating in the interior.
   a. Battalion Chief
   b. Engine officer
   c. Nozzle team
   d. Ladder company officer

16) A ______________ search is an immediate search for life; this is rapid but thorough and systematic. Whereas a ______________ search is thorough and painstakingly complete to ensure no possible victims are overlooked.
   a. Primary, secondary
   b. Initial, ensuring
   c. Secondary, primary
   d. Rescue, recovery

Chapter 15 Portable Ladders
Match the term with the definition:

17) _____ Beam
18) _____ Butt
19) _____ Cleats/shoes
20) _____ Halyard
21) _____ Gusset plate

   a. Used in truss constructed ladders connecting the rails of the beams and supports the rungs.
   b. The solid or trussed main structural side member of a ladder supporting the rungs.
   c. The base end of the ladder.
   d. A rope used to elevate the fly section of an extension ladder.
   e. Mounted on ladder to provide a more secure base for the ladder on hard surfaces.

22) Climbing angle for a ground ladder is approximately _____.
   a. 80-90 degrees
   b. 75-85 degrees
   c. 70-80 degrees
   d. 65-75 degrees

Match using the rules for portable ladder placement:

23) _____ Placed at a window
24) _____ Placed at a roof
25) _____ Placed alongside a fire escape on a building wall
26) _____ Placed against a fire escape
   a. Tip at least 2’ above
   b. Tip level with
   c. Tip slightly above
   d. Tip 1-3’ above

Chapter 9 Building Descriptions

27) In a typical Brownstone, the ____________ is found when entering windows from
    the exterior located above the stoop.
   a. Kitchen
   b. Living room
   c. Bedroom
   d. Dead man’s room
28) A typical Brownstone was built as a private dwelling in the late 1800’s. It is 3-5
    stories in height and _____ in width. Its depth varies to about 60’.
   a. 10-15’
   b. 15-20’
   c. 20-25’
   d. 25-30’
29) The parlor floor is also known as the _____ floor and can be accessed by way of
    exterior stair or stoop.
   a. 1st
   b. 2nd
   c. 3rd

Chapter 5 Rope

30) Members must be aware that the actual length of our Life Saving Rope, ________,
    may be 8-10’ less due to shrinkage after several years in the field.
   a. 125’
   b. 140’
   c. 150’
   d. 160’

Chapter 6 Scott 4.5

31) When donning SCBA, member must reach back with right hand and turn cylinder
    valve fully counter-clockwise. Listen for the momentary activation of the vibralert,
    Pak Alert, and look for the five lights in the HUD. The activation of the vibralert
    ________ an indication that the valve is fully open.
    a. Is
    b. Is not
32) After donning the SCBA, the facepiece will also be donned or placed in standby
    position. ________________ allow the facepiece to hang free.
    a. Never
    b. Always
    c. Sometimes
1) B- Chapter 12, section 5.1.1
2) B- Chapter 12, section 5.1.3
3) B- Chapter 12, section 5.1.4
4) A- Chapter 12, section 5.1.7
5) A- Chapter 12, section 5.1.11
6) C- Chapter 12, section 5.1.14
7) B- Chapter 12, section 5.1.14
8) A- Chapter 12, section 5.1.14
9) D- Chapter 12, section 5.1.14
10) C- Chapter 12, section 5.1.16
11) C- Chapter 12, section 5.1.18
12) A- Chapter 12, section 5.1.19
13) D- Chapter 12, section 5.1.20,21
14) A- Chapter 16, page 59
15) D- Chapter 16, page 59
16) A- Chapter 16, page 61
17) B- Chapter 15, Glossary
18) C- Chapter 15, Glossary
19) E- Chapter 15, Glossary
20) D- Chapter 15, Glossary
21) A- Chapter 15, Glossary
22) D- Chapter 15, section 7.4
23) B- Chapter 15, section 7.5
24) A- Chapter 15, section 7.5
25) D- Chapter 15, section 7.5
26) C- Chapter 15, section 7.5
27) D- Chapter 9, diagram page 12
28) C- Chapter 9, page 13
29) B- Chapter 9, page 15
30) C-Chapter 5, section 1.5
31) B- Chapter 6, section 5.1.7
32) A- Chapter 6, section 5.1.8
Choose the answer that is most correct based on Chapter 15, Portable Ladders:

1. The extendible top section of an extension ladder is called a _____________?
   
   a) Halyard  
   b) Bed section  
   c) Truss  
   d) Fly section

2. A ladder equipped with folding hooks at the top is called a_______________ ?
   
   a) Hook ladder  
   b) Roof ladder  
   c) Combination ladder  
   d) Both A and B

3. The lower section of an extension ladder which the upper section retracts is called the______________ ?
   
   a) Halyard  
   b) Bed section  
   c) Truss  
   d) Fly section
4. The two lengthwise members of a trussed ladder beam, which are connected by the gusset plates is(are) called (a) ______________?

   a) Pulley
   b) Rails
   c) Rungs
   d) Stops
   e) Guides/Channels

5. The cross members between the beams of the ladder, used as footrests in climbing is(are) called (a) ________________?

   a) Pulley
   b) Rails
   c) Rungs
   d) Stops
   e) Guides/Channels

6. A 35’ extension ladder has a closed length of how many feet and weighs how many lbs?

   a) 17 ½’ and 100 lbs
   b) 17 ½’ and 135 lbs
   c) 20’ and 100 lbs
   d) 20’ and 135 lbs

7. A 24’ extension ladder has a closed length of how many feet and weighs how many lbs?

   a) 12’ and 80 lbs
   b) 12’ and 100 lbs
   c) 14’ and 80 lbs
   d) 14’ and 100 lbs
8. The construction type of a portable ladder that allows for greater side beam heights for greater carrying capacities without requiring massive solid beams that add to the overall weight of the ladder is called?

a) Solid beam aluminum construction  
b) Aluminum truss construction  
c) “A” frame construction

9. Which of the following is not an advantage of an aluminum ladder?

a) They conduct heat very rapidly  
b) They are generally lighter in weight and stronger than comparable wood ladders.  
c) They will dent but will not chip and crack nor will they fail suddenly because of overloads  
d) No protective finish is required

10. Which of the following is an incorrect description of aluminum portable ladders?

a) In general aluminum ladders are tough and made of high tensile, heat treated aluminum alloy.  
b) They will bend but not break, as wood does  
c) They readily conduct electricity  
d) Even if subjected to excessive heat exposure at a fire, it will not lose its heat treatment
11. In order to avoid obstructions to the removal of portable ladders from ladder company operations, no apparatus should be positioned closer than how many feet to the rear of a Ladder Company apparatus?

   a) 15’
   b) 20’
   c) 25’
   d) 30’

12. What is the main disadvantage of positioning a portable ladder at an angle steeper than 75 degrees?

   a) The ladder will not provide for maximum strength
   b) The chances of the climber falling and sustaining injuries is increased
   c) The ladder angled more than 75 degrees requires a reduction in maximum loading
   d) The tip of the ladder will not be visible

13. A simple formula used to obtain a 75 degree angle is to place the base of the ladder at a distance from the vertical plane equal to __________ the total working length of the ladder. The working length is the distance from the base of the ladder to the top of its support.

   a) 1/8
   b) 1/3
   c) 1/4
   d) 1/2
14. If the working length (wl) of a portable ladder is 32’, how many feet from the vertical plane should the base of the ladder be placed?

a) 4’
b) 6’
c) 8’
d) 10’

15. In order to prevent slippage of the butt, or movement of the top of a raised portable ladder, it is important that it be butted by a member. In which of the following cases is this act of safety a requirement?

a) Fire
b) Emergency
c) Rescue
d) Drill
e) All of the above

True or False

16. In order to correctly butt a portable ladder, the member places his/her right foot in the center of the bottom rung, maintains a downward pressure, and positions his/her left foot behind them at a comfortable distance to maintain balance and provide resistance against ladder movement.
17. When butting the ladder it is important for the butt firefighter to grasp the rungs at shoulder height and not the ladder beams.

18. If a member is working off one side of the ladder, the butt firefighter moves his/her foot from the center of the bottom rung of the ladder to the side opposite the one from which the member is working, and places their foot next to the beam. This will prevent the bottom of the beam from shifting due to the relocated weight of the member working on the ladder.

19. The aluminum portable ladder, if it is to be left unattended, should be secured at the tip by the last member that climbs the ladder. This is to prevent the ladder from being dislodged from its position by the wind or by the impact of water from a hose line or a large caliber stream.

20. The butt firefighter must be aware of the force that causes the outward slippage of the butt of the ladder. This force is in direct proportion to the climbing member’s weight, decreases as firefighter ascends the ladder, and is minimum at the top of the ladder. Because of this, extra care must be exercised when a member receives a victim at the top of the ladder.

21. When climbing or operating on portable ladders, which of the following is an incorrect practice?

   a) Climb on the balls of the feet near the arch, left and right of the center line up and down the ladder.
   b) The rungs are grasped with the hands
   c) During the climb, the eyes look upward or forward
   d) If a tool is carried, it should be balanced in the carrying hand, which holds onto the side of the beam
22. Which of the following is an incorrect procedure during freezing weather when ice forms on the ladder due to water spray?

a) Position the rung of the ladder under the arch of the boot, next to the heel.
b) Position the feet on the rungs directly next to the beams with each step, to avoid slipping
c) The hands remain on the top side of the beams
d) Should a member slip while climbing, they should immediately pull themself into the ladder and regain their footing.

23. There are some duties that require the use of the Leg Lock or the Life Safety Belt for safety. How many of the following are correct regarding these procedures?

a) In performing a Leg Lock, the leg performing the locking maneuver is opposite the working side.
b) If a member wants to lean to the right and vent a window, they will lock their left leg on the ladder.
c) To perform the Leg Lock, the locking leg is placed over and under the rung that is one rung above the one in which the member is standing.
d) The instep of the locking leg is placed on the beam of the ladder opposite the member’s working side.
e) The arch of the foot on the rung is placed against the other beam.
f) The snap hook of the life belt hooks directly to the ladder bea
24. Which of the following is incorrect regarding the ladder lock assemblies of portable extension ladders?

a) If in good condition, the lock assemblies will work and lock in either the fly up or fly down position.
b) The mechanical lock assemblies are positive action automatic spring loaded locks.
c) For standardization, the FDNY has adopted the fly down position for the placement of extension ladders.
d) The first member ascending the ladder should always check the ladder lock assemblies to insure that they are completely engaged on the rung.
e) Before dismounting from the ladder, the surface to be stepped on should be probed with a tool for stability.

25. The maximum load capacity imposed on a ladder includes the weight of the victims, members and their equipment, and any other weight such as hose lines. Which of the following is incorrect regarding ladder load capacity?

a) Collapsible ladders can hold up to 300 lbs.
b) 26’ or less straight and extension ladders can hold up to 500 lbs.
c) Extension ladders from 27’ to 35’ can hold up to 600 lbs.
d) 20’ straight roof ladders can hold up to 600 lbs.
1. D
2. D
3. B
4. B
5. C
6. D
7. C
8. B
9. A
10. D
11. B
12. B
13. C
14. C
15. E
16. F
17. F
18. T
19. F
20. F
21. B
22. C
23. A,B,D,E
24. C
25. D
Fill in the blank with the appropriate choice:

Chapter 10, Hydrants

1) The Smith Low Pressure Hydrant has a black barrel with a silver bonnet. The number on the barrel of the hydrant indicates the size of the main supplying the hydrant. A white line under the number on the barrel indicates this hydrant is on a dead end main and is supplied from ________ direction(s). Dead end mains are generally ____________ in diameter.
   a. One, smaller
   b. Two, larger
   c. One, larger
   d. Two, smaller

2) The Dresser hydrant differs from the Smith in appearance but its operation is the same. Additionally, the Dresser hydrant will provide _______________greater discharge.
   a. 5-10%
   b. 10-15%
   c. 15-20%
   d. 20-25%

3) A ______________ is a threaded hydrant cap with three indentations on its surface. Except for the three indentations, the cap has a smooth rounded surface which prevents removal using conventional tools.
   a. Custodian hydrant guard
   b. Hydra-shield
   c. Hydro-loc
   d. Hydrant harness

4) Hydrant discs are used to provide rapid identification of hydrants that are unserviceable for any reason. The company number and individual disc number shall be marked in black on one side of each disc. A ______________ disc is available in two sizes for placement on the 4 ½” or 2 ½” outlets of frozen hydrants.
   a. Blue
   b. Yellow
   c. Green
   d. White

Chapter 11, Engine Company Tools and Appliances
5) Hose should be inspected before being placed on the apparatus. If serviceability of a length of hose is in doubt, test it to _____psi. As per FDNY’s hose testing procedures.
   a. 100
   b. 150
   c. 200
   d. 250

6) Conditions vary in individual response areas throughout the city. The typical hose load has two beds with lead lengths of 1 3/4” coupled to 2 ½” hose. One bed of 3 ½” and ____ bed(s) of 2 ½”.
   a. 1
   b. 2
   c. 3
   d. 4

7) No more than _____ lengths of 1 ¾” hose shall be used as lead lengths in any hose stretch.
   a. 2
   b. 4
   c. 5
   d. 6

Chapter 12, Engine Company Operations

8) The manner in which a firefighter physically advances a hose line may depend on the conditions encountered. The method used when the integrity of the floor is in doubt is called the ____________________.
   a. Crawl
   b. Duck walk
   c. Stand upright method
   d. Leg forward or outstretched leg method

9) Water loss at a fire operation must be handled quickly and efficiently. A single 90 degree kink in an 1 ¾” hose line can result in a loss of ____ gpm or more.
   a. 5
   b. 10
   c. 15
   d. 20

10) The __________ position is responsible for estimating the stretch accurately by limiting extra hose to 1 or 2 extra lengths.
    a. Nozzle
    b. Back-up
    c. Door
    d. Control

Chapter 16, Search

The preferential order of removal of a victim from a fire building is in the following order: 11) ___
12) ____
13) ____
14) ____
15) ____

a. Ladders
b. Life Saving Rope
c. Fire Escape
d. Interior Stairs
e. Horizontal Exits

Chapter 15, Portable Ladders

16) When raising a portable ladder, the Butt Firefighter states “prepare to raise” and ensures his _________ is facing the building.
   a. Back
   b. Shoulder
   c. Chest

Chapter 9, Basic Construction

17) __________ are Non-Fireproof Multiple Dwellings built prior to 4/12/1901 constructed of brick walls and wood floors with a width of 20-25’ and 50-85’ deep.
   a. Old Law tenements
   b. New Law tenements
   c. Private dwellings
   d. Row frames

18) Old Law tenements usually have a __________ stairway to the cellar located inside the building, usually beneath the interior stairway.
   a. Combustible
   b. Non-combustible

19) Railroad flats are those apartments which extend from the __________. There are usually two of these apartments on each floor.
   a. Front to rear
   b. Side to side

20) In __________ steel I Beams were introduced to carry floor joists which couldn’t span the enlarged floor areas. These steel beams generally were supported by masonry walls.
   a. 1901
   b. 1916
   c. 1929
   d. 1934

21) In Fireproof Multiple Dwellings, the most prominent variable that effect smoke movement and cause the most serious concern to firefighting is __________.
   a. Building height
   b. Construction of building
c. Wind
d. Mechanical ventilation systems

Chapter 5, Rope

22) Nylon tubular webbing shall only be used for _____________ and should be cleaned with mild soap and water and dried naturally, out of direct sunlight.
   a. Vertical lifts of victims
   b. Dragging victims

Chapter 6, Scott 4.5

23) When a member becomes entangled or trapped in a collapse where he/she needs to do an emergency procedure, that person must give a(n) _____________ radio transmission.
   a. Mayday
   b. Urgent
   c. Trapped

24) If a member’s SCBA becomes entangled the rear, then the ____________ must be used to free oneself.
   a. Reduced profile
   b. Low profile
   c. Quick release
   d. Swim move

Chapter 7, Maydays and Urgents

25) When transmitting a Mayday or Urgent transmission, the appropriate term, “mayday” or “urgent” must be repeated _____________.
   a. 2 times
   b. 3 times
   c. 4 times
   d. 5 times
FDNY ACADEMY CANDIDATE PREPARATION
WEEK 2
LESSON 4  PART 1
ANSWER KEY

1) A- Chapter 10, section 1.2
2) B- Chapter 10, section 1.3
3) B- Chapter 10, section 3
4) B- Chapter 10, section 4
5) D- Chapter 11, section 8.2
6) A- Chapter 11, section 9.2
7) D- Chapter 11, section 9.3
8) D- Chapter 12, section 5.3.14
9) D- Chapter 12, section 7
10) D- Chapter 12, page 38
11) D- Chapter 16, page 65
12) E
13) C
14) A
15) B
16) A- Chapter 15, Portable Ladders
17) A- Chapter 9, page 3
18) A- Chapter 9, page 3
19) A- Chapter 9, page 3
20) A- Chapter 9, page 5
21) C- Chapter 9, page 10
22) B- Chapter 5, page 16
23) A- Chapter 6, section 6
24) C- Chapter 6, section 6
25) B-Chapter 7, page 3
Choose the answer that is most correct based on Chapter 5, Intro to Belay System:

1. How many of the following are uses of the personal harness? (more than one answer)

   a. Quick and safe means for life saving rope rescues
   b. Emergency escapes
   c. Safety belt for attachment to tower ladder and aerial ladder
   d. Safety belt for attachment to a portable ladder

2. Which of the following is incorrect regarding the personal harness?

   a. The harness must always be attached to the bunker pants
   b. Members must attach the harness snap hook to the waistband “D” ring every time they don their bunker pants
   c. Training in the use of the personal harness is imperative. Sliding without the use of the protective landing mat is only permitted when training from a window less than 2 stories.
   d. The life saving rope turns must be wrapped around the rappel hook in the proper manner in order to function properly.
3. Which of the following is an incorrect description of the personal harness and its use?

a. The personal harness is made of nylon webbing
b. It has a minimum breaking strength of 1000 lbs.
c. The harness comes in 3 sizes, small, medium and extra-large.
d. The gate is triple action.

4. Which of the following is incorrect regarding the personal harness and its use?

a. Members must ensure the hook’s gate is in the locked position prior to performing a slide or lowering operation. To check that the gate is locked, apply lateral pressure on the gate with the left hand.
b. The rappel hook is positioned on the right hip while in the stored position
c. A “D” ring is incorporated to the right side of the harness handle to provide a connection point to the personal safety system.
d. The storage bag holding the EXO descender, rope and anchor hook is attached on the right side of the personal harness.

5. During inspection at the start of each tour, how many of the following instances should a personal harness be placed out of service? (more than one answer)

a. Cuts and abrasions
b. Persistent stains
c. Whenever a personal harness is subjected to an impact load. A member free falling two feet or more is considered a sufficient impact load.
d. Whenever doubt exists
6. Which of the following is incorrect regarding inspection and maintenance of a personal harness?

a. Do not lay harness in sunlight  
b. A light lubrication of oil is necessary for rappel hook gate every 6 months  
c. Inspect harness at the start of each tour and after each use  
d. Do not repair or modify the personal harness or rappel hook  
e. When a personal harness becomes grossly contaminated, it shall be placed out of service.

7. Which one of the following correctly describes a salient feature of Old Law Tenements?

a. OLT’s are considered Class 4 construction  
b. OLT’s usually have 4-6 apartments per floor  
c. OLT’s are constructed of brick walls, wood floors and steel “I” beams  
d. The secondary means of egress in OLT’s is via a fire escape or party wall balcony

8. Which of the following features is described incorrectly as it pertains to Old Law Tenements?

a. To provide light and air to each room, shafts may be provided between adjoining buildings. The term “enclosed” as used in this manual will mean “a shaft closed at the top and bound by building walls on all sides.”  
b. OLT’s have limited fire stopping  
c. “Railroad Flats” are those apartments which extend from the front of the building to the rear.  
d. OLT’s that have 4 apartments per floor will have fire escapes on both the front and rear.
9. Originally the stairs and stairway enclosures were wood with wood lath and plaster partitions. In what year were most of these buildings required to fire retard the stairway enclosure?

a. 1904  
b. 1934  
c. 1964  
d. 1984

10. The pictures at the bottom are examples of what building type?

a. Old Law tenement built before 4/12/1901  
b. New Law Tenement built between 4/12/1901 and 1916  
c. New Law Tenement built between 1916 and 1929  
d. Non-Fireproof Multiple Dwelling built after 4/13/1929
11. The following picture is an example of what building types?

- Old Law tenement built before 4/12/1901
- New Law Tenement built between 4/12/1901 and 1916
- New Law Tenement built between 1916 and 1929
- Non-Fireproof Multiple Dwelling built after 4/13/1929

12. Which of the following is incorrect regarding the construction of New Law Tenements?

- New Law Tenements are considered Class 3, Non-Fireproof
- Steel “I” beams were introduced to carry floor joists which couldn’t span the enlarged floor areas
- To avoid being built of fireproof construction, the floor areas were broken up into units of 3000 square feet or less.
- The dividing walls only go as high as the ceiling of the top floor, resulting in a very large undivided cockloft area.
13. The following picture is an example of what building type?

- Old Law tenement built before 4/12/1901
- New Law Tenement built between 4/12/1901 and 1916
- New Law Tenement built between 1916 and 1929
- Non-Fireproof Multiple Dwelling built after 4/13/1929

14. Which of the following features is an incorrect description regarding “H” type tenements built between 1916 and 1929?

- These buildings were developed with the number and layout of apartments varying from building to building.
- Some have long interior hallways with rooms of one apartment behind another apartment in “L” or “T” shaped form
- Apartment layouts are generally identical from the lobby through the top floor
- Cellars have exterior entrances only
15. Correct features are found in all of the following statements except which one regarding New Law Tenements?

a. After 1929, these buildings are considered New Type Class “A” Multiple Dwellings with extraordinary dimensions, though every 3000 square feet were required to be enclosed by firewalls.
b. First floor (cellar ceiling) is of non-fireproof construction.
c. Stairways will be found near the front entrance; others will be some distance away
d. Fire escapes may be found on all sides of the building

16. Which of the following is not considered a common feature of Fireproof Multiple Dwellings?

a. Poured concrete floors, cinder block or gypsum block walls.
b. There are extreme temperatures in the fire area due to the heat retaining characteristics of the construction
c. Two 1 ¾” lines may be required to move down a public hallway when the door to the fire apartment is open.
d. All extinguishing efforts shall proceed initially from one attack stairway.

17. Which of the following is incorrect regarding the area and height of Fireproof Multiple Dwellings?

a. They can be 4 stories
b. They can be up to 50 stories
c. They can be irregularly shaped, rectangular or star shaped.
d. They may have elevators, compactors, standpipes and sprinklers
18. The first floor of Fireproof Multiple Dwellings may contain how many of the following? (more than one correct)

a. Supermarkets  
b. Day care centers  
c. Clinics or offices  
d. Apartments

19. Cellars and basements of Fireproof Multiple Dwellings may contain how many of the following? (more than one answer)

a. Parking garage  
b. Supermarkets  
c. Laundry rooms  
d. Tenant storage  
e. Compactor room

True or False

20. Life hazard is not severe outside of the fire apartment when the door to the apartment is closed. But the potential for rapid fire development and extensive heavy smoke on the fire floor and floors above, especially stairways, mandate the need for sufficient units for extinguishment and search.
21. The following building is an example of a?

a. Fireproof Multiple Dwelling
b. New Law Tenement built between 4/12/1901 and 1916
c. New Law Tenement built between 1916 and 1929
d. Non-Fireproof Multiple Dwelling built after 4/13/1929
**Answer Key**

**Chapter 5, Intro to Belay System**

1. All
2. C
3. B
4. B
5. A,B,D
6. B

**Chapter 9, Building Descriptions**

7. D
8. A
9. B
10. B
11. A
12. C
13. D
14. C
15. B
16. C
17. B
18. A,B,C,D
19. A,C,D,E
20. True
21. A
Fill in the blank with the appropriate choice:

**Chapter 12 Engine Company Operations**

1) Engine Company apparatus should be positioned as close as possible to the fire building to reduce the time, effort and number of lengths needed for the stretch. This tactic requires a coordinated effort between the ECC and the Engine Company officer and the __________________.
   a. Ladder Company officer
   b. Battalion Chief
   c. Nozzle Man
   d. Deputy Chief

2) The ECC should position a ________________ whenever possible.
   a. Backstretch
   b. In-line pumping operation
   c. Water relay

3) The firefighter assigned the ____________ occupies the most challenging and dangerous positions on the fireground. The duties associated with this position require a determined and experienced member.
   a. Forcible Entry
   b. Back-up
   c. Control
   d. Nozzle

4) The nozzle firefighter should ______________ enter the fire area without water.
   a. Always
   b. Sometimes
   c. Never

5) While operating the line the FF assigned the Nozzle position should ______________.
   a. Tuck nozzle close
   b. Hold nozzle at arm’s length, out in front

6) When operating the stream as the advance is made, the stream should be directed forward and upward, in a rapid side to side motion or ______________ rotation.
   a. Clockwise
   b. Counter-clockwise
7) True or False: Initially, the stream should be directed at striking the ceiling and deflecting the stream toward the fire area then, as progress is made the initial angle of the stream can be lowered and directed toward the main body of fire.
8) True or False: A cardinal rule of engine company operations is Don’t Pass Fire. The term *knock down* means to have control of the area without complete extinguishment.
9) Knowledge of the ________________ is the most valuable asset to a nozzle team advancing under heavy fire and/or smoke conditions.
   a. Presence of victims
   b. Ladder company personal location
   c. Floor layout
10) The line ________ be bled before the fire attack begins.
    a. Must
    b. May
    c. Is not mandatory to
11) ___________ enter a fire area with an uncharged hoseline.
    a. Never
    b. Sometimes
    c. In an emergency, you may
12) If it becomes necessary to withdraw an attack hoseline from a position due to fire intensity, the stream ________ be kept in operation and the line should be backed out. Firefighters withdrawing a hoseline from an interior position should never turn their backs on the fire.
    a. Should
    b. May
    c. Must
13) Major functions of the ____________ position is to flake out hoselines while waiting for water, facilitate the hoselines advance once it is charged and to provide both physical and moral support to the nozzle firefighter.
    a. Door
    b. Control
    c. Back-up
    d. Can FF
14) There are several methods used to flake out hoselines, an effective way to flake out hose for a fire in a newer apartment houses or “H” type would be__________________.
    a. To flake out in the hallway on the fire floor.
    b. To flake out into an adjacent or opposite apartment on the fire floor.
    c. To flake hoseline out wholly or partially in the public hallway on the floor immediately below the fire floor.
    d. To flake out up the public hallway stair above the fire floor.
15) A useful tactic when a small hallway is encountered and the hose cannot be laid up the stairs is__________________.
    a. To flake out in the hallway on the fire floor.
    b. To flake out into an adjacent or opposite apartment on the fire floor.
    c. To flake hoseline out wholly or partially in the public hallway on the floor immediately below the fire floor.
    d. To flake out up the public hallway stair above the fire floor.
16) A useful option to flake hoseline when the volume or intensity of the fire prevents access to the fire floor is:
   a. To flake out in the hallway on the fire floor.
   b. To flake out into an adjacent or opposite apartment on the fire floor.
   c. To flake hoseline out wholly or partially in the public hallway on the floor immediately below the fire floor.
   d. To flake out up the public hallway stair above the fire floor.

17) During the initial hoseline advance, the back-up firefighter must maintain the hoseline __________ the level of the operating nozzle and keep the line as straight as possible.
   a. Above
   b. Below
   c. In line with

18) The 3rd firefighter on the line occupies the door position. This firefighter removes approximately __________ length(s) of hose from hose bed.
   a. One
   b. Two
   c. Three
   d. Whatever necessary

19) An important task of the __________ position is to maintain a bow or rise in the line and also monitor conditions at the entrance doorway.
   a. Back-up
   b. Door
   c. Control
   d. Forcible entry

Chapter 3, FDNY apparatus

20) When placing an aerial ladder to the roof of a building, extend the ladder so the tip is at least __________ above the point where the ladder comes in contact with the building.
   a. 3 feet
   b. 5 feet
   c. 7 feet
   d. 6-12 inches

21) When placing the ladder to an objective, the ladder beam should be about __________ away from it. It is expected that the weight of the firefighters and possibly victims will place ladder in the supported position.
   a. 1-2”
   b. 2-6”
   c. 6-12”
   d. 1-1 ½ ‘

Chapter 10, Hydrants

22) There are several methods of connecting to hydrants. The option that permits the most flexibility in apparatus positioning, but provides the least water flow is __________.
   a. 10’ small connection
   b. 35’ soft connection
   c. 50’ length of 3 ½ “ hose
d. 10’ hard suction

Chapter 16a, ventilation

23) On every response officers and firefighters must include a ventilation profile of the fire conditions. This includes location, evaluation and amount. Any unusual ventilation profile must be immediately communicated to the: (more than one answer)
   a. Engine officer
   b. Ladder company officer
   c. Incident commander
   d. Floor above units

24) Initial vertical ventilation must be coordinated with door control of the fire area. The Roof firefighter must confirm door control with the ____________ before vertical ventilation can begin.
   a. Ladder company officer
   b. Incident commander
   c. Engine company officer

25) All members must be reminded that conducting ventilation remote from the immediate fire area __________ have a negative impact on fire conditions and intensify the fire.
   a. Can
   b. Can not
Chapter 12
1) A- section 5.2.3
2) A- section 5.2.6
3) D- section 5.3.1
4) C- section 5.3.6
5) B- section 5.3.12
6) A- section 5.3.15
7) True, section 5.3.15
8) True, section 5.13.17
9) C- section 5.3.20
10) A- section 5.3.20
11) A- section 5.3.20
12) C- page 27
13) C- section 5.4
14) A- section 5.4
15) B- section 5.4
16) C- section 5.4
17) B- section 5.4.8
18) A- section 5.5
19) B- section 5.5

Chapter 3
20) B- page 15
21) B- page 15

Chapter 10
22) C- page 2

Chapter 16a
23) B or C page 8
24) A page 10
25) A page 11
Choose the answer that is most correct based on Chapter 10, Hydrants:

1. The primary agent used by this department to extinguish fires is water. Which of the following is incorrect regarding water sources?

   a) The primary source of water for firefighting operations is hydrants.
   b) Engine companies carry water in booster tanks.
   c) Engine companies are capable of drafting water from lakes and reservoirs.
   d) Engine companies are not permitted to draft salt water.

2. Which of the following hydrants has a black barrel with a silver bonnet, contains two outlets, one 2 ½” and one 4 ½” and also is equipped with two valves, a main and a drain which are activated by the operating nut on top of the hydrant?

   a) Smith Low Pressure Hydrant
   b) Dresser Low Pressure Hydrant
   c) Chapman Hydrant
   d) Eddy Hydrant
   e) High Pressure Hydrant

3. Which of the following hydrants provides 10-15% greater water discharge?

   a) Smith Low Pressure Hydrant
   b) Dresser Low Pressure Hydrant
   c) Chapman Hydrant
   d) Eddy Hydrant
   e) High Pressure Hydrant
4. Which 2 of the following were originally installed by private water companies, may have two 2 1/2” outlets and opens and closes in a direction opposite other hydrants in NYC?

a) Smith Low Pressure Hydrant
b) Dresser Low Pressure Hydrant
c) Chapman Hydrant
d) Eddy Hydrant
e) High Pressure Hydrant

5. Which of the following hydrants are being removed, out of service, and if encountered not to be used?

a) Smith Low Pressure Hydrant
b) Dresser Low Pressure Hydrant
c) Chapman Hydrant
d) Eddy Hydrant
e) High Pressure Hydrant

6. Which of the following is considered incorrect regarding hydrants in New York City?

a) The number on the barrel of the hydrant indicates the depth of the main supplying the hydrant.
b) The number on the barrel of the hydrant indicates the size of the main supplying the hydrant.
c) A white line under the number on the barrel indicates the hydrant is on a dead end main and is only supplied from one direction.
d) Dead end mains are generally smaller in diameter and provide less water than mains fed from two directions.
7. Which of the following is not equipment an Engine Company uses in connecting to a hydrant?

   a) 25' soft connection  
   b) 35' soft connection  
   c) 10' small connection  
   d) 10' hard suction  
   e) 50' length of 3 ½" hose

8. Which of the following hydrant connections must be used for drafting?

   a) 25' soft connection  
   b) 35' soft connection  
   c) 10' small connection  
   d) 10' hard suction  
   e) 50' length of 3 ½" hose

9. Which of the following is the newest connection available to the Engine Company Chauffeur? It is yellow, 5" hose carried in a trough on the front bumper extension and provides the largest flows of any of the hydrant connections.

   a) 25' soft connection  
   b) 35' soft connection  
   c) 10' small connection  
   d) 10' hard suction  
   e) 50' length of 3 ½" hose
10. Which connection is 4 ½” hose with 3 ½” butts, requires close and accurate positioning at the hydrant and is carried on the side of the apparatus in a horizontal tray?

a) 25’ soft connection  
b) 35’ soft connection  
c) 10’ small connection  
d) 10’ hard suction  
e) 50’ length of 3 ½” hose

11. Which hydrant connection permits the most flexible in apparatus positioning but the least water flow?

a) 25’ soft connection  
b) 35’ soft connection  
c) 10’ small connection  
d) 10’ hard suction  
e) 50’ length of 3 ½” hose
12. Which of the following hydrants is considered out of service and should not be used?

(a)  
(b)  
(c)  

13. Which of the following is incorrect regarding hydrant security devices?

a) A hydra shield is a threaded hydrant cap with three indentations on both the 2 ½” and 4 ½” outlets.
b) The hydra shield wrench fits both the 2 ½” and 4 ½” outlet
c) A custodian hydrant guard is a free spinning cap which completely covers the hydrant operating nut to prevent it from being used by unauthorized users.
d) A custodian hydrant wrench is equipped with an internal magnet.
e) Under no circumstances shall a custodian hydrant wrench be struck with an axe, maul or similar tool.
f) A hydra shield wrench and a custodian wrench must both be taken to a hydrant with these security devices. One is used on the operating nut, the other to open the outlets with the hydra shield caps.
14. Name the security device shown below?

15. Name the security device shown below?
16. Which of the following is incorrect regarding hydrant discs?

a) Hydrant discs are used to provide rapid identification of hydrants that are unserviceable for any reason.
b) The company number and individual disc number shall be marked in black on one side of each disc
c) A firefighter finding a white disc on a hydrant would know that to mean the hydrant is frozen.
d) A firefighter seeing a blue disc on a 3” Siamese of a fire protection system would know that the system is not functioning as a fully automatic system.

17. Which of the following is incorrect regarding hydrant plugs and standard wrenches?

a) Hydrants without security devices are opened by placing the standard wrench on the operating nut and rotating clockwise.
b) When a hydrant is selected for use and the 2 ½” outlet cap is missing, an apparatus cap or spare hydrant cap carried on the apparatus can be used to cap the outlet.
c) A T-BOLT (hydrant plug) is used when no cap is available or the 2 ¼” outlet threads are damaged.
d) When using the T-BOLT, the washer must be on the inside of the hydrant to work correctly.
18. Which of the following steps when using a T-BOLT is incorrect?

a) Remove the 4 1/2 inch cap and flush hydrant.
b) Shut down hydrant and exam barrel for sharp objects and debris before inserting T-BOLT firmly with one hand and maneuver it through the 4 1/2 inch opening into the hydrant barrel. A firm grip must be maintained on the T-BOLT to prevent it from being dropped into the hydrant barrel.
c) Place the threaded rod of the T-BOLT through the 2 1/2 inch opening and center it in the middle of the opening. The non-threaded section of the T-BOLT being held inside the hydrant should be maintained in a horizontal rather than vertical position in order for sufficient thread to protrude through the opening to complete the connection.
d) Hold the T-BOLT firmly against the inside of the hydrant barrel with one hand and turn the handle onto the threaded end of the T-BOLT with the other hand.
e) Turn the handle clockwise while holding the T-BOLT until the handle is tight against the 2 1/2 inch nozzle or barrel.
f) Hook up to the 4 1/2 inch outlet using the proper hydrant connection.
g) Open the hydrant.
h) The hydrant plug is removed by reversing the steps outlined above.

19. Which of the following is incorrect regarding specially designated hydrants?

a) In order to use a yellow hydrant on parkways or expressways, you usually would need to turn it on using a curb valve key.
b) Red Air Cock hydrants are hydrants on 24” or greater mains

c) Red Air Cock hydrants are painted red and are excellent sources of water for fire department use
d) Engine companies should avoid the use of Red Satellite Water System hydrants.
20. Which of the following is a twin hydrant arrangement on large mains for a rapid and adequate source of water?

a) Yellow hydrants on parkways and expressways
b) Red Air Cock hydrants
c) Red Satellite Water hydrants
**Answer Key**

**Chapter 10, Hydrants**

1. D sec. 1
2. A sec.1
3. B sec.1
4. C, D sec. 1
5. E sec.1
6. A sec. 1.2
7. A sec.2
8. D sec.2
9. B sec.2
10. C sec.2
11. E sec.2
12. B sec.1.4
13. F sec. 3.1
14. Hydra-shield
15. Custodian Hydrant Guard
16. C sec 4.2
17. D sec 5.2
18. C sec 5.2
20. C sec 6.3
Fill in the blank with the appropriate choice:

**Rowframe/Brownstone**

1. Wood (Yankee) gutters are found on most brownstones, are dangerous because they have been tarred over many times, are often rotted and are located on (the) ____________ of the building.
   a) Sides
   b) All sides
   c) Rear only
   d) Front only

2. The 1st floor or basement of a brownstone can be accessed from the interior, from the rear and through a doorway located ________________.
   a) Under the stoop
   b) At the top of the stoop stairs.

3. The ventilation points of a Brownstone cellar are possibly a coal chute, an opening under a grating near the 1st floor vestibule and a couple of very small windows at ground level in the ____________ of the building.
   a) Front
   b) Rear
   c) Sides

4. An iron ladder (usually in a closet) gives access from top floor to the roof through a ____________.

5. A majority of Brownstones are flat construction with no rear parapet with an approximate cockloft of ____________.
   a) 1-2’
   b) 2-3’
   c) 3-4’
   d) Tall enough for a person to stand

6. Brownstones are often found to occupy entire blocks or section of them. When built at the same time and by the same contractor, they are normally of the same ____________.

7. Rowframes are made of wood, built in rows sometimes of 20 or more and are balloon frame or ________________ construction.
   a) Braced frame
   b) Platform
8. The salient feature in Rowframes is the common ____________ spreading over all buildings in a row.

9. There are two Rowframe design type, a Brownstone type featuring 3 windows across the front per floor and a (n) ________________ type featuring 4 windows across the front per floor.
   a) New Law tenement
   b) Old law tenement
   c) Non fireproof type

10. A Brownstone type rowframe generally has ___________ apartment(s) per floor.
    a) One
    b) Two
    c) Three
    d) Four

11. The division walls between buildings are quite frequently no more than the equivalent of a partition wall with brick nogging present. This mortar most often is disintegrated and ____________ against the spread of fire.
    a) Effective
    b) Ineffective

**Stretch/operate 1 ¾” (OLT)**

12. In order to facilitate an efficient and coordinated operation, the officer of the first engine company should strive to enter the block ____________ of the first ladder company and from the same direction.
    a) Behind
    b) Ahead

13. This order of arrival allows the Engine company firefighters to initiate a (n) ____________ and accurately estimate, and remove enough hose by hand to reach the entrance of the fire building and adequately cover the anticipated fire area.
    a) Backstretch
    b) In-line pumping operation

**Portable extinguishers**

Matching:
14. Class A fire___
15. Class B fire___
16. Class C fire___
17. Class D fire___

   a) Listed under yellow star, involve burning metals such as magnesium, sodium, or potassium. These fires require an extinguishing agent that does not react with the burning metal to give off dangerous gases or cause explosions.
   b) Listed under the red square involve flammable liquids, flammable gases, greases. Exclusion of air by smothering, or inhibiting the combustible chain reaction with a chemical.
c) Listed under the green pyramid involve such things as wood, cloth, paper, rubber and many plastics. Generally these ordinary combustibles require cooling with water or certain dry chemicals that also retard combustion.

d) Listed under the blue circle, involve live electrical equipment, and for safety reasons, a non-conductive agent must be used to extinguish these fires.

**Inline Pumping**

18. Inline pumping is a stretch of the supply line in which the hydrant is located __________ the fire (in relation to the direction of the pumper’s response.)
   a) Before
   b) After

19. After the hydrant is deemed serviceable, the Hose FF keys the hydrant by pulling sufficient __________ hose from the bed.
   a) 1 ¾”
   b) 2 ½”
   c) 3 ½”

20. At a slow rate of speed, playing out the hose, the pumper proceeds to the vicinity of the fire building, so as not to ______________________.
1. C, Ch. 8 page 16
2. A, Ch. 9 page 13
3. B, page 13
4. Scuttle, page 15
5. B, page 15
6. Height, page 16
7. A, page 23
8. Cockloft, page 23
10. A, page 23
12. B, Ch. 12, page 8
13. A, page 8
14. C, Ch. 21 page 2
15. B
16. D
17. A
18. A, Ch. 12, page 55
19. C, page 55
20. *Impede the positioning of a ladder company.*
Choose the answer that is most correct based on Chapter 5, Life Saving Rope packing, pages 27-34:

1. The Life Saving Rope (LSR) back pack carrying case is made of vinyl reinforced nylon and its dimensions are 14”x14”x6”. On the front of the case it reads “Life saving Rope”.
   The color and print on this bag is:
   
   d. White with “Life Saving Rope” in black letters.

2. Which of the following is incorrect regarding the Life Saving Rope?

   a. The intended use of the LSR back pack carrying case is to store and deploy the LSR.
   b. The case provides for instantaneous use of the LSR in lowering and sliding operations.
   c. The rope does not need to be flaked out before its use. It is deployed directly from the bag.
   d. The anti-chafing device is carried separately and placed over roof edge or parapet underneath the rope being deployed.
3. Prior to packing the LSR in the back pack carrying case, the entire rope should be coiled clockwise on a clean work space, free from any substance that may damage the rope. The diameter of the coil should be approximately ________ feet?

   a. 2
   b. 4
   c. 6
   d. 8

4. Of the following steps in packing the LSR, which is described incorrectly? (more than one incorrect)

   a. Stand the open carrying case on the floor, to the right of the coiled rope.
   b. Place the hook of the LSR in the left front corner of the back pack carrying case.
   c. Move to the right, making a COUNTER CLOCKWISE circle just over one half the width of the bottom of the case.
   d. Move to the left, make another circle slightly overlapping the first circle
   e. Continue in this manner until the entire rope is coiled in the case.
   f. Remove 6 feet of rope from the carrying case and place the anti-chafing device on this section of the rope.
   g. Grasp the hook of the LSR and pull the rope through the anti-chafing device and tie a bowline on a bight on this section of the rope.

5. When tying a bowline on a bight on the end of the LSR, how much rope should be pulled through the anti-chafing device?

   a. 1 arm length
   b. 1 ½ arm’s length
   c. 2 arm’s length
   d. 2 ½ arm’s length
6. How often should the Life Saving Rope be repacked in the back pack carrying case?

   a. At the beginning of each tour of duty.
   b. Daily
   c. Weekly
   d. Monthly
   e. After each use only

7. Each time the rope is repacked, it should be repacked from the opposite end each time. To help identify this, one hook shall be marked with what color tape?

   a. Red
   b. Blue
   c. Black
   d. Gold

8. Which of the following is incorrect regarding care and maintenance of the rope and case?

   a. Each time rope is repacked, the back pack carrying case shall be checked for cleanliness and dryness
   b. The back pack carrying case shall be cleaned with a hypochlorite solution consisting of one-quarter cup of household bleach to one gallon of water (1:100 dilution)
   c. It is essential that the back pack carrying case be thoroughly dry before repacking the LSR.
   d. Replacement back pack carrying cases shall be requested from the Tech Services Division.
9. SCBA’s should be inspected and cleaned at which of the following times?

a. During Roll Call inspection, after members have been assigned a SCBA for the tour
b. After each use
c. Weekly at Multi-unit drill
d. Both a and b
e. All of the above

10. SCBA disinfecting procedures are correctly found in all of the following except?

a. Member should use a hypochlorite solution consisting of one-quarter cup of household chlorine bleach to one gallon of water (1:100 dilution), which is recommended by the Center for Disease Control.
b. The bleach solution is to be used in routine disinfecting procedures and to disinfect SCBA parts contaminated with blood or body fluids.
c. Certain cleaning and disinfecting agents such as quaternary ammonium compounds (Ammonium Chlorides) found in glass cleaner, will cause damage, deterioration, or accelerated aging to parts of the SCBA. Use only the recommended cleaning and disinfectant solution.
d. For gross contamination of SCBA, increase the amount of bleach used to one full cup to one gallon of water.
11. When contaminated SCBAs or components can’t be cleaned or disinfected in the firehouse due to gross contamination of blood or other body fluids, items will be sent to Special Operations Command. Which of the following steps is incorrect?

a. Items shall be placed in a double sealed black plastic bag with a biohazard label attached.

b. A tag shall be attached to the bag noting details of the incident including known and suspected contaminants.

c. If away from quarters, bag is to be placed on the apparatus in an appropriate location to preserve the integrity of the bag, and shall be transported back to quarters.

d. At quarters, bag shall be placed in a light traffic area.

e. Officer on duty will notify SOC for pick-up.

f. When decontaminating, bagging, or handling such equipment to be sent to SOC, members shall wear BSI (Body Substance Isolation).

12. Which one of the following Facepiece cleaning procedures is correct?

a. Immerse facepiece in the hypochlorite solution for 5 minutes, wiping lens with cloth. Never allow facepiece to remain immersed for longer than 5 minutes.

b. Remove facepiece from solution and thoroughly rinse under hot running water.

c. Wash facepiece with cleansing solution (household soap or detergent and warm water) and again thoroughly rinse under hot running water.

d. Nose cup is designed to be an integral part of the facepiece and needs to be disassembled for cleaning and disinfecting.
13. When cleaning SCBA parts, use household strength soap or detergent mixed with warm water. Use of strong industrial strength cleansers, abrasive soap pads or brushes are damaging and not recommended.

14. Never mix disinfectant or cleaning solutions, or their respective cloths and sponges.

15. Place the Kevlar head net outside of the facepiece lens. In order to achieve a proper facepiece seal when donning the SCBA, Kevlar head nets shall be stored on the outside of the facepiece. This will prevent the head net straps from entangling with the thumb buckles and also prevent the scratching of the facepiece lens.

16. Supplies needed to disinfect a regulator include 70% Isopropyl Alcohol in a spray bottle and drinking (potable) water - running or in a spray bottle. Also needed is a sponge or a soft cloth.

17. In order to remove the breathing regulator assembly from a facepiece you must rotate the assembly 180 degrees clockwise.

18. Alcohol and water should only be applied to the regulator surface and exhalation port. Alcohol and water should not be directed into the spray bar ports.

19. In order to remove excess dirt or dust from regulator opening, insert a stiff wire brush into opening and scrub gently.
20. Rinse regulator with drinking water using a spray bottle or softly running water. The inside of regulator must be thoroughly rinsed after applying the 70% alcohol. Failure to thoroughly rinse may cause a number of adverse effects. Rinsing is a key component to the SCBA integrity after disinfecting.

21. Shake excess water out of regulator. Completely air-dry the regulator before use. Gently bang regulator against a hard surface to expedite the removal of water. Banging, shaking and opening the purge valve are the only acceptable way to remove water.
Answer Key

Chapter 5, LSR

1. C pg.26
2. D pg.26
3. B pg.27 sec 3.1
4. A,F pg.27 sec 3.2
5. B pg. 28 sec 3.7
6. C pg. 33 sec 4.5.4
7. A pg 33 sec 4.5.4
8. B pg 33 sec 4.6.1

Chapter 6, Scott 4.5

9. D pg 43 sec 8.1.1
10. D pg 44 sec 8.2 - 8.3
11. A pg 44 sec 8.3.1- 8.3.2
12. A pg 45 sec 8.5.3- 8.5.6
13. True pg 44
14. True pg 44
15. False pg 45
16. True pg 45
17. False pg 45
18. True pg 46
19. False pg 46
20. True pg 46
21. False pg 46
Private Dwellings:

1. Private Dwellings were originally built for one or two families. The major weakness from a firefighting standpoint is the ______________.
   a) Class 4 construction
   b) Class 3 construction
   c) open interior and unenclosed stairway
   d) fact that they may be semi-attached or attached.

2. Private Dwellings are usually 1 to 3 stories in height, generally rectangular although alterations and extensions are common there average dimensions are approximately _____________.
   a) 20x40’
   b) 25x50’
   c) 30x40’
   d) 30x50’

3. The location of the cellar entrance in private dwellings is usually located _____________.
   a) in the rear of the building
   b) at the side of the building
   c) inside the building underneath the interior stairs.

4. Private dwellings built on a sloped terrain can cause communication and operational problems. A dwelling which has 2 or 3 stories in the front may have 3 or 4 stories in the rear. The ____________ may be used as a point of reference as the difference in floor levels may not always be apparent from the front.
   a) Top floor
   b) Basement level
   c) 1st floor

5. In a Straight Line Colonial private dwelling, the door that gives both access to the kitchen and to the cellar stairway is usually found _________________.
   a) In the front of the building
   b) At the side of the building
   c) At the rear of the building

6. Which of the following buildings would commonly have balloon construction? (more than one correct)
a) Straight line colonial  
b) Cape style house  
c) Queen anne  
d) Ranch house  

7. A cupola or turret is a tower-like room with a round or dome shaped roof usually found in a ______________style house  
   a) Queen anne  
   b) Colonial  
   c) High Ranch  
   d) Cape style house  

8. In a Cape style house, two dormers are normally found facing the street; these dormers usually indicate 2nd floor bedrooms. Portable ladder access to these bedrooms is best through windows on the______________ of the building.  
   a) Front  
   b) Rear  
   c) Sides  

9. Flat roof private dwellings may be found isolated, attached in pairs, or attached in a row occupying an entire block. Many of these attached dwellings were built with firewalls that ____________ be relied on.  
   a) Can  
   b) Cannot  

10. In private dwelling fires, control and management of the _______________ is critical to a successful operation.  
    a) Front door  
    b) Basement door  
    c) Windows  
    d) Interior stairs  

**Ventilation, Ch 16**

11. Ventilation for search is the horizontal tactic performed to facilitate the movement of a member into an area in order to conduct a search for a life hazard, which has the inherent risk of pulling fire towards the ventilation/entry point. This action needs to be communicated to the ______________as the ventilation may also negatively impact the members operating on the interior.  
    a) Ladder company officer  
    b) Engine company officer  
    c) Command  
    d) Fire sector chief  

12. True or False  
   Ventilation openings will increase the in-flow of air into the building providing additional oxygen for the fire, while at the same time drawing the fire, heat and smoke toward this ventilation flow point and the member performing the ventilation tactic.  

13. After venting and entering an area to search, the priority action for the member is to _________________.  
    a) Notify his/her officer that they are “in”
b) Immediately choose a wall in which to begin their search (search to the right or left)
c) Isolate the area by closing a door

14. Ventilation tactics, whether ventilation for extinguishment or ventilation for search must be coordinated with interior operations, communicated to and controlled by the ________________ to ensure the safest and most effective operation possible.
   a) Ladder Company officer
   b) Engine company officer
   c) Fire sector chief
   d) Floor above chief

Chapter 12

15. Due to the combustible nature of both interior and exterior building materials, fire can spread in private dwellings rapidly. The unprotected, open interior stairwell to the upper floors acts as a natural flue for fire spread. Small rooms and narrow stairs are commonly found in these dwellings. Due to the need for speed and mobility, a ________ hose line is recommended.
   a) 1 ¾”
   b) 2 ½”

Chapter 16 Forcible entry

16. To force an inward opening door, place the fork of the Halligan approximately _____ above or below the lock with the bevel side of the fork next to the door, slightly canted toward the floor or ceiling. Strike the Halligan with the axe driving it past the interior door jamb. Apply pressure on the Halligan toward the door, forcing the door open (Figure 1).

   a) 2”
   b) 4”
17. When forcing doors with two locks use the above procedures placing the tool ___________.
   a) Between the 2 locks
   b) Below the 2 locks
   c) Above the 2 locks

18. Padlocks are portable or detachable locking devices having sliding and pivoting shackles that pass through a staple and are then made fast. Which of the following tools is not used to force one of these locks?
   a) Halligan
   b) Saw with carbide blade
   c) Saw with aluminum oxide blade
   d) Bolt cutters

19. A portable or detachable locking device that fits over a staple and locks by use of a movable steel pin located in the body of the lock is called an American Lock Series 2000. It resembles a hockey puck. In order to cut these with the saw, we cut about __________ of the distance up from the keyway, cutting it in two pieces. Then remove the pin from the security gate.
   a) ¼"
   b) ½"
   c) 2/3"
   d) ¾"

There are three types of security gates found in New York City. They can be manual, mechanical and electric. Match the following door with the correct description:

20. Manually operated doors ____
21. Mechanically operated doors ____
22. Electrically operated doors ____
A) The operating mechanism is a chain hoist assembly similar. This cover is mounted on hinges and is locked against the curtain guides by two padlocks. To force entry remove all padlocks from chain cover and door; then, using chain, raise the door.

B) To force entry remove the padlocks and removable eye bolts that penetrate the gate. Then lift door.

C) The key switches that activate the operator will be found usually on the building wall on either side of the door.

MASK, Ch 6

23. SCBA rated durations and the actual exit time achieved from the cylinder will vary considerably. The End of Service Time Indicator (EOSTI) alarms (vibralert and HUD) actuate when approximately ____ of full cylinder pressure remains in the cylinder and valve assembly.
   a) 10%
   b) 15%
   c) 20%
   d) 25%

24. The working and exit time of the SCBA will depend on many factors. Which of the following must be taken into consideration? (more than one correct)
   a) The degree of physical activity of the user
   b) The degree of training which the user has with the equipment
   c) Loose or improperly fitting facepiece
   d) The atmospheric pressure. i.e. if used in a pressurized tunnel

25. True or False
Company drill is a perfect opportunity to practice unconscious FF removal on members wearing a company or spare SCBA.
1. C, Ch 9, page 29
2. A, page 29
3. C, page 29
4. A, page 30
5. B, page 30
6. A and C, page 30, 31
7. A, page 31
8. C, page 31
9. B, page 34
10. D, page 35
11. A, Ch 16, page 66
12. True, page 67
13. C, page 68
14. A, page 68
15. A, Ch 12, page 75
16. C, Ch 16, page 78
17. A, page 79
18. B, page 81
19. C, page 82 sec 5.1
20. B, page 84 sec 9.1
21. A
22. C
23. D, ch 6, page 5
24. All correct, page 5
25. False, page 6
Choose the answer that is most correct based on Chapter 6, SCBA and PASS (Personal Alert Safety System):

1. How many of the following are correct regarding the FDNY and its use of the Scott 4.5 Self Contained Breathing Apparatus?
   
   a. The SCBA meets the approval of the National Fire Protection Association (NFPA)
   b. The SCBA meets the approval of the Occupational Safety and Health Administration (OSHA)
   c. The SCBA meets the approval of the National Institute for Occupational Safety and Health (NIOSH)
   d. Use of the SCBA is regulated by the U.S. Department of Labor Safety and Health Act.

2. Which one of the following is incorrect regarding FDNY SCBA’s?
   
   a. All SCBA’s must have a visual and audible low air alert device.
   b. The Heads-Up Display (HUD) provides an audible monitor of the air supply in the cylinder.
   c. All SCBA’s must have a Universal Air Connection (UAC) and a Chemical, Biological, Radiation, Nuclear (CBRN) approval
   d. The CBRN approval means that the SCBA has met the NIOSH and NFPA criteria for exposure to Liquid, Mustard and Sarin agents.
3. Which one of the following is not a requirement for a member to be properly protected from CBRN agents?

a) Using a NFPA 2007 compliant SCBA
b) Proper Protective Clothing (i.e. Level A entry suit)

c) Be a member of a Ladder Company
d) Possess appropriate HAZ-MAT training

4. Which of the following is incorrect regarding limitations of the SCBA?

a) The SCBA is designed to protect against the Immediately Dangerous to Life and Health (IDLH) atmosphere.
b) The facepiece protects the user against entry of contaminants through the eyes and ears.
c) The SCBA does not protect against heat exhaustion or exposure to flame or heat.
d) It is the individuals’ responsibility to know their work and exit times of the SCBA.

5. The actual working and exit time achieved from a SCBA will vary considerably depending on how many of the following factors? (more than one answer)

a) Members physical conditioning
b) Type of work load
c) Physical characteristics
d) Training
e) Loose or improperly fitted facepeice
f) The degree in which the user’s breathing is affected by excitement or fear.
6. In the event a member runs out of air while operating in an IDLH, the member should do all of the following except?

   a) Remove the regulator from the facepeice.
   b) Notify officer.
   c) Immediately leave the contaminated area with another member using a SCBA.
   d) It is not necessary for member to leave the contaminated area with another member using an SCBA.

7. The code of Federal Regulations 29-CFR 1910.146 defines a confined space as any area that is all of the following except?

   a) Contains airborne contaminants.
   b) Not designed for continuous human occupancy.
   c) Large enough so a person can enter and work.
   d) Has limited means of entry and escape.

8. How many of the following can be considered a confined space? (more than one correct)

   a) Basements
   b) Sub-basements
   c) Cellars
   d) Manholes
   e) Pits
   f) Tunnels
   g) Wells
   h) Windowless buildings
   i) Storage containers
   j) An oxygen deficient space
   k) Any space that contains dangerous levels of airborne contaminants
9. Which of the following is incorrect regarding operational procedures within a confined space?

a) All confined spaces are to be considered dangerous until proven otherwise.
b) All members entering a confined space shall have SCBA in stand by position; ready to don facepeice if airborne contaminants are present on Haz-Mat meter.
c) Members operating in a confined space must work in teams of two or more and maintain contact with each other, in case assistance is needed.
d) When a member of a rescue team has to leave an area to service an SCBA, another member must accompany them.

10. Which of the following is incorrect regarding the SCBA?

a) Contact lenses must not be worn with the SCBA.
b) The SCBA is never to be used under water.
c) Submersion in water will render the SCBA inoperative.
d) When a member’s use of corrective eye lenses is required during SCBA use, the lenses must not interfere with a good seal between face and facepeice. For example, glasses with temple bars must not be used.

11. Which of the following is incorrect regarding the breathing air cylinder?

a) Cylinders are constructed of an aluminum shell and wrapped with a fiber composite.
b) Pressurized to 4500 psi, the cylinder holds purified breathing air.
c) The service life of an air cylinder is 20 years.
d) The date of manufacture is listed on the SCOTT label by month and year.
e) Hydrostatic testing is done every 5 years.
12. The SCBA assembly has the capability of accepting all but which minute cylinder?

   a) 30
   b) 45
   c) 60
   d) 90

13. The End of Service Time Indicator (EOSTI) alarms when approximately how much of full cylinder pressure remains?

   a) 10%
   b) 15%
   c) 20%
   d) 25%
Match the cylinder valve assembly part with each description:

A. Protects the assembly.
B. Reads the pressure of the air within the cylinder and gauge assembly. The gauge must read the same on both sides.
C. Connects cylinder to back frame assembly.
D. Safety feature in the event the cylinder becomes over pressurized.
E. To be opened fully counter-clockwise when in use. To close, push valve in and turn clockwise to stop.

14. _______ Over Pressurization Disk
15. _______ Rubber Bumper
16. _______ Cylinder Hanger
17. _______ Cylinder Gauge
18. _______ Cylinder Valve

19. Which of the following is incorrect regarding spare cylinders?

a) Spare cylinders should be placed in either storage boxes or apparatus holders.
b) Extra cylinders should be place on their sides.
c) Inspect all spare cylinders on the 1\textsuperscript{st} day of the month for FULL pressure (4500psi)
d) Do not open the cylinder valve when the cylinder is not in the back frame or secured in some other manner.
e) When opening a cylinder, do not direct airflow at yourself or another member.
20. Training cylinders are identified in which of the following ways?

a) With a blue top and/or a polymer protective sleeve.
b) With a green top and/or a polymer protective sleeve.
c) With a red top and/or a polymer protective sleeve.
d) With a black top and/or a polymer protective sleeve.

21. During inspection of an SCBA, there may be a need to replace the Nylon O-ring. To do so use a 1/8” Allen wrench and a(n) ____________ open end wrench?

a) 3/8”
b) 7/16”
c) 1/2 “
d) 9/16”

22. Which of the following is incorrect regarding the UAC (Universal Air Connection)?

a) The UAC permits emergency replenishment of a user’s SCBA from an approved air supply while in use.
b) This is a quick charge attachment and may be used for routine recharging of an air cylinder when necessary.
c) The UAC can be used when the SCBA user is incapacitated within the hazardous atmosphere.
d) The UAC manifold is equipped with a relief valve.
e) The UAC must have its protective dust cover in place.
23. The Pressure Reducer Assembly (PRA), mounted on the left side of the back frame, reduces the high pressure breathing air from the cylinder. When functioning properly, the PRA reduces the operating pressure to _______psi before entering the regulator’s low pressure hose?

a) 85  
b) 100  
c) 150  
d) 185

24. Which of the following is incorrect when dealing with a malfunction of the PRA’s primary system?

a) Breathing air will automatically be directed to a secondary system.  
b) The operating pressure will be reduced to 150 psi.  
c) The member’s pass alarm will begin to activate.  
d) The member’s vibralert alarm will activate.  
e) The member must immediately leave the contaminated area accompanied by another member using an SCBA.

25. Failure of both the primary and secondary systems in the open position (cylinder valve open) will activate a relief valve in the PRA. Which of the following is incorrect when this occurs?

a) The relief valve will rapidly discharge all pressure in excess of 185 psi into the atmosphere.  
b) Member must notify officer.  
c) Member must leave contaminated area accompanied by another member using an SCBA.  
d) Member must insure their cylinder valve is in the full open position.
Answer Key Chapter 6, pages 1-9

1. All
2. B
3. C
4. B
5. All
6. D
7. A
8. All
9. B
10. A
11. C
12. D
13. D
14. D
15. A
16. C
17. B
18. E
19. C
20. A
21. B
22. B
23. B
24. C
25. D
Fill in the blank with the answer that is most correct:

**Well-Hole Stretch, Ch. 12**

1. The use of a well-hole for stretching the hoseline allows for more rapid positioning of the line and reduces the number of lengths required. The rule of thumb is that a five story stretch up a well-hole requires about ________ length(s) of hose.
   a) One
   b) Two
   c) Three
   d) Five

2. The officer will look up to see if the well goes up the entire stairway. In certain stair configurations, a well exists between the ________________, but the rest of the stairway does not have sufficient space to accept a charged hose line.
   a) Basement and 1st floor
   b) 1st and 2nd floor
   c) 3rd and 4th floor
   d) Top floor and bulkhead

3. True or False
   When it is determined that there is a wide well-hole, the backup FF carries nozzle and lead length in the well.

4. If the door to the fire area is controlled and conditions on the fire floor are favorable, sufficient hose must be pulled up and flaked out on ________________.
   a) The floor below
   b) The fire floor
   c) The stairs to the floor above

5. The ________________ (Firefighter) initially feeds line to the nozzle FF from the base of the stairway, and then proceeds up the stairway pulling line up the well-hole.
   a) Door
   b) Control
   c) Backup
   d) Officer

6. The ________________ FF will remain at the base of the stairway until notified by the officer that sufficient hose has been stretched. Any remaining hose on the first floor should be flaked out and checked for kinks, once the line is charged.
a) Backup
b) Door
c) Control
d) ECC

Search #2, Ch. 16

7. The _______________ is the movement of heat and smoke from the higher pressure within the fire area towards the lower pressure areas accessible via doors, window openings and roof structures.
   a) Heat release rate
   b) Flow path
c) Ventilation
d) VEIS

8. The rate at which energy is generated by the burning of a fuel and oxygen mixture is called the ____________.
   a) Heat release rate
   b) Flow path
c) Ventilation
d) VEIS

9. ______________ is the approved tactic when entering a structure through an opening (door or window) to search an area for the location of the fire or to locate possible victims. The priority upon entering the area via the window is to close the door to that room or area in order to isolate that area.
   a) Heat release rate
   b) Flow path
c) Ventilation
d) VEIS

10. Ventilation is the controlled and coordinated removal of heat and smoke from a structure, replacing the escaping gases with fresh air. This exchange is bi-directional with heat and smoke exhausting at the ______ and air flowing in towards the fire at the ____________.
    a) Top, bottom
    b) Bottom, top

11. Fires involving modern synthetic contents coupled with new building construction methods that contain the heat and smoke within the fire area, may quickly become a ventilation limited fire once a door is left open or other parts of the occupancy are ventilated allowing air flow into the fire area. These openings will provide enough air flow that may rapidly expand the fire condition and extension, causing conditions to
become untenable in as little as ______ minute(s) after entry is made into the fire apartment or area.
   a) 1
   b) 1 ½
   c) 2
   d) 2 ½
12. True or false
   It is important for an engine company to realize that a properly positioned hoseline will contain the fire, possibly saving civilian lives and protecting firefighters and only in extreme cases should an engine company become involved in search and rescue without simultaneously stretching and positioning a hoseline.
13. A search for life that is rapid, thorough and systematic, can be influenced by the fire and may be made prior to the application of water is called a _____________.
   a) Primary
   b) Secondary
   c) Tertiary

Portable ladders Ch. 15

14. When fire escapes become overcrowded, a portable ladder should be raised to the 1st balcony, at a point ____________ the drop ladder.
   a) Opposite
   b) Alongside
15. In a building with party wall balcony fire escapes the ladder of choice to be used to gain access to the various balcony levels is the _____________.
   a) 20’ straight
   b) 12’ hook
   c) 24’ extension
   d) “A” frame
16. In a Brownstone type building, the best way to transport a ladder to the rear is through the parlor floor of an adjoining brownstone with the __________ facing the rear of the building.
   a) Tip
   b) Butt
17. It is recommended, in order to reach all floors, that the laddering of the rear of Brownstones be accomplished with ___________ ladders.
   a) Extension
   b) Straight
18. A collapse is one of the most dangerous operations a firefighter will encounter. Which of the following collapse types has the potential for secondary collapse?
   a) Supported lean-to
   b) Cantilever collapse (unsupported lean-to)
   c) A-frame collapse
   d) Pancake collapse
   e) V-shaped collapse

19. A________________ is a structure that supports another structural member in the same building, such as a bearing wall, a column or a girder.
   a) Primary structural member
   b) Secondary structural member
   c) Coping stone
   d) Corbelling

20. Causes of collapse include all of the following except:
   a) Accumulation of snow or rain on the roof of structure
   b) Backdraft or smoke explosion
   c) Excavation
   d) Creaking sounds, rumbling
FF Candidate Practice Answers

Week 3 Lesson 8 Part 1

Well-Hole Stretch, Ch. 12

1. A, page 46
2. B
3. False
4. B
5. C
6. C

Search #2, Ch. 16

7. B, page 85
8. A
9. D
10. A
11. B page 87
12. True, page 89
13. A, page 90

Portable ladders Ch. 15

15. B, page 14
16. B, page 17
17. A, page 18

Collapse, Ch. 8

18. B, page 7
19. A, page 6
20. D, page 6
Fill in the blank with the answer that is most correct:

Well-Hole Stretch, Ch. 12

1. When a second hoseline is needed to be stretched up a well-hole to the fire floor, which of the following two options would be a correct procedure?

   a) Utilize a utility rope if the well-hole is large enough to accommodate its use.
   b) Nozzle firefighter should carry the entire 1\textsuperscript{st} length of hose up the well-hole to the fire floor.
   c) The nozzle firefighter should carry only the nozzle and change hands at each newel post (turn) as the line is stretched up the well.
   d) Officer will take only the nozzle while the nozzle firefighter feeds the hose up the well.
2. What must be done when sufficient line has been pulled up the well-hole?

   a) Notify the ECC to start water.
   b) Secure the line with a hose strap.
   c) Notify the ECC that sufficient line has been stretched.

3. In the following diagram, if the engine is positioned directly in front of fire building on a hydrant, the correct lengths of hose in the stretch to a fire on the 5th floor of a multiple dwelling would be?

   a) 3 lengths of 2 ½” hose
   b) 5 lengths of 2 ½” hose
   c) 3 lengths of 1 ¾” hose
   d) 5 lengths of 1 ¾” hose
4. The controlled and coordinated ventilation effort which should coincide with the Engine Company extinguishment of the fire is a tactic defined as?

   a) Ventilation limited fire  
   b) Ventilation profile  
   c) Ventilation for extinguishment  
   d) Ventilation for search

5. The controlled and coordinated ventilation effort performed to facilitate the movement of a firefighter into an area to conduct a search for victims is a tactic defined as?

   a) Ventilation limited fire  
   b) Ventilation profile  
   c) Ventilation for extinguishment  
   d) Ventilation for search

6. A fire in which the heat release rate and fire growth are regulated by the available oxygen within the space is called a ________________________.

   a) Ventilation limited fire  
   b) Ventilation profile  
   c) Ventilation for extinguishment  
   d) Ventilation for search
7. The appearance of the fire building’s ventilation points showing the flow paths of heat and smoke out of the structure as well as any air movement into the structure is called the __________________________.

a) Ventilation limited fire  
b) Ventilation profile  
c) Ventilation for extinguishment  
d) Ventilation for search

8. Conducting a search in the modern fire environment has added many challenges to the fire service. The increased use and amount of synthetic contents found in all buildings is one challenge presented due to its heat release rate (HHR). Which of the following is incorrect as it pertains to modern day firefighting tactics?

a. Synthetic materials give off heat more quickly than ordinary combustibles.  
b. A slower change of the fire environment takes place in fires with synthetic contents.  
c. Fires today produce thick black smoke which greatly reduces the searcher’s visibility.  
d. Bunker Gear is totally encapsulating and allows members to search deep into an IDLH.

9. The tool that has taken on a great importance when conducting searches due to thick black smoke and a lack of visibility is the ?

a. Thermal Imaging Camera  
b. Pak- Tracker  
c. KO Curtain  
d. Sure search door markers
10. Today’s fire conditions lower the survival threshold of civilians as well as decreasing the amount of time needed to safely perform a search without an operating hoseline in place. While searching in a fire environment, how many of the following tactics should members be constantly aware of, for reasons of safety? (more than one)

   a. Status of the hoselines
   b. Location of the hoselines
   c. Operation of the hoselines
   d. Number of hoselines stretched

11. Which of the following is incorrect regarding CIDS?

   a. CIDS is an acronym for “Critical Information Dispatch System”
   b. The information provided will enhance operational efficiency
   c. CIDS alerts units to dangerous, hazardous or unusual conditions
   d. Dangerous and hazardous conditions are usually apparent when sizing up a building

12. Searching members must understand that the degree of aggressiveness incorporated into a search for life must be dependent upon how many of the following factors? (more than one)

   a. The structural stability of the building
   b. The ventilation profile
   c. The report of a life hazard
   d. The status of the water supply
13. Members must include the building configuration as part of their size-up. The benefits gained by observing construction features of the fire building may give members an idea of the floor layout inside a residential building. Prior to reaching the fire floor, knowledge can also be gained from conducting a survey on the floor below. How many of the following can be learned by observing features on the floor below the fire? (more than one correct)

a. Determine the interior hallway layout.
b. Determine number of victims on the fire floor.
c. Determine the apartment numbering system.
d. Determine the floor plan of the fire apartment.
e. Determine closest means of access to the fire apartment.

14. It is critically important to take into consideration the effects of the wind direction and velocity on fire conditions, especially when windows are open or failed. Direct or gusting wind may suddenly increase the fire conditions and fire growth within the structure. Who should members of the outside team report wind conditions and its effect on the fire and smoke conditions to?

a. Ladder Company Officer
b. Engine Company Officer
c. Ladder Company Officer and the Incident commander
d. Engine Company Officer and the Incident commander
**Matching**

In the following occupancies, match the building type with the possibility of occupants present during the night time. This part of your size-up will help you determine the possibility and/or location of victims as you consider your search tactics.

15. Commercial buildings______  A. Large number of sleeping occupants
16. Commercial loft buildings______  B. Occupants padlocked in to provide security at night
17. Multiple dwellings______  C. Computer personnel present for 24 hours
18. Office buildings______  D. Occupants present due to building being converted to a residential
19. Taxpayers______  E. Cleaning personnel working after normal business hours

**True/False**

20. The most important tactic for an engine company to possibly save civilian lives and protect firefighters who are searching both the fire floor and floors above is to properly position a hoseline to contain the fire.

21. Only in extreme cases should an engine company become involved in search and rescue without simultaneously stretching and positioning a hoseline.
22. The company that is responsible for the primary search of the fire floor or fire area is the?
   a. 1st to arrive engine company
   b. 2nd to arrive engine company
   c. 1st to arrive ladder company
   d. 2nd to arrive ladder company

23. The company that is responsible for the primary search of the floor above the fire is the?
   a. 1st to arrive engine company
   b. 2nd to arrive engine company
   c. 1st to arrive ladder company
   d. 2nd to arrive ladder company

24. The 1st arriving ladder company’s priorities include all of the following except?
   a. Locate the fire area.
   b. Control the door to the apartment or fire area, and any other ventilation points.
   c. Communicate the fire location to the Engine officer and the Incident commander.
   d. Determine if conditions are tenable to support life (conduct a search for victims)
   e. Search the area directly below the fire, to determine if fire has dropped down.

25. The search for life in the areas adjacent to or above the fire area or fire floor should start immediately upon entering the area, followed by searching for the extension of fire. Any extension should be immediately reported to?
   a. Incident commander
   b. 1st ladder company officer
   c. 1nd engine company officer
   d. 2nd engine company officer
Answer Key

Well-Hole Stretch

1. A and C
2. B
3. C

Search, Ch. 16, pages 81-90

4. C
5. D
6. A
7. B
8. B
9. A
10. All
11. D
12. All
13. A,C,D,E
14. C* The answer is C because outside members are in a ladder company and report directly to their officer and also, for an important situation such as this one, the IC.
15. C, E
16. D
17. A
18. C,E
19. B
20. True
21. True
22. C
23. D
24. E
25. A
FF Candidate Practice Questions

Week 3 Lesson 9 Part 1

Fill in the blank with the answer that is most correct:

**Single Slide/ Roof Ch. 5**

1. The single slide with the Life Saving Rope is used __________ when circumstances are such that alternative methods of removing oneself are denied.
   a) Initially
   b) As a last resort

2. The single slide with Life Saving Rope __________ be used to make a rescue pick up.
   a) Shall
   b) Shall not

3. Which of the following statements regarding the Single Slide from a building using a Life Saving Rope is incorrect?
   a) Place the back pack carrying case on the roof near the substantial object you plan to use.
   b) Remove the snap hook from the pocket of the case.
   c) Grasp the anti-chafing device and pull it through the window of the case
   d) Be sure the bowline-on-a-bight is also pulled through
   e) Secure the Life Saving Rope by taking a turn around a substantial object and tie a slippery hitch on the taut part of the rope.

4. After walking to the planned point of descent, place the anti-chafing device on the parapet, stand to the __________ of the rope and place the left elbow on the outer edge of the parapet and reach down and grasp the rope.
   a) Right
   b) Left

5. After pulling down the gate lock with the left hand and when the hook, rope and gate are together in the right hand, member is now ready to take __________ turns around the hook.
   a) Two
   b) Three
   c) Four
   d) Five

6. Once the gate is returned to the locked position, member will slide the right hand back along the rope approximately ______ inches and grasp the rope firmly.
   a) Four
   b) Five
   c) Six
   d) Eight
True or False
7. Position the anti-chafing device on the parapet and allow enough slack in the rope between the hook and the anti-chafing device to lie flat with approximately five (5") inches draped over the edge.

**OSHA TWO IN/TWO OUT CH. 6A ADD.7**

8. When a fire progresses past the incipient stage, the fire area must be considered an IDLH (Immediately Dangerous to Life and Health) atmosphere. Every member entering the IDLH must be equipped with personal protective equipment and a self- contained breathing apparatus. No member shall enter, leave or operate in an IDLH atmosphere unless the member teams-up with at least ________________ member(s) and remains within visual or voice contact with that member.
   a) One other
   b) Two other

9. When teaming up with a member, Handi-talkies or other electronic communication devices _______ ____ acceptable to replace visual or voice contact.
   a) Are
   b) Are not

10. If a known life hazard is discovered and immediate action could prevent the loss of life, appropriate action (rescue activity) may be taken by an individual member. A known life hazard can be defined by all of the following except:
    a) A victim can be seen by rescuer
    b) A victim can be heard by rescuer
    c) A private home at night in a residential area
    d) A member has information from a credible source or a person at the scene indicating the location of the life hazard.

**Relay Pump Operations Ch. 3, page 1-6**

11. The function of an engine in a pumping operation is to function as the pump: water is taken from a source of supply and delivered through hose to a point of operation (or to another apparatus). When a 1 ¾” size hose is used, which of the following Gallons per Minute (GPM) flows would be appropriate to produce an effective firefighting stream?
    a) 150 GPM
    b) 180 GPM
    c) 250 GPM
    d) > 400 GPM

12. To flow water it is necessary to have a supply of water. This supply can be how many of the following? (more than one correct)
    a) Connection to a hydrant
    b) Drafting
    c) Supply line from another apparatus
d) Booster tank water

13. Most engines carry a supply of _______ gallons of water in its booster tank.
   a) 250  
   b) 500  
   c) 750  
   d) 1000

14. The Intake Pressure Gauge on the pump panel indicates the pressure of the water supplying the pump. With no water flowing, pressure would be considered _____________.
   a) Static  
   b) Residual

15. The Prime Valve operates primer pump to inject water into the pump chamber. Doing this expels air from the pump chamber, thus enabling the pump to generate the necessary suction to operate. Priming pump must be done at any hose line operation ___________ increasing pump pressure and opening any discharge outlets.
   a) Before  
   b) After

Ch. 12 Relaying Water page 59

16. A relay operation is one in which one pumper supplies water to another. Upon finding no viable water source, the officer or Engine Company Chauffer transmits what signal via department radio and Handie-Talkie indicating the need to be supplied by another pumper?
   a) 10-20  
   b) 10-60  
   c) 10-70  
   d) 10-75

17. The supply pumper connects to a hydrant utilizing either the 10’ or 35’ hydrant connection. The necessary lengths of _______ hose are stretched from an outlet of the Supply Pumper to the Operating pumper’s gated inlet on the pump panel side of the pumper.
   a) 1 ¾”  
   b) 2 ½”  
   c) 3 ½”  
   d) 5”

18. Both the Supply pumper and the Operating pumper must remain in the ____________ position. An exception to this is operations where head pressure needs to be overcome.
   a) Volume  
   b) Pressure

19. A relay procedure should accommodate two 2 ½” lines without intake pressure dropping below ________ psi.
   a) 10  
   b) 15  
   c) 20
20. If possible, it is better to set up a relay operation before supplying handlines.

New Law Tenements Ch. 9

21. In which years were steel “I” beams introduced to carry floor joists which couldn’t span the enlarged floor areas?
   a) Before 1901
   b) 1901-1916
   c) After 1929

22. New Law Tenements, between the years of 1901 and 1916, were generally built approximately what size?
   a) 150’ x 200’
   b) 35-50’ x 85’
   c) 20-25’ x 50-85’
   d) Extraordinary dimensions, though every 3000 sq.’ was required to be enclosed by firewalls.

23. The first floor (cellar ceiling) is of ________________ construction?
   a) Fireproof
   b) Non-fireproof

24. After what year were changes in the NYS building law designed to reduce the size of the cockloft by requiring firewalls to be extended through to the roof?
   a) 1909
   b) 1919
   c) 1929
   d) 1939

25. A ________________ is any structure on the roof of the building enclosing stairways, tanks, elevator machinery or other accessories to a structure.
   a) Canopy
   b) Marquee
   c) Bulkhead
   d) Cockloft
Answer key

1. B, Ch. 5 page 85
2. B
3. E, section 3.3
4. A, section 3.6
5. C, page 86, “note”
6. C, section 3.13
7. True

OSHA Ch. 6a, ADD.7

8. A
9. B
10. C

Relay pumper operations

11. B, Ch. 3
12. ALL
13. B
14. A
15. A
16. C, Ch. 12 page 59
17. C
18. A
19. B
20. True

NLT

21. B, Ch. 9
22. B
23. A
24. C
25. C, Ch. 8 page 8
Fill in the blank with the answer that is most correct:

**Basic Standpipe Operations, Chapter 13**

1. Which of the following is incorrect regarding standpipe systems?

   a) Requirements for the installation of standpipes are predicated on several factors.
   b) The primary factor for the requirement of a standpipe is whether or not the structure is fireproof.
   c) Standpipe systems are often installed in locations with no access for fire department vehicles (such as parking garages).
   d) Standpipe systems are often installed where excessive distance precludes the stretching of hoselines directly from engine apparatus (such as on bridges).

2. How many of the following places might a standpipe be encountered? (more than one correct)

   a) Hospitals
   b) Warehouses
   c) Terminals and industrial buildings
   d) Theaters, stadiums and arenas
   e) Tunnels
   f) Piers and wharves
   g) Limited access highways
3. Engine and Ladder companies should be familiar with the standpipe systems found in their response areas and any special characteristics or problems with these systems. Many buildings and other structures are included in CIDS (Critical Information Dispatch System) for various reasons; however, buildings that require a stretch of more than how many lengths of hose off a standpipe should definitely be placed in CIDS?

   a) 2 lengths  
   b) 3 lengths  
   c) 4 lengths  
   d) 5 lengths

4. Standpipe systems can be categorized in one of two ways; by whether or not the system riser contains water, and by the size of the hose outlets. Wet systems contain water in the riser at all times. Which one of the following is not considered a wet system?

   a) A system supplied by a Fire Department pumper.  
   b) A system supplied by the city main.  
   c) A system supplied by a gravity tank.  
   d) A system supplied by a fire pump.
5. Which type of standpipe system is depicted in the following drawing?

![Diagam of a standpipe system](image)

a) Dry system supplied by a gravity tank.
b) Dry system supplied by a pressure tank.
c) Wet system supplied by a city main, gravity tank and/or fire pump.
d) Wet system supplied by a fire department pumper.

6. Standpipe systems that contain no water and the only supply is from fire a department pumper are called?

a) Dry system 
   b) Manual dry system 
   c) Combination system 
   d) Wet system 

7. Which of the following outlets will not be found in standpipe systems?

a) 1½” outlet 
   b) 1½” outlet with 1½” unlined occupant hose 
   c) 2½” outlet 
   d) 3” outlet
8. Which of the following is incorrect regarding standpipe operations?

a) Engine companies shall utilize only Department issued hose for standpipe firefighting.
b) Occupant hose is not maintained properly, is often old, and may fail under Department operating pressures.
c) Ladder companies operating remotely from an engine company while performing searches may use occupant hose in an attempt to save lives.
d) Whenever a reducer is encountered, it must be used to regulate operating pressures and permit attachment of our 2 ½” hose to the outlet.

9. Which of the following is incorrect regarding supplying a standpipe system?

a) Standpipe systems may be supplied through Siamese connections.
b) Standpipe systems must never be supplied through floor outlets.
c) Supplying a standpipe through floor outlets is permitted to reinforce augmentation with additional supply lines.
d) Siamese connections are color coded for ease of identification. i.e. a red siamese indicates a standpipe.

10. Which of the following is incorrect regarding supplying a standpipe system and FDNY standard operating procedures?

a) When there is no color coding present on a Siamese connection to make it identifiable as to the type of system it supplies, the information will be available through CIDS.
b) Standpipes should always be supplied with 3 ½” hose.
c) As a general rule, there should be a separate engine company supplying the standpipe system for each hose line placed in service.
d) Whenever possible, standpipe systems should be supplied by at least two different pumpers.
11. Which of the following is correct regarding standpipe firefighting procedures?

a) As a general rule, there should be a separate engine company supplying the standpipe system for each hoseline placed in service.
b) When supplying a floor outlet to augment a standpipe system and a Pressure Reducing Device (PRD) is found, it must always be removed in all instances.
c) If a building is equipped with both a standpipe and an automatic sprinkler, the first supply line must be attached to the sprinkler Siamese.
d) When supplying a Siamese, always stick your hand inside the connection to clear debris.

12. Difficulties may be encountered with siamese connections. How many of the following are possible problems that may need to be overcome when connecting a supply line to feed a standpipe system? (more than one answer)

a) Missing caps  
b) Defective threads  
c) Debris stuffed into connection  
d) Tight caps  
e) Female swivels out of round or frozen  
f) Clappers either broken or jammed

13. Which of the following should be carried by all engine companies in the event it becomes necessary to cap one side of the siamese connection to prevent an outflow of water due to a malfunctioning clapper valve?

a) 2 ½” cap  
b) 3” cap  
c) 3 ½ “ cap  
d) 4 ½” cap
14. Another remedy to solve the problem of a malfunctioning clapper valve is to immediately stretch what size hose line to the 2nd Siamese inlet?

a) 2 ½”
b) 3”
c) 3 ½”
d) 4 ½”

15. Which of the following is an incorrect remedy to solve the problem of caps stuck in place, defective threads and frozen female swivels on a siamese inlet?

a) Tap swivels to loosen paint, dirt etc...
b) Twist hose 4-5 right turns, insert, and turn to the left.
c) Insert Siamese 3”x3”x3”, insert hose.
d) Insert double 3” male, attach 3” double female swivel, and insert.

16. Which of the following is incorrect regarding supplying a siamese and operating from a standpipe outlet?

a) The engine pump discharge pressure for each hoseline attached to a standpipe system is 100 psi.
b) For each floor above grade, 10 psi should be added to the engine pump discharge pressure.
c) Both metal and plastic caps on a siamese are removed by striking the center of the cap with a tool.
d) When stretching off a standpipe, a 1 1/8”MST (Main Stream Tip) is used on the controlling nozzle.
Aerial Ladders, Ch3, pages 7-

17. Which of the following is incorrect regarding Ladder Company apparatus?

a) There are two types of aerial ladder apparatus currently in service: a REARMOUNT and TILLER. Both types are equipped with 110’ aerial ladder.

b) A TILLER is a tractor trailer rig with maneuverable rear wheels, for easier maneuvering around tight turns.

c) A third type of ladder apparatus currently in service is the TOWER LADDER, which is highly effective on the exterior of buildings for rescue purposes and also provides superior elevated large caliber stream capability.

d) Rungs are cross members between beams which are used for climbing and spaced 14” apart.

18. How many of the following can an Aerial Ladder be used for?

a) Ladder pipe operations
b) Entry
c) Search
d) Rescue
e) Ventilation
19. Which of the following is incorrect regarding stabilizer controls (tormentors) on a REAR Mount aerial ladder?

   a) Controls are located in rear compartment
   b) Before operating tormentors, check for 5’2” clearance on each side to insure that area on operating side is clear of members, civilians, hose and obstructions.
   c) Both tormentors must be lowered in every operation, even under extreme emergency conditions.
   d) Before leaving controls, be sure both handles are in neutral and engine speed returned to idle.

20. Which of the following is incorrect regarding operating an aerial ladder from the turntable?

   a) Depress “aerial enable foot switch” when performing any function.
   b) In order to raise the bed ladder, release the Raise/Lower lever.
   c) The rotation lever is used for proper direction.
   d) The extension/retraction lever is used to reach the desired length.
   e) The rung alignment indicator must be on before permitting personnel to climb the ladder.
Answer Key

Basic Standpipe Operations Ch. 13

1. B
2. All
3. B
4. A
5. C
6. B
7. D
8. D
9. B
10. A
11. E
12. All
13. B
14. C
15. B
16. B

Aerial Ladders Ch. 3, pages 9-15

17. A
18. All
19. C
20. E
Private Dwellings

1. Private Dwelling fires challenge the expertise of firefighting forces and require a coordinated team operation. Small rooms and narrow stairs are commonly found in these dwellings. Due to the need for speed and mobility, a ______ hoseline is recommended.
   a) 1 ¾”
   b) 2 ½”
   c) 2 ¾”
   d) 3 ½”

2. In Private dwellings, due to the combustible nature of both interior and exterior building materials, fire can spread rapidly. The unprotected, __________ interior stairwell to the upper floors acts as a natural flue for fire spread.
   a) Open
   b) Enclosed
   c) Wooden
   d) Concrete

3. In Private dwellings, for a first floor fire, the first hose line is stretched through the front door to extinguish the fire. The second hoseline is initially positioned and charged___________ the fire building as a back- up for the first hoseline, it can be used to extinguish any fire that may extend to the other floors or to exposures.
   a) Inside
   b) Outside
   c) Away from

4. What is the name of the following private dwellings?
5.

![House Image]

a) Queen Anne  
b) Cape style  
c) Ranch  
d) Straight line colonial

6.

![House Image]

a) Queen Anne  
b) Cape style  
c) Ranch  
d) Straight line colonial
7. In the following cross section of a private dwelling, which number indicates the *eaves* and provides no fire stopping?

8. In Private Dwelling fires, the 1\textsuperscript{st} due Irons Firefighter carries which of the following tools?

9. After gaining entrance through the main entrance door at a fire in a private dwelling, the door shall be controlled in a(n)_______________ position by a member of the interior team.
a) Open  
b) Closed  
c) Chocked  

10. For fires in *peaked roof* private dwellings, which of the following member(s) proceed to the side or rear and must visually examine cellar windows to determine interior fire conditions?
   
a) Can Firefighter  
b) Outside vent firefighter and roof firefighter  
c) Ladder company chauffeur and  
d) Ladder company officer  

**Taxpayers**

**Match the term with the correct definition:**

- **Gypsum Plank roof decking** - gypsum concrete roof decking  - Lightweight wood trusses  - open web steel bar joist  - parapet  - return  - raised roof  - membrane  - built up roof  - terrazzo floor  - metal “c” joists  

11. _____ A roof which is considered inverted. It’s supported by 2”x4” ‘s. The extent varies so as to provide proper drainage. The result is a large open cockloft where fire can spread easily.  
12. _____ A polished covering made of small marble chips set in several inches of cement. A collapse hazard: it adds weight to floor beams, conceals the heat of a serious fire below and is watertight.  
13. _____ Normally 2 inches thick, 2 feet wide, 8 feet long and factory laminated. Each plank weighs 135 lbs.  
14. _____ Constructed of lightweight steel, approximately 1/16” thick and may have pre-drilled holes for plumbing and electric lines.  
15. _____ Made of 2”x3”s or 2”x4”s which are held together with sheet metal gang nails or gusset plates. When exposed to high heat, fire or prolonged moisture, gang nails may pull away causing failure.  
16. _____ The roofing material applied in sealed water-proof layers on the structural members of the roof.  
17. _____ The portion of the wall continued above the roof line.  
18. _____ Mill formulated and composed of calcined gypsum and wood chips or shavings. It is usually poured to a 2 inch thickness and weighs approximately 17.5 lbs. per square foot.  
19. _____ The interior surface of a scuttle or skylight between the roof and top floor ceiling.  
20. _____ Vulnerable to elevated temperatures and may collapse after only 5 or 10 minutes. Used to span long distances (up to 60’). Roofs with this type of roof support system must *not* be cut.
21.______ Roofing material in roll form, consisting of asphalt, bituminous polymers of plastics and synthetics for strength. Roofs covered with this type of material are susceptible to ignition and rapid flame spread when exposed to flame.

**Portable power saws, Ch.14**

22. Which of the following regarding portable power saws is incorrect?

a) The saw has a high speed, 4 cycle engine using only gasoline  
b) 20-30 minutes of operating time.  
c) Special suction wick, allowing saw to operate regardless of position.  
d) The saw is not to be started in an explosive atmosphere.

23. The portable power saw has three different types of blades. Which of the following is incorrect regarding the blades in use?

a) Carbide tip will cut through gravel and tar covered roofs, wood flooring, light sheet metal and similar material.  
b) Carbide tip blades are placed out of service when 8 or more tips are missing, broken, or worn down to the circumference of the blade.  
c) The Aluminum oxide blade will cut various types of steel, including auto bodies, metal security doors, metal window bars, etc.  
d) The silicon carbide blade will cut through concrete and masonry materials and is painted green to differentiate from the Aluminum oxide blade.

24. The Aluminum oxide and Silicon carbide are abrasive blade discs. These blades will be placed out of service at all of the following times except?

a) Whenever they are cracked  
b) Whenever the center hole wears out of round  
c) The blade is worn down to 10 inches or less  
d) The blade is badly nicked

25. The firefighter who operates the saw will be assisted and/or guided by another member. The physical communication system between the Guide member and the operator will include all of the following signals except?

a) One slap on the back of the operator.................Stop cut  
b) Two slaps on the back of the operator...............Cut  
c) Three slaps on the back of the operator...............shut down saw  
d) Four slaps on the back of the operator...............change location of the cut
Answer Key

Ch. 12

1. A, add. 1 page 78
2. A
3. B page 79
4. D, Ch. 9 page 30
5. B, page 31
6. A, page 31

Ch. 9

7. A, page 33

Ch. 16

8. B, page 16
9. B, page 16 sec 5.1
10. B, page 17

Ch. 8 Definitions

11. Raised or inverted roof
12. Terrazzo
13. Gypsum plank roof decking
14. Metal “C” joists
15. Lightweight wood truss
16. Built up roof
17. Parapet
18. Gypsum concrete roof deck
19. Return
20. Open web steel bar joist
21. Membrane

Ch. 14

22. A, page 11
23. D,
24. C
25. D
1. Which one of the following is incorrect regarding a secondary search?

a) It is thorough and painstakingly complete.
b) It is a search for life of all areas that required a primary search.
c) It includes the entire outside perimeter of the building and all shafts, basements, cellars, elevators, roofs etc...
d) Time is extremely important as well as accuracy.

2. Which one of the following is correct regarding the implementation of a secondary search?

a) The secondary search shall be performed by the same company that performed the primary search.
b) The secondary search should be performed by a well-rested later arriving engine company.
c) The secondary search shall be performed by a different company that performed the primary search.
d) The secondary search shall always be performed by the Rescue or Squad Company.
3. When is the most ideal time a secondary search should be completed?

   a) Before any extensive overhauling is completed.
   b) After all extensive overhaul is completed.
   c) Before the main body of fire is extinguished.
   d) Immediately following the primary search.

4. Communication between all members and the need to monitor communications when conducting a search is imperative to improve the safety and efficiency of operations. To ensure the safety of the interior team, how many of the following tactics, performed by the outside team members are imperative? (more than one correct)

   a) The outside team must report all noteworthy conditions.
   b) The outside team must report the effect wind is having on smoke and fire.
   c) The exterior size-up must be relayed to their officer.
   d) The exterior size-up can also be relayed directly to the IC (incident commander.)

5. Sound tactics by search team members can be found in which of the following choices? (more than one correct)

   a) Monitor Handie-talkie transmissions.
   b) Maintain situational awareness.
   c) Maintain status of water supply.
   d) Maintain knowledge of the position of hoselines.
6. Which officer is responsible to supervise searches by controlling both the interior and exterior search teams and maintaining team integrity?

a) Ladder Company Officer
b) Engine Company Officer

7. Which search team is controlled by immediate supervision via verbal communication and the use of the Thermal Imaging Camera?

a) Interior search team
b) Exterior search team

8. Which search team is supervised through functional supervision by tracking member’s progress via Handie-Talkie reports?

a) Interior search team
b) Exterior search team
9. All search teams must have a plan in order to complete an effective search. A plan will enable members to achieve the main objectives of searching for life hazards and the location of fire. Members can orient themselves within the occupancy by practicing sound tactics. Which of the following is an incorrect tactic to be used while searching inside a structure?

a) Know the exposure from which the member entered the building.
b) Know what floor the member is on.
c) Know the apartment the member is in.
d) Conduct a survey on the floor above.
e) Note landmarks (radiators, large furniture...) within search area.

10. The term “situational awareness” will help the member in how many of the following? (more than one correct)

a) Will help members perform a thorough search.
b) Will help members perform a systematic search.
c) Will allow members to maintain contact with other members.
d) Will allow members to provide details of their exact location in case the need for assistance should arise.
11. Which of the following is considered firefighting foam that is resistant to the detrimental effects of water-soluble substances such as alcohol and polar solvents?

   a) Aerated Foam  
   b) Aqueous Film Forming Foam (AFFF)  
   c) Alcohol Foam  
   d) Fluoroprotein Foam concentrate

12. Which of the following is a foam liquid that has fluorinated surfactants added which gives the foam the ability to shed hydrocarbons?

   a) Aerated Foam  
   b) Aqueous Film Forming Foam (AFFF)  
   c) Alcohol Foam  
   d) Fluoroprotein Foam concentrate

13. Which of the following is incorrect regarding non-aerated foam?

   a) Non-aerated foam is produced by a nozzle that forces air through the foam solution.  
   b) A foam nozzle that is non-aerating generally has a greater reach than an aerating nozzle.  
   c) The foam blanket that is produced by a non-aerating nozzle is not as stable as one that is produced with aerated foam.
14. Which foam is a combination of synthetic fluorinated surfactant foaming agents, which spread quickly, providing a film across the surface of hydrocarbon fuels?

a) Aerated Foam  
b) Aqueous Film Forming Foam (AFFF)  
c) Alcohol Foam  
d) Fluoroprotein Foam concentrate

15. A foam chute is a plastic sleeve used to deliver which type of foam from the generator to the fire?

a) AFFF  
b) Fluoroprotein Foam  
c) Hi-Ex Foam  
d) Alcohol Foam

16. A proportioning device that employs a venturi action to pick up foam concentrate from a container and introduce it into a stream of water thus producing foam solution is called a (n)?

a) Educator  
b) Aerator  
c) Venturi  
d) Hi-Ex
17. The ability of a foam blanket to resist direct flame contact is called?

a) Burnback resistance
b) Drainage time
c) Flashback resistance
d) Fuel shedding

18. The ability of a foam blanket to resist ignition by flammable vapors coming in contact with a hot surface or a spark is called?

a) Burnback resistance
b) Drainage time
c) Flashback resistance
d) Fuel shedding

19. The ability of foam to resist saturation by hydrocarbons is called

a) Burnback resistance
b) Drainage time
c) Flashback resistance
d) Fuel shedding
20. How many of the following are considered hydrocarbons?(more than one)

   a) Methane  
   b) Butane  
   c) Ethane  
   d) Diesel  
   e) Gasoline

21. Polar solvents are water soluble chemicals that readily combine with the water in a foam blanket thus destroying it. Examples of these chemicals are ether, lacquer and acetone. Which type of foam needs to be used on these substances?

   a) AFFF  
   b) Fluoroprotein Foam  
   c) Hi-Ex Foam  
   d) Alcohol Foam
**True or False**

22. Methyl Tertiary Butyl Ether (MTBE) is a slightly polar additive, added to gasoline to meet the Federal Air Standards

23. Surfactants are chemicals that lower the surface tension of a gas.

24. Hi-Ex foam concentrate is a detergent based liquid which when mixed with water and deployed with an aerating device produces lightweight foam with an expansion ratio from 1000:1 to 10000:1.

25. An in-line educator is not part of the nozzle and is placed on the discharge gate of the pumper.
Answer Key

Search pages 91-93

1. D
2. C
3. A
4. All
5. All
6. A
7. A
8. B
9. D
10. All

Foam, Chapter 20, pages 1-2

11. C
12. D
13. A
14. B
15. C
16. A
17. A
18. C
19. D
20. All
21. D
22. T
23. F
24. F
25. F
FF Candidate Practice Questions
Week 3 Lesson 11 Part 1

Fill in the blank with the answer that is most correct:

**Taxpayers Chapters 9,12,16**

1. The duties of the 1\textsuperscript{st} Ladder company to arrive inside team (Officer, Can and Forcible Entry FF) for a Taxpayer store fire include all of the following except:
   a) Provide and maintain an unobstructed path through which the hose line can advance.
   b) Open ceilings, ducts and partitions
   c) Ventilate the roof
   d) Search and removal of victims

2. The Inside team tool assignments, for a fire in a store, include all of the following except:
   a) 6’ hook
   b) Pressurized water extinguisher
   c) Maul and halligan
   d) Hydra ram
   e) Forcible entry saw (carbide tip blade)

3. Roof FF position, duties and tool assignments for a Taxpayer store fire are correct in all of the following except:
   a) Perform vertical ventilation (open skylights and scuttles)
   b) Access to roof of fire building via portable ladder
   c) Tool assignment is the 6’ halligan hook and halligan
   d) For fires above the cellar, the saw and halligan are taken

4. A fire in a taxpayer is usually a fast-spreading and difficult fire to control and extinguish. It calls for many hand lines stretched quickly to the proper locations to prevent a large loss. When heavy or medium fire conditions are encountered the initial lines should be ________.
   a) 1 ¾”
   b) 2 ½”

5. For a fire in a cellar of a taxpayer, the Second engine company’s responsibility include all of the following except:
   a) To control the first floor if the first engine company has advanced into the cellar via the interior cellar entrance.
   b) Serve as a backup or protection line for the first engine company
c) Stretch into the cellar via the interior stairs or the outside entrance if the first unit’s line has to control the first floor.

d) Supply a 3 ½” line to a tower ladder

6. Which of the following statements regarding Taxpayers is incorrect?
   a) The term “Taxpayer” is not defined or recognized in the building code. The term originally referred to the practice of real estate investors who, while holding land for speculation, resorted to minimal investment in construction to produce income to offset the cost of taxes.
   b) These structures were usually of cheap and flimsy construction with little or no fire retarding features
   c) Supermarkets and one story shopping centers of more recent construction do not fit the above description but contain many of the inherent hazards associated with taxpayers
   d) A taxpayer building is commonly taken to mean a business structure one or two stories in height. With areas varying from 20’x50’ to areas of whole city blocks, the most common size being approximately 200’x200’

7. In what era were Taxpayers usually built larger in area but one tenant occupancies such as supermarkets, bowling alleys, restaurants and factories.
   a) Older type: Built up until the 1920’s
   b) Built from the 1920’s into the 1960’s
   c) Newer types built since 1960’s

8. In what era did Taxpayers have original ceilings made of tin, with as many as two or three suspended ceilings found due to renovations?
   a) Older type: Built up until the 1920’s
   b) Built from the 1920’s into the 1960’s
   c) Newer types built since 1960’s

9. Which of the following is incorrect regarding Newer types of taxpayers built since 1960’s?
   a) May have 2nd floor with separate occupants such as large meeting halls, dancehalls, restaurants, etc. or may be broken up into small offices
   b) Combustible construction material has been reduced
   c) Steel bar joists used to support the floors and roofs in lieu of wood beams
   d) Floor and roof may be concrete poured on top of metal decking

10. Which of the following statements regarding Taxpayers is incorrect?
    a) In some cases due to variances sprinkler systems may only be found in cellar areas.
    b) A Backdraft is possible when a fire burns within a structure, particularly a sealed or closed occupancy and the fire is unable to vent itself to the outer air, the
available air supply within the structure is used up quickly and the flames subside. A high heat condition, with combustible gases and highly heated contents may now be present in the structure. All that is missing is a source of air or oxygen to create an explosive fire.

c) Canopies or marquees are extensions that are supported by cables which go through the wall and are attached inside the building to non-combustible members in the cockloft.

d) Fires in cockloft can weaken attachments or supports causing sudden canopy or marquee collapse, along with long section of parapet wall without any warning.

11. Cast iron columns are unpredictable and fail on the average in about _______ minutes.
   a) 10
   b) 20
   c) 30
   d) 40

12. Cocklofts are the common area extending over all the stores in the structure. The height of the cockloft varies and can be found in which one of the following choices?
   a) 2-3’
   b) 4’-6’
   c) 4” to more than 6’
   d) 4”-6”

13. In terms of collapse possibilities, which of the following structural members will cause the most damage if failure occurs?
   a) Girder
   b) Column
   c) Beam

14. Which one of the following has a greater effect on collapse: impact load or the same weight carried as a stationary load?
   a) Impact load
   b) Stationary load

15. Which of the following may be causes of collapse during fire operations in Taxpayers? (more than one answer)
   a) Backdrafts blowing out walls or floor
   b) Heating of unprotected structural members.
   c) Presence of water absorbent materials such as rags, paper, clothing which increase floor loads when wet.
   d) Water, ice or snow loads on the roof
   e) Vibration or movement in or near a weakened building
16. Warning signs that will signal a potential structural collapse include all of the following except?
   a) Heavy body of fire which has been burning out of control for 15 minutes or more
   b) Walls leaking smoke or water
   c) Cracking or groaning noises which may indicate strain being placed on structural members.
   d) Presence of heavy equipment or signs on the roof

17. Which type of roof is inherently spongy?
   a) Gable
   b) Inverted
   c) All flat roofs
   d) Built up roof

18. Some characteristics of New type construction (supermarkets, etc.) include all of the following choices except?
   a) Many are built on concrete slab foundation
   b) For the most part roofs are constructed of “Bar Joists”
   c) Partition walls are well constructed of steel and aluminum studs which employs gypsum blocks and sheathing as a bearing or non-bearing wall system
   d) Decorative metal cornices or small signs, attached to the front wall sometimes provide access to the cockloft

19. True or False
   In both the older and newer Taxpayer, exit facilities are poor.

20. In all Taxpayer construction, fire can spread both horizontally and vertically. Which of the following are avenues for fire spread? (more than one answer)
   a) Via common cockloft
   b) Through flimsy partitions
   c) “I” beams
   d) Party walls
   e) Via ducts
   f) Convection (mushrooming at upper levels)
   g) Via voids

21. True or False
   The most common type of floors are tongue and groove boards or plywood supported by wood floor joists.

22. An exceptionally hazardous condition is when ________________ is placed over wood joist floor construction.
   a) Terrazzo
   b) Firefighters
23. Which of the following occupancies has the potential to contain many different aerosol sprays, refrigerants, compressed cylinders, lye in containers and other corrosives and caustics?
   a) Drug stores
   b) Paint stores
   c) Supermarkets
   d) Bakeries

24. Mezzanine areas may be found in some Taxpayers. Characteristics can be found in all of the following except?
   a) Their location, area and use will differ. Most cases will be for storage of goods.
   b) Can be offices which will be predominant in supermarkets and factories
   c) The load bearing components will be of light construction
   d) The height of the ceilings will be below average
   e) In the majority the area will be enclosed

25. In Taxpayers, there may be as many as ____or _____ dropped ceilings found in a particular store.
   a) 1,2
   b) 2,3
   c) 3,4
   d) 4,5
Answer Key

Ch. 16

1. C, page 12
2. E
3. D

CH. 12

4. B, page 75
5. D

Ch. 9

6. D, page 36
7. B
8. A
9. A
10. C
11. C
12. C
13. B, page 39
14. A, page 40
15. All
16. A, page 41
17. B
18. D
19. T
20. All, page 43
21. T
22. A
23. C, page 44
24. E
25. B
Fill in the blank with the answer that is most correct:

Car Fires/ Alternate Fuel Fires Chapter 19:

1. At a highway operation, the FDNY has an obligation to its members and to the civilian population to prevent further injury and to provide a safe working area, consistent with conditions. Immediately upon arriving at an operation on a highway, units must perform which of the following tasks?

   a) Get inside damaged vehicle in search of patients.
   b) Stretch a hose line.
   c) Take steps to prevent the escalation of the incident in the form of secondary collision.
   d) Stop traffic in both directions with the use of flashlights or if during the day, bunker gear.

2. Which of the following is incorrect regarding the potential for secondary collision at the scene of an accident or car fire?

   a) The greatest danger of secondary collision occurs during periods of moderate to heavy traffic volume.
   b) Visibility of roadway is affected by weather conditions, topographical layout, curves and hills.
   c) A fully loaded tractor-trailer will need over 500’ to stop at 50 miles per hour, after the driver perceives the danger.
   d) Wet pavement and other factors can double car stopping distance.
3. The safest way for units to control and stop traffic is by use of what method?
   
a) Shining flashlights in a circular motion facing oncoming traffic.  
b) Road flares spaced 10-15’ apart.  
c) By parking the apparatus across all lanes of traffic.  
d) Placing orange cones in front of all oncoming vehicles.

4. A passenger car traveling at 70 miles per hour will need approximately how many feet to stop?
   
a) 300’  
b) 400’  
c) 500’  
d) Over 500’

5. Which of the following would not be necessary for assistance at a car fire on an Express Highway during freezing temperatures?
   
a) FDNY HAZ-MAT unit for possible fuel spill on the highway.  
b) Sanitation salt spreader for ice conditions.  
c) NYPD for traffic control.  
d) Authorized tow truck for disabled vehicle.
6. How many of the following should be considered regarding the possibility of a secondary collision?

a) “Rubbernecking”

b) Smoke obscuring driver’s vision.

c) Time of day resulting in high speed during light traffic.

d) Eventualities such as fuel tank explosion, hydraulic cylinder rupture, bursting of tires, causing firefighters to react by inadvertently stepping out of the safe area into the path of traffic.

7. No fewer than how many unit(s) shall operate at an incident on an express highway or other potentially dangerous roadway?

a) One

b) Two

c) Three

d) Four

True or False

8. One engine and one ladder from each direction, and a Battalion Chief will be assigned to all express highway incidents.

9. During a fire in a flammable liquids tank truck or other hazardous material carrier located on a grade, the highway will have to be closed at a sufficient distance from the incident to prevent civilians becoming involved if a container should rupture or develop a leak. Apparatus will have to be located downhill of the involved vehicles.
10. Apparatus will usually be placed to the front of the incident or emergency in a manner that reduces the chance of a vehicle being struck by oncoming traffic.

11. The apparatus used to block traffic is to be placed at least how many feet behind the first operating unit?

   a) 25’
   b) 40’
   c) 50’
   d) 75’

12. Flares should be used in all of the following situations except?

   a) Night time operations.
   b) Fog which reduces visibility.
   c) Flammable or combustible liquid leak.
   d) Snow which reduces visibility.
   e) During day time operations on a secondary roadway.

13. Which one of the following procedures is incorrect regarding the placement of flares?

   a) At least 4-6 cones and/or flares should be used to build a lane closure or safety zone.
   b) Before leaving apparatus light one flare.
   c) Carrying the lit flare walk the proper distance to place the furthest flare first.
   d) Member should walk on roadway with lit flare, oncoming motorists will be alerted by firefighter carrying flare to stop.
Read and understand the following to answer questions 14 and 15:

The formula for placing flares is as follows:

 MPH (fastest speed expected) x first number of MPH + 60 = Minimum distance in feet to furthest flare

 OR FOR EXAMPLE:

 40 MPH x 4 + 60 = 220

 Where 220’ is minimum distance of furthest flare.

 ANOTHER EXAMPLE:

 30 MPH x 3 + 60 = 150

 Where 150’ is minimum distance of furthest flare.

 14. If the fastest speed expected is 60MPH on an express highway, what should be the minimum distance of the furthest flare?

 a) 220’
 b) 310’
 c) 420’
 d) 550’

 15. If the fastest speed expected on a divided boulevard is 70MPH, what should be the minimum distance of the furthest flare?

 a) 220’
 b) 310’
 c) 420’
 d) 550’
16. The furthest flare is placed about how many feet from the edge of the roadway?

a) 1’
b) 2’
c) 3’
d) 4’

17. Which of the following is correct regarding flares, their use and procedures?

a) After traffic is stopped, three members should place flares.
b) Member may walk on pavement with back to traffic only if he/she is carrying lit flare.
c) Flares are waterproof.
d) Carry lit flares in a vertical position to avoid burning wax or chemical from dropping on hand.
e) Flares burn for approximately 30 minutes.
18. Which of the following is incorrect regarding aerial ladder placement?

a) When placing aerial ladder to roof extend the ladder so that the tip is at least 5’ above the point where the ladder comes in contact with the building.
b) When placing ladder to a window, the tip should be less than 6” over the window sill.
c) When placing alongside a fire escape, ladder should rest against building wall with the tip at least 3’ above the balcony railing.
d) The aerial ladder is not to be placed on a fire escape railing.

19. When placing aerial ladder to a window, the recommended distance of the tip from the objective is 2-6”. In case of rescue, what distance should be used?

a) No distance (place directly on sill)
b) 2” positioning
c) 3” positioning
d) 6” positioning

20. Which of the following is incorrect when climbing or descending the aerial ladder?

a) Member should always face aerial when climbing or descending.
b) Eyes should look up or forward.
c) Stand on rung with heel of foot.
d) Member must have one hand in contact with aerial at all times unless secured to aerial with leg lock or with personal harness hook to rung.
e) On steep angles it may be necessary to grab rungs.
True or False

21. The PSS bag is laid out on a clean flat work area on its back with bag opening facing towards member.

22. Place the figure 8 stopper knot on the left edge of flap closure just above rope storage section.

23. Weave rope to opposite edge of flap and return to the right edge, folding the rope to the previous row. Continue this process making five flat rows. Slide five folds into storage section of bag.

24. Repeat this process until approximately 18 inches of rope with EXO remain.

25. Be sure to maintain 8 inches of rope between eye hook and EXO.

26. The rope shall have a 12 inch loop between the “U” shaped rope guide and the EXO.

27. The EXO should be placed flat side down on top of the rope separation flap with the handle of the EXO facing away from the body if the bag were mounted on the waist band of the personal harness.
Answer Key

CAR FIRES CH 19, pages 11-19

1. C
2. A
3. C
4. D
5. A
6. A,B,C,D
7. B
8. T
9. F
10. F
11. C
12. C
13. D
14. C
15. D
16. B
17. E

FDNY APPARATUS CH 3, pages 15-16

18. C
19. B
20. C

PSS BAG REPACKING CH 5, pages 121-122

21. F
22. F
23. T
24. T
25. T
26. F
27. T
Fireproof Multiple Dwellings

1. Constructions of Fireproof Multiple Dwellings consist usually of poured concrete floors and cinder block or gypsum block walls. Newer buildings use sheetrock in the interior construction. The height of these buildings can be anywhere from?
   a) 4-40 stories or higher
   b) 5-50 stories
   c) 6-60 stories
   d) 3-30 stories

2. Smaller fireproof buildings usually have how many open or enclosed fireproof stairs that run from first floor to roof?
   a) 1
   b) 2
   c) 3
   d) No stairs (elevator only)

3. Which of the following may be found on the first floor of these buildings? (more than one answer)
   a) Supermarket
   b) Day care center
   c) Clinics
   d) Parking garage

4. Care must be taken to maintain the doorway to the __________________ closed on the fire floor.
   a) Fire apartment
   b) Attack stairway
   c) Evacuation stairway
   d) Adjoining apartment stairway

5. When indiscriminate ventilation is accomplished, whether naturally, because windows fail, or by firefighting forces ventilating improperly, unpredictable results will follow. There are many variables that effect smoke movement. Which of the following is the most serious concern to firefighting, as it alone can override the effects of some or all of the other variables?
   a) Building height
   b) Stack effect (the temperature differential between outside and inside)
   c) Construction and building configuration
6. In Fireproof Multiple Dwellings, our ventilation is very limited. In fact it is usually not performed until the main body of fire is controlled. When two stairways are present, which one of the following will be the primary means for vertical ventilation?
   a) Attack stairway
   b) Evacuation stairway
   c) Elevator shaft
   d) Compactor chute

7. When the fire apartment door has been left in the open position and the windows fail, which part of the building becomes part of the fire area?
   a) Apartment above the fire
   b) Adjoining apartment
   c) Stairways
   d) Public hall

8. In Fireproof Multiple Dwellings that have elevators, stairs shall be used when the fire is on which floor or any floor below that floor?
   a) 6
   b) 7
   c) 8
   d) 9

9. After all units are in position and two elevators are serviceable, one elevator must remain on standby in the lobby and the other should be positioned _______________ to transport injured members or civilians down to the lobby?
   a) 2 floors below the fire floor
   b) Floor below the fire floor
   c) Fire floor
   d) Floor above the fire floor

10. When it is decided that a door is going to be forced on the fire floor to be used as an area of refuge, where shall this door be located?
    a) On the same side of the hallway as the fire apartment door
    b) Opposite side of the hallway of the fire apartment door

Air Bags

11. Which of the following is incorrect regarding Maxi-Force Air Bags?
    a) They are designed to lift and move heavy loads
    b) Excellent on cylindrical and odd shaped objects
    c) Works well with other extrication tools, such as, the Hurst tool, and power saw
d) One of its components, the steel SCBA cylinder, is painted red as not to be confused with breathing air cylinders.

12. Correct facts regarding the Maxi-Force Air Bags can be found in all of the following except?
   a) Bags are neoprene rubber, reinforced with steel, with a non-slip surface
   b) Bags require only 2 inches for insertion
   c) Rated tonnage is based on the bags ability to lift that weight one inch
   d) Rated height is based on the bags ability to lift ½ the maximum tonnage to a certain height, i.e. a 12-ton/8.2” bag can only lift 12 tons one inch and six tons 8.2 inches

13. The pressure regulator, which connects to the cylinder, has two gauges. The high pressure gauge indicates the cylinder pressure and the low pressure gauge indicates the working pressure. At what PSI of the high pressure gauge do we change the air cylinder?
   a) 50 PSI
   b) 100 PSI
   c) 200 PSI
   d) 300 PSI

14. The Low Pressure gauge should be set to what PSI, to indicate working pressure?
   a) 118 PSI
   b) 135 PSI
   c) 200 PSI
   d) 22 PSI

15. Correct statements regarding the inflation and deflation of the bags can be found in all of the following except which choice?
   a) Control levers on the Dual Combination Control Valve and Safety Relief are in the closed position when they are perpendicular to the air supply line.
   b) Inflate the bags slowly to minimize the chance of load shifting
   c) Maximum internal air pressure for the bag when used for lifting purposes is 128 PSI
   d) Stabilize and shore the load before placing the bags into position

16. Correct operational guidelines when using air bags can be found in all but which one of the following statements?
   a) If necessary to block up a bag, ¾” plywood, 3 layers thick, glued or nailed together is recommended
   b) The bags should only be inflated a quarter to half of its rated height capacity
   c) Never work under a load unless it is blocked or shored
   d) The “pillowing” effect should be avoided
17. Avoid inflating bags against sharp objects or on a surface heated to over what temperature?
   a) 120 F  
   b) 220 F  
   c) 320 F  
   d) 420 F

18. The correct choice regarding the use of Maxi-Force air bags can be found in which of the following statements?
   a) Two bags may be used safely from one control valve safety relief device  
   b) When stacking bags, generally inflate the top bag first  
   c) Store the bags in a vertical position  
   d) Wood may be placed between the bags when stacking them

Mask Confidence 2

19. The terms “mayday” and “urgent” are intended for use in situations where immediate communication is necessary to protect life or prevent injury. Which of the following is incorrect regarding these emergency Handie-Talkie transmissions?
   a) Whenever the emergency alert button has been pressed, and or a mayday/urgent is transmitted, all Handie-Talkie communications are to cease, except those between the member initiating the emergency transmission and his/her officer.  
   b) If possible, press the Emergency Alert Button before beginning your transmission  
   c) “mayday” or “urgent” should be repeated three times followed by your message  
   d) By pressing the Emergency Alert Button the member ensures their message gets out at maximum wattage

20. Which of the following is not considered a “mayday” transmission?
   a) Imminent collapse feared  
   b) Member becomes lost or trapped  
   c) A firefighter is unconscious or suffers a life threatening injury  
   d) Loss of water, which would endanger members

True or False

21. When a member becomes trapped or lost they should immediately sound there Pass alarm and then transmit a “mayday.”

22. When transmitting a “mayday” for an injured Firefighter or Officer, member should provide the location, unit and identity of the injured along with the extent of their injuries.
23. While operating at a fire or emergency and the Incident Commander states “mayday, get out of the building, get out of the building”, all members will know that an imminent collapse is feared.

24. When fire is discovered entering an exposure to a degree that any delay may considerably enlarge the fire problem an “urgent” message that “fire extending” should be transmitted.

25. Anytime a change in conditions will severely impact an operation or the safety of members the member aware of the conditions shall immediately press their Emergency Alert Button and then contact the Incident Commander with a “mayday” message
Answer Key

Chapter 9

1. A, page 9
2. A,
3. A,B,C
4. C page 10
5. D
6. A
7. D
8. B page 11
9. A
10. A

Chapter 14

11. D page 17
12. B
13. C page 20
14. B
15. C page 23
16. B page 29
17. B
18. A

Chapter 7

19. A
20. D
21. False
22. True
23. True
24. True
25. False
Fill in the blank with the answer that is most correct:

Foam Ch. 20 pages 3-6

1. Foam is an agent designed for certain unusual type incidents. There are two main categories of foam in use in the Department- low expansion foam and high expansion foam. Which of the following fires are high expansion foams intended to be used on?

   a) Outdoor flammable liquid fire  
   b) Truck fire with diesel fuel spill  
   c) Class “A” combustible materials in a cellar  
   d) Class “A” combustible materials in a ship hold  
   e) Both A and B  
   f) Both C and D

2. Handlines with foam nozzles may be used in conjunction with an eductor and are very useful at a small operation like an oil burner with fire or small fuel spill. Approx. what size fuel spill makes a foam handline appropriate?

   a) 300 sqft  
   b) 200 sqft  
   c) 600 sqft  
   d) 450 sqft
3. Which of the following is not an advantage of foam?

a) Foam extinguishes progressively
b) Foam provides long lasting control
c) Foam can prevent ignition
d) Foam blankets have a short life span

4. Firefighters should begin extinguishment of a fuel spill fire beginning at which of the following locations?

a) At the edge of fuel that is nearest them
b) At the edge of the fuel that is furthest from them
c) In the middle of the spill and work out in all directions in a circular motion

5. Identify foam concentrates currently in use by the FDNY. (Multiple Correct)

a) Universal Gold AR-AFFF
b) Hi-EX
c) Fluoroprotien
d) AFFF
6. Which of the following is incorrect regarding the use of foam by the FDNY?

   a) The Port Authority (Airports) utilizes a variety of foams, and will make these available for FDNY use at large scale incidents.
   b) Most foam concentrate are compatible and can be mixed for storage.
   c) Hi-Expansion foam is not to be used in conjunction with Low-Expansion foam.
   d) Protein foam is not used by the FDNY, but might be encountered at some bulk plants.

7. Ladder companies have a very limited foam capability. Ladder companies shall carry how many 5 gallon containers of foam concentrate?

   a) 4
   b) 2
   c) 3
   d) 5

8. At the 3% setting, the foam eductor will consume___________gallons of foam concentrate per minute.

   a) 5
   b) 3.75
   c) 2.5
   d) 3.25
9. Which type of foam is used due to its improved flashback and burn-back resistance?

   a) Aerated
   b) Non-aerated

10. How many of the following methods of extinguishment does finished firefighting foam possess? (more than one)

   a) Smothers
   b) Suppresses
   c) Separates
   d) Cools

HRFPMD's Ch. 16 pages 20-24

11. For a fire in a High Rise Fireproof Multiple Dwelling, the inside team may take an elevator to what floor?

   a) The floor below the fire
   b) The floor two floors below the fire
   c) To the fire floor
12. When reaching the fire floor, and it is determined that the smoke and/or heat condition is due to a wind impacted fire, members shall?

a) Remain in stairwell.
   b) Immediately search to find the fire apartment door and close it.

13. When shall the fire apartment door be chocked in the open position?

   a) When the Ladder Company inside team is performing their search for the fire.
   b) Only when the uncharged hoseline is moving into the apartment.
   c) Only when the charged hoseline is moving into the apartment.

14. Which of the following is not a tool carried by the Ladder Company officer?

   a) Search rope
   b) Thermal Imaging Camera
   c) CO monitor
   d) Officer halligan tool

15. Which of the following tool assignments are listed incorrectly for a Ladder Company Firefighter at a fire in a HRFPMD?

   a) The Can FF will take (2) extinguisher cans
   b) The Irons FF will take the axe and halligan and the Hydra ram
   c) The OV FF will take the Halligan and 6’ hook
   d) The Roof FF will take the KO curtain, halligan and Hydra ram
16. Which of the following is not listed as a Roof FF duty at a fire in a HRFPMD?

a) Go to the apartment directly above the fire via the attack stairway.
b) Make sure the attack stairway door is maintained closed on the floor above.
c) Gain entry to the apartment directly above the fire.
d) Notify your Officer of apartment layout.
e) Prior to entering the building, perform an exterior size-up with the chauffeur.

17. Which member has the responsibility of operating the “fireman service” elevator by transporting members from the lobby to the upper floors?

a) Irons FF
b) Ladder Company Chauffeur
c) Outside Vent Firefighter
d) Roof firefighter

18. Which 2 members are responsible to conduct an exterior survey of the fire building including notifying their Officer of the apartment lettering?

a) Roof firefighter and Ladder Company chauffeur.
b) Outside vent firefighter and Ladder Company chauffeur.
c) The Ladder company chauffeur’s from both the 1st and 2nd due companies.
d) The Roof firefighter and Outside Vent firefighter.
19. For a fire in a HRFPMD, the second due ladder inside team is responsible to search the attack stairway for how many floors above the fire?

a) 1  
b) 2  
c) 5  
d) 10

20. Who is responsible to assist with KO curtain deployment in the event it is used from the apartment directly above the fire?

a) 1st due OV firefighter  
b) 1st Ladder company chauffeur  
c) 2nd due OV firefighter  
d) 2nd due Ladder company Chauffeur  
e) 2nd due inside team

21. The primary position of the 2nd due Ladder Company officer inside team is?

a) The floor above the fire  
b) The fire floor hallway  
c) Assist in the fire apartment  
d) Both the evacuation stairwell and the attack stairwell on all floors above the fire.
22. Which member of the 2nd due Ladder Company is responsible to carry the Life Saving Rope?

   a) Can FF  
   b) Iron FF  
   c) Roof FF  
   d) OV FF  
   e) Ladder Company Chauffeur (LCC)  
   f) Officer

23. If outside operations are in progress by both LCC’s of the 1st and 2nd due companies, who has the responsibility for roof operations?

   a) The 2nd due Roof FF  
   b) The 2nd due OV FF  
   c) The 3rd to arrive Ladder Company  
   d) The 4th to arrive Ladder Company

24. The Ladder Company Chauffeur proceeding to the roof should take which one of the following routes?

   a) The attack stairway.  
   b) The elevator directly to the roof ensuring car does not stop on fire floor.  
   c) The evacuation stairway.  
   d) The aerial ladder.
25. Which one of the following conditions is not sufficient reason to force the door and search adjacent apartments on the fire floor?

a) Severe heat in the hallway
b) Severe smoke in the hallway
c) High CO readings in the hallway
d) High CO2 readings in the hallway

True or False

26. If no outside operations are in progress, and building has “Fireman Service” elevators, the 2nd due OV FF should take control of an elevator.

27. Tool assignments for the 2nd due OV FF include the Halligan and 6’ hook or Axe.

28. If there are no “Fireman Service” elevators, the 2nd due OV FF should proceed to floor above and assist the Roof FF.

29. Experienced, respected members of this department who have survived wind impacted fires have all agreed that an operating 2 ½” line had little or no effect on the incredible heat being produced.

30. Directly attacking wind impacted fires with one or two- 2 ½” hoselines has sometimes proved ineffective and ultimately led to members incurring serious injuries.
Answer Key

Foam Ch. 20, pages 3-6

1. F
2. C
3. D
4. A
5. A, B & D
6. B
7. B
8. B
9. A
10. All

HRFPMD’s Ch. 16 pages 20-24

11. B 29. T
12. A 30. T
13. C
14. D
15. A
16. E
17. C
18. B
19. C
20. E
21. B
22. C
23. C
24. C
25. D
26. T
27. T
28. F
Fill in the blank with the answer that is most correct:

**CHAPTER 6a, Firefighter Removal ADD. 1**

1. When a MayDay is transmitted for a firefighter that is lost, missing, trapped or in distress, time will not be on your side. There will usually be a time lag between the trapped firefighter recognizing that they are in danger and the transmission of a MayDay. At times, fire conditions may be so severe that immediate removal of the distressed firefighter is critical, even with a spinal injury. In all cases a member should be positioned at the downed members ____________.
   a) Feet
   b) Head
   c) SCBA
   d) Side

**True or False**

2. The abandonment of Engine or Ladder Company operations to assist in a rescue of a downed Firefighter where resources have been deployed to handle the situation is sometimes necessary. However, this may place the trapped member and the rescuing Firefighters in severe danger.

3. When a distressed Firefighter is located, the appropriate radio transmission must be made. Whether or not the removal involves a conscious or unconscious member, the priorities will be all of the following except?
   a) Fire/Environment
   b) Air
   c) Immediate medical care, if required and possible
   d) Removal
   e) Identification of member

4. When transmitting a mayday/urgent is important to transmit a clear and concise message. When wearing a facepiece, the microphone of the Handie-Talkie must be placed ________________.
   a) Directly on the voicemitter
   b) Within 3 inches of the voicemitter
   c) Directly on the regulator
   d) Within 3 inches of the regulator

5. The air supply of the member needs to be assessed whether the member is conscious or unconscious. Removing the member from the IDLH is critical for survival. Assuring that the distressed member has an adequate supply of air is the next priority. A member will suffer brain damage without air in ____________________.
6. There are _____________ way(s) to supply air to the distressed member.
   a) 1
   b) 2
   c) 3
   d) 4

True or False
7. The high pressure air system permits emergency air replenishment of an SCBA from an air supply source while still in use through the Universal Air Coupling (UAC). The UAC is for emergency use only when a member is low or out of air within an IDLH. If the condition of the distressed member’s SCBA is in doubt DO NOT provide air via the high pressure system.

8. There are a number of ways to identify an unconscious member. One way is to depress the members EAB (emergency alert button) on their Handie-Talkie. One other way is to position the downed firefighter on their __________ side, which will provide access to members name on bunker coat.
   a) Right
   b) Left
   c) Back
   d) Front

9. Which of the following are common methods that may be used for packaging a downed firefighter? (more than one answer)
   a) Use of SCBA straps and personal harness
   b) Nylon tubular webbing
   c) Stokes basket/backboard
   d) SKED stretcher
   e) Life saving rope

10. If possible, position the member so that their __________ is facing toward the direction of removal prior to starting the packaging process.
    a) Chest
    b) Right side
    c) Left side
    d) Back

Chapter 16, VEIS with child gates

11. Which of the following is incorrect regarding child guard gates?
    a) They are usually 5 or 6 horizontal bars
    b) Typically, they are secured on the outside of the sash to the window frame.
    c) In most cases, screws are used to secure them.
d) Removing them under non-fire situations rarely is a problem. Striking the vertical frame away from the mounting screw generally will be sufficient.

Chapter 12

12. Stretching and operating hoselines is the primary function of a(n) ____________________.
   a) Engine company
   b) Ladder company
   c) Water resource unit
   d) Battalion company

13. All members must realize the importance of the initial line stretched at a structural fire. Most lives are saved by which of the following resources at fire operations?
   a) Ladder company personnel conducting searches
   b) The proper positioning and operating of hoselines
   c) The ventilation of the roof

14. If there is a determination of a life hazard in a building, the first hoseline is stretched to which location?
   a) Between the fire and most severe exposure
   b) Between the fire and any person endangered by it
   c) Between the fire and the greatest amount of property
   d) Between the fire and the ladder company members operating on the floor above.

15. Which of the following is not a consideration for the Second hoseline stretched at a fire?
   a) To provide a back-up to the first hoseline in case of a burst length
   b) To provide a back-up to the first hoseline in case of kinks in the line
   c) To provide a second hoseline to be used simultaneously with the first hoseline if fire conditions warrant
   d) If not needed on the fire floor, it can be advanced to the floor above.

16. In order to assure an efficient and timely stretching of the first attack line, the services of the first __________ engine companies will be utilized.
   a) 2
   b) 3
   c) 4

True or False

17. Unless the presence of a possible life hazard requires the stretching of a second line, the second engine shall augment and assist the first engine.

18. In one and two story structures, where the amount of hose required is ________ lengths or less, the need to assist on the first hoseline is not as great and engine companies are generally capable of stretching and operating individually. In such cases, the officer of the second engine company should make contact with the officer of the first engine company to ascertain if their assistance is required.
   a) 4
19. How many of the following procedures should be utilized to minimize the number of lengths required and provide for a rapid hoseline positioning?
   a) Well-hole stretch
   b) Fire escape stretch
   c) In-line pumping
   d) Utility rope stretch

20. A single 90 degree kink in a 1 ¾” hoseline can result in a loss of _________ GPM or more.
   a) 5
   b) 10
   c) 15
   d) 20
Answer key Lesson 13

Chapter 6a ADD. 1
1.  B
2.  True
3.  E
4.  A
5.  B
6.  B
7.  True
8.  A
9.  A,B,C,D
10. D

Chapter 16
11. A

Chapter 12
12. A section 6.1
13. B
14. B
15. B
16. A
17. False
18. A
19. All
20. D
Chapter 11 Pump operations/Hydraulics

True or False

1. Company officers may order the stretching of 1 ¾” hose at fires as the initial line if its use is compatible with fire conditions and the extinguishing capability is weighed against the fire’s magnitude, location and potential for spread.

2. The use of an 1 ¾” hose would be inappropriate and a company officer should not order it stretched if there is a large body of fire in a large compartmented area.

3. The use of 1 ¾” would be appropriate when the officer cannot determine the size or extent of the fire or fire area.

4. The use of a 1 1/8” MST, as opposed to a 15/16” MST, will produce a fire stream at extremely low pressure and is difficult to clog.

5. 3 ½” hose is used to provide greater water flows with less friction loss. This hose should be used to relay water to other engine companies.

6. In hoselines, the first thread of couplings is blunted with a Higbie cut. This cut serves a dual purpose: it protects the threads and makes coupling easy.

7. One lug on each coupling has a cut in it, when coupling hose, simply line these lugs up, take a quarter turn to the left to seat the coupling, then swivel to the right.

8. Couplings are made up hand tight. A spanner should be used only if couplings leak.

9. Direction of male threads normally point in the direction of the pumper supplying the hoselines.

10. Apparatus shall not be driven over hose lines unless absolutely necessary. When it is necessary, the line should be charged if possible.

Chapter 12, Standpipe stretch

11. A standpipe system is an auxiliary fire protection system installed in certain buildings/facilities. The requirement of standpipe systems is based on any of the following factors: building height, floor area, and/or fire department vehicle access.

12. When supplying a standpipe Siamese a 2 ½” hose should be used stretched from a pumper. Also, one pumper is sufficient in supplying system.
13. When performing a stretch from a standpipe outlet, the control firefighter will proceed to the floor below the fire with a folded length of 2 ½” hose and the standpipe kit.

14. All hoselines stretched from standpipes shall be connected to outlets on floors below the fire floor. If a pressure reducing device (PRD) is found on the standpipe outlet, it should be removed. If the PRD cannot be removed, this outlet is considered Out of Service.

15. The use of the Engine Company’s In-line pressure gauge attached to the standpipe outlet to ensure correct nozzle pressure should always be used.

16. If building is equipped with both standpipe and sprinkler systems and standpipe is to be used, the engine company first to arrive must connect first line to standpipe siamese and second line to sprinkler siamese.

17. To supply the standpipe if the Siamese is inoperable (but the system is otherwise serviceable) or if the Siamese is supplied but further augmentation is required, this can be done by connecting and supplying water to the first floor outlet. To make this connection a 3” x 2 ½” reducer and a 2 ½” double female is required. Another option to make this connection would be to use a 3” double female and a 2 ½”x3” increaser.

**Matching**

Always observe the color of the Siamese or outlet caps and indicating signs or plates before connecting hose lines. Color markings for the systems are:

18.______ Combination standpipe/sprinkler

19.______ Automatic sprinkler

20.______ Standpipe

21.______ Non-automatic sprinkler

   a) Red
   b) Green
   c) Yellow
   d) Aluminum
Answer key

Chapter 11
1. T
2. T
3. F
4. T
5. T
6. T
7. F
8. T
9. F
10. T

Chapter 12
11. T
12. F
13. T
14. F
15. T
16. T
17. T
18. C
19. B
20. A
21. D
Fill in the blank with the answer that is most correct:

**OV/Roof operations #2 Chapter 16**

1. Which of the following is **not** a position or duty of the 1st OV to arrive at a fire in a non-fireproof multiple dwelling?
   a) Assist chauffeur in front of building with laddering
   b) Provide horizontal ventilation from the exterior fire apartment
   c) V.E.I.S. (vent, enter, isolate, search) fire apartment
   d) Accomplish ventilation after receiving permission from Battalion Chief

2. Isolation of the fire is accomplished by closing doors or windows thereby controlling the ___________ of fire, heat and smoke.
   a) Extension
   b) Flow path
   c) Ignition

3. The correct tool assignment for the 1st to arrive OV at a fire in a non-fireproof multiple dwelling is found in which choice?
   a) Ax and halligan
   b) Hydra ram and maul
   c) 6’ hook and halligan
   d) 6’ hook and ax

4. How many of the following are correct variations for the OV at a fire in a non-fireproof multiple dwelling? (more than one correct)
   a) Store Fire – ventilate the rear of the store from exterior after receiving permission from Ladder Co. Officer.
   b) Top Floor Fire – to the roof with saw & Halligan, then, if possible, exterior of fire area to prepare for VEIS.
   c) If company is a Tower Ladder & there is no front fire escape, operates as basket firefighter for ventilation

5. Which of the following is an incorrect way to access the roof for a fire in a non-fireproof multiple dwelling?
   a) Adjoining building
   b) Interior stairs
   c) Aerial ladder
6. Which of the following is the first duty the Roof Firefighter should perform after gaining roof access?
   a) Confirm a way off the roof
   b) Conduct a roof size up
   c) Force open bulkhead door and probe inside for a victim
   d) Conduct a survey of the building for trapped victims or firefighters

7. The correct tool assignment for the 1\textsuperscript{st} to arrive Roof FF at a fire in a non-fireproof multiple dwelling is found in which choice?
   a) Ax, halligan and Life Saving Rope
   b) Hydra ram, maul and Life Saving Rope
   c) 6′ halligan hook, halligan and Life Saving Rope
   d) 6′ hook, ax and Life Saving Rope

8. Correct duties of the 2\textsuperscript{nd} due Roof FF can be found in all of the following except which choice?
   a) Contact the first to arrive Roof FF to determine their roof access.
   b) Assist and confirm all duties of the first to arrive Roof FF have been completed
   c) Never attempt to climb onto or off a bulkhead at a spot near or next to an open shaft.
   d) Team up with the 1\textsuperscript{st} Roof FF or 2\textsuperscript{nd} OV to search and ventilate the apartment above the fire.

9. Removed

10. For top floor fires, which is the correct tool assignment for the second due Roof FF?
    a) Saw and Halligan hook
    b) Saw and Life Saving Rope
    c) Saw and Halligan
    d) Saw and hydra-ram

11. Correct order of preference to attain roof access for a fire in a Brownstone is listed in which choice?
    a) Adjoining building, aerial ladder, fire escape
    b) Aerial Ladder (or Tower Ladder), 2nd arriving aerial ladder, adjoining building
    c) Aerial ladder, adjoining building, fire escape
    d) Fire escape, aerial ladder, tower ladder
12. If the Tower Ladder basket is used for roof access which of the following tools should be placed in basket and brought to the roof? (more than one correct)
   a) Extinguisher can
   b) Life saving rope
   c) Saw
   d) Hydra-ram

13. Correct position for the second to arrive Ladder Company inside team for a top floor fire in a Brownstone type row frame can be found in which choice?
   a) Check floors below to insure fire didn’t start on lower floor
   b) Initially 1st floor of the exposure
   c) Initially top floor of the most severely threatened exposure.
   d) Roof of fire building

14. Correct duties for the 1st OV at a taxpayer store fire can be found in all but which choice?
   a) Check rear and sides
   b) Provide ventilation at rear
   c) Provide ventilation at sides
   d) Enter and search when teamed up with another member

15. Which of the following is the correct tool assignment for the 1st OV at a taxpayer store fire?
   a) Maul and halligan
   b) Forcible entry saw and halligan
   c) Ax and halligan
   d) Forcible entry saw and hook

16. Which of the following is the correct tool assignment for the 1st Roof FF at a taxpayer store fire above the cellar?
   a) Saw and hook
   b) Forcible entry saw and hook
   c) Saw and halligan
   d) Saw and Life Saving Rope

17. Ladder Companies other than 1st or 2nd to arrive should report in with their ______and ______ foot hooks besides their normal tool complement?
   a) 8, 10
   b) 10,12
   c) 12,15
   d) 15,20
True or False

18. In fires in peaked roof private dwellings the Roof and OV team’s position is determined by probable life hazard.

19. In fires in peaked roof private dwellings all interior and exterior ventilation tactics must be controlled, communicated and coordinated by the 1st Battalion Chief on the scene.

20. For a fire in a flat roof private dwelling, Roof/OV positions remain the same as in a peaked roof, and they shall team up and V.E.I.S. area most likely occupied.

21. For a fire in a peaked roof private dwelling, Roof/OV team shall vent for extinguishment after the Engine Company is applying water to extinguish the fire.

22. Correct tool assignments for Roof/OV team for fires in peaked roof private dwellings include a 6’ halligan hook and/or ax for each member, along with a portable ladder.

23. Some buildings have exterior stairs to second floor (with no interior stairs) and fire escapes to attic.

24. For a fire in a flat roof private dwelling, the OV shall assist the chauffeur with any laddering needed.

25. When the OV and chauffeur of the 1st arriving ladder company have teamed up to V.E.I.S., the OV and chauffeur of the 2nd arriving ladder company should team up and ventilate the roof.
Answer key

Chapter 16 pages 1-20

1. D
2. B
3. C
4. A, B, C
5. B
6. A
7. C
8. D
9. A
10. A
11. B
12. B and C
13. C
14. C
15. A
16. A
17. B
18. True
19. False
20. False
21. True
22. False
23. True
24. True
25. False
Fill in the blank with the answer that is most correct:

**Hurst Tool Chapter 24**

1. Which of the following is incorrect regarding safety advancements made in construction of new vehicles?
   a) Reinforced wheel and engine deflection systems that upon impact deflect the wheels and motor away from the passenger compartment.
   b) Crumple zones that absorb the energy of the impact, preventing it from being absorbed into the passenger compartment.
   c) Reinforced dashboards that have been developed to protect the occupants in case of a front or side impact.
   d) These changes have drastically increased the ability of occupants to survive the impact and have made disentanglement efforts easier.

2. Airbags present several challenges. Exact location, volume and mechanism of deployment will vary. Many newer systems include the use of dual stage inflators which means there could be a second airbag deployment. Our members should always treat the area around the airbags as if they have not been deployed. Which of the following is incorrect in abiding by the “5-10-20” rule?
   a) Stay away from deployment path of side airbags at least 5”
   b) Stay away from deployment path of driver airbags at least 15”
   c) Stay away from deployment path of passenger airbags at least 20”
   d) Stay away from deployment path of curtain type airbags at least 20”

3. The seats in vehicles today are generally stronger, some wrapping around the occupant, and are mounted more firmly to the floor pan making seat displacement more difficult. Many new design vehicles have airbag components mounted in the seats upholstery. During disentanglement, members should avoid cutting through all of the following except which choice?
   a) Airbag sensors
   b) Gas cylinders
   c) Airbags
   d) Nader pin

4. Which of the following are places where batteries may be found? (more than one)
   a) Under the hood
   b) In the wheel well
c) Under the seats
d) In the trunk
5. Which of the following is incorrect regarding Hurst tool tactical procedures?
   a) Disentanglement is the removal of wreckage from around the victim
   b) Extrication is the physical removal of the victim from the vehicle
   c) Position yourself between the tool and the vehicle only in an emergency and due safety
   d) The power unit should be placed in front or rear of vehicle
6. Engine company assignments at a vehicle extrication are correctly stated in all of the following except which one?
   a) Officer should divide the company into two teams
   b) The officer and 1 firefighter (equipped with trauma bag and cervical collars) proceed to the scene of the accident
   c) The remaining members stretch and charge a precautionary hoseline
   d) Consider the use of a foam handline
7. Ladder company operations are correctly stated in all of the following except which one?
   a) Officer and inside team proceed to scene to initiate perimeter survey, chock the vehicle and gain access to the victim.
   b) The officer should ensure disconnection of battery, always removing positive terminal first.
   c) Ensure car is in park, windows are opened, seats are moved back and seatbelts are removed before shutting down ignition.
   d) If an engine or EMS is not on the scene, stabilize the patient.
8. The goal of vehicle stabilization is to prevent rocking of the vehicle. How many of the following are listed as part of vehicle stabilization? (more than one correct)
   a) Placing step chocks
   b) Shutting the engine down
   c) Engaging the parking brake
   d) Putting transmission into park
   e) Disconnecting the battery
   f) Placing a cervical collar on the patient
9. Vehicles encountered on their side or roof presents a unique challenge. Which of the following is an incorrect tactic in these situations?
   a) Immediately enter the vehicle to administer first aid to the patient
   b) Place step chocks and wedges under side of car and tires
   c) Secure vehicle to a substantial object
   d) Utility rope may be used to secure vehicle to a tree or apparatus
e) Entry into these vehicle could be the front or rear window

10. Which of the following is an incorrect statement regarding door removal in a vehicle extrication?
   a) There are two options, the Nader pin/staple or hinge side
   b) Protect victim from any flying debris
   c) When cutting on the hinge side, cut the top and bottom hinges in that order. If the hinge has a spring, it must be removed with a halligan or officer’s tool prior to cutting
   d) While attacking the hinge side has been successful in the past, the Nader pin/staple side may be an improved approach with new car construction.

Oil burner and Compactor emergencies Ch. 17, 19

11. Oil burner emergencies usually result in a heavy odor or visible smoke on scene which may be caused by delayed ignition. Actions to be taken include either disconnecting electrical power and/or fuel shut off. Which one of the following statements listed is incorrect?
   a) Shut off electric power by use of oil burner remote control which is generally painted red.
   b) In private dwellings, switch is usually located at top of interior cellar stairs.
   c) In an old law tenement, brownstone or frame building outside of the oil burner room.
   d) Shut off fuel at tank (all tanks have a shut off)

12. The FDNY spends many hours at emergencies and minor fires that involve incinerators and compactors. We must know how to deal with them in a professional and safe way. New York City Regulations encourage the use of compactors rather than incinerators, and require that incinerators be used only with safeguards. This policy reduces the risk of fire or smoke emergencies occurring, but does not eliminate them. Which of the following is an incorrect statement regarding these emergencies?
   a) For a fire in a compactor our priority is to extinguish the fire.
   b) For a fire in an incinerator our priority is to clear the blockage
   c) A large number of bags on the sidewalk may indicate a compactor
   d) In city housing projects, the chute door on the 1st floor may be color coded: RED for incinerator, BLUE for compactor

13. Which one of the following is correct when dealing with a fire in an incinerator or compactor?
   a) When approaching building, steel cans filled with ashes may indicate an incinerator
   b) All hallways have windows that can be ventilated
   c) A compactor fire is considered an emergency, not a structural fire
d) Extension is likely in an incinerator shaft

14. In regards to incinerator operations, which of the following is an incorrect statement?
   a) Officer and FE team, and OV position of the ladder company will generally operate inside the building to ventilate, search and locate the blockage.
   b) The Ladder Company chauffeur can vent stairways by opening the door of the bulkhead and securing it
   c) If you open a chute door on a floor and smoke comes out, the blockage is generally above that floor.
   d) If you open a chute door and a draft goes inward or there is little smoke, the blockage is generally below that floor.

15. How many of the following are listed as good practices in incinerator safety? (more than one)
   a) When opening a chute door wear full firefighting gear
   b) Stand to the side of the hopper door
   c) Consider using a mask
   d) Always stay clear of the opening, in case there should be an explosion or eruption of fire
   e) If attempting to clear a blockage from the base of an incinerator, shut off the auxiliary burner before commencing operations

16. A compactor is designed to reduce the volume of raw refuse. The refuse is dropped down a chute from the floors above, and guided by a shaped hopper into the compactor chamber. When the chamber is full, a photo electric beam is broken, initiating a ram that forces the refuse through a nozzle leading to a bag or container. Which of the following is incorrect regarding compactor room fire protection?
   a) Room should be fire resistive and protected by a steel door
   b) A water outlet and hose are required to be located just outside the room
   c) Sprinkler heads shall be provided in compactor units
   d) A small O.S. & Y. valve controlling both the automatic head within the compactor and any heads within the compactor room is usually found on the water line in or near the compactor room.

17. Engine company operations, for incinerator chutes or unit fires, shall be guided by all of the following correct operations except which one?
   a) Engine company will stand fast in the lobby with masks, rolled ups and standpipe kit
   b) If it is determined that the chute is to be flooded, a line is stretched to the floor below and operated into the chute
   c) Hand stretch a line from the apparatus if there is no standpipe in the building
d) If fire is in basement incinerator room, entry may have to be made via an outside entrance, use Standard Operating Procedure (S.O.P.) for a basement fire.

18. Operations at compactor fires are governed by the location of the fire. There are three categories of compactor fires. Which of the following is not one of those categories?
   a) Fire in spark arrestor
   b) Fire in the chute
   c) Fire in the unit
   d) Fire in the compactor room

19. Compactor fire operations are correctly listed in how many of the following? (more than one answer)
   a) For a fire in the chute, OV of the ladder company operates with the engine company to provide access to the chute and check for extension
   b) Before operations commence, the officer and FE team must go to compactor room and shut off power.
   c) Never operate the compactor unit to help clear the unit.
   d) OV Firefighter, after providing access for the engine company, proceeds to roof to search and vent stairways.

20. Proper tactics for a fire in a compactor unit are correct in all of the following except which one?
   a) If fire has not extended to the room, the engine company stretches a line to the first floor, and operates into the chute to extinguish the fire.
   b) Electrical shut off will be on the wall just outside the compactor room.
   c) Ladder Company will begin overhauling after the engine company extinguishes the fire. Before opening the compactor unit access door, be sure the hoseline is shut down and the sprinkler O.S.& Y. is closed.
   d) Open door to the unit and pull garbage to reach the fire.
Answer key

Hurst Tool chapter 24

1. D Pg1 sec 2.1
2. D pg 2 sec 2.6
3. D pg 3 sec 2.1.2
4. All pg 3 sec 2.1.5
5. C pg 4 sec 3.3.3
6. B pg 5 sec 4.1
7. B pr 5 sec 4.2.4
8. A,B,C,D,E pg5 5.1
9. A pg 5 sec 5.6
10. D pg 8 sec 6.1

Oil Burner and Incinerator Chapters 17 and 19

11. C pg 17 sec 5.1
12. D pg 1 sec 1.3D
13. A pg 1&2
14. B pg 2
15. A,B,C,D,E pg 4 sec 3
16. B pg 6 sec 7
17. B pg 5 sec 4.1
18. A
19. A,B
20. B
Handie Talkie Mayday Chapter 7 pages 1-11

1. Which of the following scenarios would you NOT transmit a “mayday” for?
   a) The rear wall of the fire building which is a 3 story frame is peeling away, indicating a structural collapse in a matter of seconds.
   b) You’re operating on the 1st floor of a private dwelling and suddenly the floor beams burn through and collapse the floor.
   c) The fire has not been extinguished and you sprain your ankle as you step onto roof from the aerial.
   d) You’re searching a basement of a taxpayer with your officer and you get turned around losing voice/visual contact. You’re also not sure of your escape route.

2. You’re the OV for Ladder Company 113 searching the top floor apartment of an old law tenement. You locate an unconscious firefighter, which one of the following procedures is considered incorrect?
   a) You contact the incident commander in the following format “Mayday-Mayday-Mayday. L113 OV to command, Mayday.”
   b) After a response from the Incident Commander you continue with “L113 to command, mayday-member unconscious”
   c) You also provide the location, unit, identity of the injured member, and extent of their injuries.
   d) In an attempt to identify the firefighter, you check the name on the back of his bunker coat

3. If a member becomes lost, which of the following procedures is considered incorrect?
   a) Immediately activate your pass alarm prior to contacting the Incident Commander
   b) Provide to the Incident Commander the number and identity of members involved
   c) Provide your location if known, or last recognizable reference point if location is unknown
   d) Provide any imminent conditions that might affect trapped members

4. Which is the correct initial communication procedure when a member finds a trapped or lost member?
a) Begin with a Handie Talkie message “Mayday-Mayday-Mayday, L113 OV to
command, Mayday”
b) Begin by pressing your Emergency Alert Button
c) Begin by pressing the lost members Emergency Alert Button
d) Begin by pressing the lost members pass alarm

5. Which of the following serious change of conditions is NOT considered an Urgent
message?
   a) There is a structural problem indicating the danger of collapse
   b) There is a loss of water
   c) An interior attack is to be discontinued, and an exterior attack instituted
   d) The 1st arriving engine is unable to secure a positive water source

6. An Urgent message shall be initiated anytime a change in conditions will severely impact
an operation or the safety of members. A member aware of a change shall immediately
press their Emergency Alert Button, and then contact the IC. Which of the following
information is not necessary for the member to report?
   a) Nature of the problem
   b) Location
   c) Members/units affected
   d) How much air reporting member has left in his cylinder

7. Effective Handie Talkie communications in High rise buildings and hospitals are generally
hampered in all of the following areas except?
   a) Elevator cars
   b) Core areas
   c) Stairs
   d) Unobstructed shafts

**Stretching 2 ½” up an aerial**

8. Stretching a line up an aerial is an option available to place a hoseline in operation from
the exterior. Which of the following is an incorrect procedure when performing this
evolution?
   a) Turntable of aerial ladder is placed directly below objective. The tip of the ladder
      level with the sill.
   b) Stretch hose and arrange in folds below the turntable
   c) The nozzle position climbs the aerial with hose under right arm and nozzle over
      left shoulder
   d) All members operating on ladders shall wear personal harness or life belts.
   e) Hose is placed on left side of ladder as firefighters climb
9. Mask cylinder valve assembly consists of 5 parts. Which of the following is an incorrect statement regarding these parts?
   a) The Rubber bumper protects the assembly
   b) The Cylinder hanger connects the cylinder to back frame assembly
   c) The Cylinder gauge reads the pressure within cylinder and gauge assembly
   d) The Cylinder valve needs not to be fully opened counter clockwise when in use

10. How many of the following statements are correct regarding cylinders?(more than one)
    a) Place spare cylinders in storage boxes or apparatus holders. Extra cylinders should be placed on their sides with the valve stem and handle protected from damage.
    b) Inspect all spare cylinders weekly on Tuesdays for FULL pressure (4500 psi)
    c) Avoid depleting cylinders and leaving valve open. Doing so will allow moisture and contaminates to build up inside the cylinder
    d) Cylinders with a blue top and/or a polymer protective sleeve are designated training cylinders. These cylinders may be used for firefighting purposes.

11. How many of the following situations necessitate the exchange of a cylinder?(more than one)
    a) Prior to operating, the remote gauge reads less than full (green area)
    b) While operating, the remote gauge and the HUD read less than ¼.
    c) While operating the Vibralert sounds

True or False (12-16)

12. Never use a wrench to tighten the high pressure hand coupling.
13. During inspection of the SCBA, there may be a need to tighten or replace the Nylon O-ring. To do so use a 1/8” Allen wrench and a 7/16” open end wrench
14. The universal air connection (UAC) permits the replenishment of an approved SCBA breathing air supply cylinder on a user’s SCBA from an approved air supply source while in use
15. The UAC is not a Quick charge attachment and must not be used for routine recharging of the air cylinder
16. It is not necessary for the UAC dust cover to be in place. If missing, requisition one from Mask Service Unit and place over the UAC.

17. The Pressure Reducer Assembly (PRA), mounted on the left side of the back frame, reduces the high pressure breathing air received from the cylinder. Consisting of two systems, the PRA normally reduces the operating pressure to ________ before
entering the regulator's low pressure hose. The regulator then controls the pressure within the facepiece to slightly above atmospheric.

a) 50 psi  
b) 100 psi  
c) 150 psi  
d) 185 psi

18. A malfunction of the PRA's primary system will automatically direct breathing air into a secondary system. When this occurs, the operating pressure will only be reduced to _________ and cause the vibralert alarm to activate. The member will only know that the vibralert alarm has activated and MUST NOTIFY THEIR OFFICER AND IMMEDIATELY LEAVE THE CONTAMINATED AREA.

a) 50 psi  
b) 100 psi  
c) 150 psi  
d) 185 psi

19. Failure of both the primary and secondary systems in the open position will activate a Relief Valve in the PRA, which will rapidly discharge all pressure in excess of _________ into the atmosphere. When this occurs, the cylinder valve should be partially closed, allowing only a minimal amount of air to release, permitting the member to both breathe and conserve air. MEMBER MUST NOTIFY THEIR OFFICER AND IMMEDIATELY LEAVE THE CONTAMINATED AREA.

a) 50 psi  
b) 100 psi  
c) 150 psi  
d) 185 psi

True or False

20. If a member of a company, using an SCBA, leaves a contaminated area, this member must be accompanied to a safe area by another member using a SCBA.
Answer key

Mayday/Urgent Chapter 7 Sec .4.1 thru 4.3 and 6.2

1. C
2. B
3. A
4. B
5. B
6. D
7. D

Stretch 2 ½" line up aerial

8. C

Mask Confidence Chapter 6 pages 6-9 sec 3.2-3.6

9. D
10. A,C
11. A, B, C
12. T
13. T
14. F
15. T
16. F
17. B
18. C
19. D
20. T
FF Candidate Practice Questions

Week 5 Lesson 18 Part 1

Fill in the blank with the answer that is most correct:

CO/Rad 50/TIC

1. Which of the following is NOT a characteristic of Carbon monoxide (CO)?
   a) It is colorless, odorless, and tasteless.
   b) Smoldering fires and fires partially extinguished by sprinkler systems produce large quantities of carbon monoxide (CO).
   c) Heavy concentrations of carbon monoxide is present only if there visible smoke and/or a visible haze.
   d) CO combines with hemoglobin 210 times more readily than oxygen does and rapidly robs the blood of oxygen needed by the body.

2. Of the following statements, which one is correct regarding CO?
   a) Carbon monoxide prevents the blood from disposing of the waste carbon dioxide it normally brings back to the lungs. This mode of action makes carbon monoxide dangerous at high concentrations only.
   b) Exposure to 1.3% of carbon monoxide will cause unconsciousness in two to three minutes.
   c) Exposure to small concentrations for only a few minutes inhibits one’s ability to think clearly, rapidly causes disorientation, and gives a feeling of euphoria compounding the risk hazard.
   d) Carbon monoxide is produced by the incomplete combustion of many common materials including wood and paper. Other more modern sources are foam rubber, rubberized flooring, vinyl wall paper and pipes made with polyvinyl chloride (PVC).

For questions 3-10, match the description with the toxin listed below:

a. Carbon monoxide  b. hydrogen cyanide  c. acrolein  d. hydrogen chloride  
   e. phosgene  f. nitrogen oxides  g. formaldehyde  h. acetaldehyde

3. _______ Is tasteless and odorless at first, but at 6 PPM has a musty hay smell, if concentration reaches 25 PPM, this toxin is deadly.
4. _______ Intensely irritating and also has a suffocating effect, is used commercially for fumigation and as a preservative.

5. _______ Colorless, but has a pungent odor and is intensely irritating to not only your eyes but also your respiratory tract which may swell enough to suffocate you.

6. _______ When inhaled, this toxin crowds oxygen from the blood, seriously affecting the brain and other tissues. It is produced by the incomplete combustion of common materials such as wood, paper and foam rubber.

7. _______ Its extreme irritation to your nose can be felt at less than 10 PPM. This toxin can arise from the burning of acrylic light diffusers.

8. _______ Strong depressant of the central nervous system. Ingestion has effects similar to alcohol intoxication. Its fruity odor may be masked by other odors present.

9. _______ Colorless gas that has a noticeable almond odor. It can be absorbed through the skin as well as inhaled. It causes one to gasp in breathing, induces muscle spasms, and speeds up the heart rate.

10. _______ A reddish brown gas. This toxin is insidious; you can stand the irritation in your nose and throat, even when you are breathing in a lethal dose. The effects may not come for several hours.

11. The Fire Department is occasionally called to operate at incidents where respiratory protection is necessary for extended periods of time. In order to provide safe and alternative protection for our members at these operations, the Department has issued Air-Purifying Respirators (APR). How many of the following statements are correct in the use of the APR adaptor and filter? (more than one correct)

   a) The concentration of contaminants in the atmosphere is known.
   b) Atmospheric monitoring has been conducted and will continuously be done.
   c) Oxygen level is at least 19.5% and not more than 25.5%
   d) It is not to be used in fire conditions.
   e) It is not to be used in either confined spaces or permit required confined spaces.
   f) The level of physical activity of the wearer is monitored.
   g) The elapsed time since the filtration element was placed in service is monitored.

12. The thermal imaging camera is a valuable tool that can be used for many operations. TICs may be especially helpful in the low visibility environment of
structural firefighting. TICs provide a pictorial representation of temperature differences that are unaffected by smoke. Which of the following is incorrect regarding the TIC and its use?

a) The TIC is a tool that should be used as an adjunct to, not a replacement for the established firefighting procedures and practices already in use.
b) Visible light is blocked by the solid carbon particles in smoke.
c) IR wave length is affected by the smoke.
d) A thermal image is a pictorial representation of temperature differences.

13. Which of the following color representations regarding the TIC is incorrect?

a) Black indicates the presence of the most amount of heat or the coolest object in the scene.
b) Shades of gray represent the temperature range between black and white.
c) Some TIC’s in service also associate colors such as red or orange with specific temperature ranges.
d) White is the presence of the most heat in the scene.

14. Correct statements can be found in all of the following characteristics regarding the TIC except?

a) LOW contrast may occur in cooler areas where images may be difficult to view due to the lack of heat present, and all objects being close in temperature.
b) HIGH contrast is when more heat is present, both generated and absorbed by objects, the clearer and sharper the image will appear.
c) When using a TIC, convected heat movement may appear as red swirling waves or smoke.
d) When searching for fire location or extension, operators should make every attempt to detect the presence of convected heat along with its direction and velocity earlier rather than later.

15. How many of the following are considered tactical applications of the TIC?

a) The TIC shall be carried and used at all structural fire operations.
b) Search for life, including occupants at windows obscured by smoke.
c) Used at emergencies to check for overheated motors, circuits or ballasts.
d) Used at HAZ MAT operations for vapor spills and liquid levels in containers.

16. Correct maintenance procedures and limitations are listed in all of the following except?

a) The thermal image will not see through water.
b) The average field of view of a TIC is 90 degrees.
c) Inspect immediately after each use and following the 0900 and 1800 roll calls
d) Thermal imaging cameras are not rated as intrinsically safe

17. Which of the following is incorrect regarding the RADALERT 50/ RADIOLOGICAL monitor?

   a) When units arrive at a radiological scene, they shall turn on their RADALERT 50
   b) When turning on the monitor using ON/OFF/AUDIO switch, the switch should be in the AUDIO for proper operation.
   c) A spare 9-volt alkaline battery shall be kept with the RADALERT 50
   d) The RADALERT 50 alarms at 1.0 mR/hr, indicating an area that has radiation above normal background

**High Rise Office**

18. General descriptions of High Rise Office buildings can be seen in all of the following examples except?

   a) They are 75’ or more in height
   b) They vary from 2000 to over 300,000 sq. feet
   c) They are considered Class 1 non-combustible
   d) Buildings shall be classified as Class E when they are primarily occupied for residential purposes.

For questions 19-23 match the approximate year built with the description:

A)”Heavy weight” built before 1945

B) “Medium weight” built between 1945 and 1968

C) “Light weight” built after 1968

19. _______10-20 lbs. per square foot, fire towers required,

20. _______ Exterior windows were open able, core construction techniques were not used

21. _______ Extensive plenum ceilings with a lack of fire stopping, core construction used extensively

22. _______Lack of compartmentation, exterior curtain walls leave a space of 6-12”, requiring additional fire stopping
23. _______ Floors constructed of reinforced concrete, structural steel components were encased in concrete.

24. In High Rise office buildings, a Class E communication system consists of all of the following components except which one?
   a) A fire command station, located in the Lobby near the elevator control panel, with a public address serving all floors, elevators and stairways.
   b) Manual alarm sending station in each stairwell
   c) Associated systems such as smoke detectors and sprinkler water flow alarms
   d) Floor warden stations, on each floor, with two-way communications with the fire command station

25. Which of the following is an incorrect statement regarding High Rise office buildings?
   a) A curtain wall is non-bearing and built between piers or columns for the enclosure of the structure, but not supported at each story.
   b) Q decking is a type of composite floor construction in which corrugated steel is used to support the concrete floor.
   c) A fire safety director is a civilian employee of the building, holding a certificate of fitness from the FDNY. This person is required whenever there are more than 250 people anywhere in the building.
   d) Core construction is when a building’s elevators, stairway and building support systems are grouped together in one area of the building

26. Compartmentation is the subdividing of floor areas by fire resistive separations into smaller spaces or compartments, such as numerous enclosed offices as compared to open space cubicles.
Answer key

CO/Rad 50/TIC

1. C Ch 6
2. D
3. E
4. G
5. D
6. A
7. C
8. H
9. B
10. F
11. A,B,D,E, F, G
12. C Ch14
13. A
14. C
15. A,B,C,D
16. B
17. A

High Rise Office Ch 9

18. D
19. B
20. A
21. C
22. C
23. A
24. B
25. C
26. True
FF Candidate Practice Questions
Week 5 Lesson 19 Part 1

Fill in the blank with the answer that is most correct:

Elevator Emergencies Chapter 18

1. Which of the following is incorrect regarding the function of the FDNY at elevator operations?
   a) FDNY operations include the safe removal of persons trapped in the elevator car or hoist way.
   b) Repairs are not to be carried out by members, unless of course, repairs are minor
   c) Reactivation of elevators are not to be carried out by members
   d) Contact shall be made with responsible building management personnel for assistance, however, FDNY units should start operations immediately

2. How many of the following are considered correct regarding elevator operations?
   a) An elevator emergency is considered an incident when there is a stuck elevator with trapped passengers not in immediate danger and no evidence of injury.
   b) Conditions must be constantly monitored. An incident may escalate to an emergency.
   c) A situation considered an emergency is when fire endangers passengers in a stuck elevator
   d) A passenger in a stuck elevator is injured or panic stricken is also considered an emergency

3. How many of the following are correct procedures in locating the stalled elevator car?
   a) Check floor indicator at the lobby control panel
   b) Communicate with passengers via the car telephone or intercom
   c) Communicating with passengers can also be accomplished by yelling up hoist way or speaking through car doors.
   d) Instruct the passengers to activate the emergency alarm and emergency stop button. This will help to locate the car.

4. Which of the following is considered an incorrect procedure in locating the stalled elevator car?
   a) With forcible entry tools, pry open door with the fork end of the halligan and look up shaft.
b) View the location of the counterweight through the wire glass door panel or by opening the hoist way door. The location of the counterweight can be used to approximate the position of the car.

c) Enter a car in the same bank and open the top hatch if no damage will be done to the elevator car.

d) Use the floor selection in the machinery room; it indicates the exact location of the elevator car.

5. The most frequent cause of elevator malfunction is ____________?
   a) Electrical problems
   b) Mechanical problems
   c) Faulty cables applying the elevator brake.

6. Primary removal procedures are simple approaches performed without turning off the elevator power. Which of the following is not considered a primary removal procedure?
   a) Have a passenger press Door Close button
   b) Press the lobby call button
   c) Instruct the passengers to insure the car door is fully closed
   d) Have members physically close all hoist way doors on the shaft (air movement in shaft may have opened an interlock cutting power to the car.)
   e) Activate firemen service by inserting 1620 key into switch located adjacent to elevator door at lobby.

7. Whenever secondary or emergency removal procedures are necessary, power removal is essential. Which of the following is an incorrect location for the elevator machinery room where the power shut off is located?
   a) The top of the shaft
   b) The bottom of the shaft
   c) 1 level above the highest floor serviced by the elevator
   d) 2 levels above the highest floor serviced by the elevator

8. How many members are dispatched to the elevator machinery room to shut off power to the stalled car?
   a) 1
   b) 2
   c) 3
   d) 4

9. How many of the following are correct operations performed during secondary removal procedures?
   a) Members are to remain at power switch throughout the operation to insure that power is not restored
   b) Upon completion, it is advisable to restore power to the stalled car
c) In the elevator machinery room, do not step on the grating or cover over the ventilation hole also known as the smoke hole.
d) Members are not to enter the shaft or remove passengers from the car until assured power has been removed

10. Of the following operations during secondary removal procedures, which one is considered incorrect?
   a) When passengers are removed from a car between floors they should be taken up and out
   b) Members operating in the shaft should secure themselves with their personal harness
   c) The elevator shall not be jacked up or moved in any direction
   d) No adjustment to or prying of the elevator machinery brake shall be attempted. The brake will be in a safe position and should not be tampered with

Backstretch Chapter 12
11. A backstretch is a stretch of an attack line in which the pumper reaches the fire before the hydrant. Correct procedures regarding this operation include all of the following except?
   a) Pumper stops in vicinity of fire building so as not to impede the positioning of a ladder (truck) company
   b) Firefighters remove enough hose to reach the building
   c) Pumper proceeds to hydrant playing out hose along the way
   d) One member (control ff) rides rear step, standing clear of moving hose
   e) Upon reaching hydrant connect pumper; break hose line and attach to pumper

12. While performing a backstretch, the proper procedures to remove hose from apparatus includes all of the following choices except?
   a) One member mounts rear step
   b) This member places arm through first 4 folds of hose which equals 1 full length
   c) When laying first length of hose on ground, hose should be placed 15 feet from apparatus slightly to side in direction of stretch
   d) The 2nd length of hose should be placed directly to rear of apparatus
   e) The 3rd length of hose should be placed to side away from direction of stretch

Fire Escape Stretch
13. The fire escape stretch can be utilized to stretch a hoseline (or an additional line) via the outside of the building. The line can be stretched to the balcony of the floor below the fire and in through a window and up to the fire floor via the interior stairs. Another option, when there is no access via the interior (i.e. a vacant with damaged interior
stairs) is to stretch up to the balcony of the floor below the fire and then gain access to the fire area via the balcony through a window on the fire floor. Correct procedures performing the fire escape stretch are included in all of the following except?
   a) Stretch and arrange sufficient hose on street next to apparatus
   b) Hoist hose up the fire escape with a utility rope or a 6 foot hook
   c) If a rope is used, the nozzle firefighter should proceed directly to the floor below the fire and be prepared to pull on rope once nozzle is secured
   d) The control firefighter is responsible for securing the nozzle to the rope or the 6 foot hook, whichever is used.

14. Additional correct procedures are included in all of the following except which choice?
   a) Additional hose on the fire floor can be flaked over the fire escape railing
   b) The back-up firefighter secures the line with a hose strap on the floor below the fire
   c) The line is secured with hose straps beginning with the floor below the fire and continuing with alternate floors down
   d) Prior to charging the line, members must position themselves between the dry line and the building- not the dry line and the fire escape railing
   e) Fire below the 3rd floor, the line is stretched up the well of the fire escape

**Partner Saw Roof operations**

15. Portable power saws improve efficiency by facilitating cutting operations. They can be extremely dangerous if misused or if safety precautions are disregarded. Which one of the following safety precautions is considered correct?
   a) Have a plan of action after starting the saw
   b) It is safe to operate saw and not be assisted by a guide
   c) During cutting operations, everyone in the vicinity of a saw shall observe as near as possible and practical, a 25’ radius circle of danger
   d) Only the officer, the operator and the member assigned as the guide may enter the circle of danger. This circle shall be measured in all directions from the point where the blade of the saw is in operation

16. How many of the following are considered correct procedures and safety concerns? (more than one correct)
   a) The saw shall be shut down when moved to a distant operation (level to level)
   b) Operator and guide must have their clothing completely buttoned up and close fitting
   c) Side pressure or twisting of the blade when operating should be avoided
d) Avoid using saw from tower ladder basket

17. Correct cutting operations and blade usage are included in all of the following except?
   a) When cutting with a carbide tip blade, bring the throttle to full RPM before contacting the surface to be cut
   b) While using the carbide tip blade, a rigorous back and forth motion of the saw will widen the cut and help prevent saw from binding
   c) When using abrasive discs (aluminum oxide and silicon carbide), when the blade is brought into contact with the material, run the engine at low speed and gradually increase as it cuts into material.
   d) The saw should be checked at the beginning of each tour

Chapter 16 Ventilation Techniques

18. In all fires it is still of paramount importance to provide rapid initial ventilation (windows, skylights, etc.) before getting involved in the slower work of cutting the roof. If necessary, cut a hole directly over a top floor fire. How many of the following are indicators to determine the correct cutting location?
   a) Check for soft spots
   b) Melting snow or ice
   c) Steam or a dry spot on a wet roof
   d) Knowledge of fire location on travel to roof
   e) Looking over edge of roof

19. Correct cutting procedures are correctly described in all of the following except?
   a) Holes are made using aluminum oxide blade
   b) Push down on top floor ceiling to complete ventilation.
   c) On flat non fire proof roofs, with the exception of taxpayers, a 3’x6’ coffin cut is recommended
   d) On taxpayer roofs a 8’x8’ hole is recommended

20. The size and location of the opening will depend on fire conditions. The suggested method to make an expandable opening “coffin cut” is correctly described in all of the following except?
   a) Ideally wind is at your back
   b) Cut 1 is approximately 3 feet
   c) Cut 2 is a knockout corner cut for tool insertion
   d) Cut 3 is approximately 6 feet
   e) Remove pieces of roof section to rear yard to avoid tripping hazards
   f) Make sure roof is not opened before cut is completed.
**Answer key**

**Elevator Emergencies chapter 18**
1. B
2. All
3. A,B,C
4. A
5. A
6. A
7. C
8. B
9. A,C,D
10. B

**Backstretch Chapter 12**
11. B
12. B

**Fire Escape Stretch CH 12**
13. A
14. E

**Partner Saw/Roof Operations CH 14**
15. D
16. A,B,C
17. B

**Roof ventilation Chapter 16 pages 68-69**
18. A,B,C,D,E
19. A
20. E
Choose the answer that is most correct:

**AUC 323**

1. The Probationary Firefighters Development Program ensures that apprentice firefighters continue their education after graduation from Probationary Firefighter School. How many of the following are listed as essential components of a firefighter’s development? (more than one correct)
   a) Reading assignments
   b) Company drills
   c) Fire critiques
   d) Input of senior firefighters
   e) Guidance of company officers

2. Company officers will be flexible and take advantage of training opportunities as they arise. How many of the following are examples of company, firefighter and probationary firefighter training opportunities? (more than one correct)
   a) During BISP (building inspection safety program)
   b) During hydrant inspection
   c) During an incident
   d) Anytime an officer feels there are lessons to be learned

3. Which of the following is incorrect regarding the probationary firefighter reading schedule?
   a) Company commanders will initially emphasize those portions of the reading schedule to their unit type (engine or ladder) and the response area.
   b) The probationary firefighter will initial and date the reading schedule in red ink when subject matter has been read.
   c) The officer on duty (OOD) will initial and date the reading schedule in red ink when the subject matter has been reviewed and drilled on.
   d) The company commander will initial and date the reading schedule in red ink once a month
4. Every member upon completion of Probationary Firefighter School is issued a composition notebook to document their training. Which of the following is incorrect regarding these notebooks?  
   a) Notebooks shall be maintained for one full year from the probationary firefighter’s appointment date.  
   b) Notebook entries shall include the day, date and tour.  
   c) Members shall ensure a tool list from their current unit is attached to the first page of the notebook.  
   d) Members shall bring the training notebook to all drills held in quarters.  

5. How many of the following topics should be recorded by the Probationary Firefighter in their training notebooks? (more than one correct)  
   a) Questions they have concerning fire tools, equipment and operations.  
   b) Lessons learned and reinforced during operations  
   c) Information obtained at drills and training exercises  
   d) The input and tips provided by senior members  
   e) Knowledge gained from reading assignments  

6. Probationary Firefighters are required to continue their reading schedule for _________ Year(s)?  
   a) 1  
   b) 2  
   c) 3  
   d) 4  

H-Type, Chapter 8  

7. A _______________ is a bevel cut at the end of roof beams in brick walls, leaving the beams free to fall if burned through without causing the walls to fail.  
   a) Brick cavity cut  
   b) Joist  
   c) Fire-cut  
   d) Corbel shelf cut  

8. A _______________ is a horizontal structural member used to carry loads perpendicular to its length but larger in size to beam.  
   a) Steel “I” beam  
   b) Girder  
   c) Column  
   d) joist  

9. A _______________ is a closely spaced beam supporting a floor or ceiling.
10. A _____________ is a space between buildings or rooms within a building provided for the purpose of admitting air and light to rooms.
   a) Sleeper
   b) Air shaft
   c) Void
   d) Channel rail

Matching

Match the 1938 building code class with the correct description:

11. Class 1:___ A) non-fireproof structure
12. Class 2:___ B) heavy timber construction
13. Class 3:___ C) metal structure
14. Class 4:___ D) fireproof
15. Class 5:___ E) fire protected
16. Class 6:___ F) wood frame structure

Match the 1968 building code with the correct description in Construction Group II-Combustible:

17. II-A:___ A) unprotected wood frame
18. II-B:___ B) heavy timber
19. II-C:___ C) protected wood frame
20. II-D:___ D) protected wood joist
21. II-E:___ E) unprotected wood joist

22. _____________ stairs are considered an asset to fire operations and are located at points remote from each other. A person can go from one stairway to another via public hall on all floors of the building.
   a) Return
   b) Scissor
   c) Transverse
   d) Wing
   e) Isolated
23. ____________ stairs usually have an individual entrance. The floor landings are limited with no connection to any other stairwell.
   a) Return
   b) Scissor
   c) Transverse
   d) Wing
   e) Isolated

24. ____________ stairs can be one or two located in each wing. There is no connection to any other wing in the building.
   a) Return
   b) Scissor
   c) Transverse
   d) Wing
   e) Isolated

25. ____________ stairs are constructed side by side in the core of a building in which their doors alternate the point of exit to opposite sides of the core.
   a) Return
   b) Scissor
   c) Transverse
   d) Wing
   e) Isolated

Standpipes Chapter 13

26. The City of New York is the Nation’s foremost vertical city with over 1000 high rise buildings. Firefighting in these buildings is challenging and success depends upon both the condition of the standpipe system and our skill and efficiency in using it. Requirements for the installation of standpipe systems are predicated on several factors. Primary factors are the height and area of the structure. How many of the following are examples where a standpipe system may be found? (more than one)
   a) High rise residential and office buildings
   b) Large area buildings such as hospitals, terminals, warehouses and industrial buildings
   c) Enclosed shopping malls
   d) Theaters, stadiums and arenas
   e) Parking garages
   f) Bridges and tunnels
   g) Piers and wharves
   h) Limited access highways
27. Standpipe systems can be categorized in one of two ways:
   A) By whether or not the system riser contains water
   B) By the size of the hose outlets.

Which of the following characteristics is described incorrectly?
   a) Wet systems contain water in the riser at all times supplied by city main, gravity tank, pressure tank and/or fire pump
   b) A “manual dry” standpipe system contains water in the riser but also must be supplied by fire department pumpers.
   c) Combination systems consist of sprinklers interconnected with a standpipe system.
   d) Combination systems are usually considered “wet” and are of special concern. They require prompt augmentation by fire department pumpers.

28. Which of the following is considered incorrect regarding firefighting procedures in standpipe buildings?
   a) Engine companies shall utilize only department issued hose for standpipe firefighting
   b) Upon finding a reducer on the standpipe outlet it must be removed to permit the attachment of our 2 ½” hose
   c) The stretching of occupant hose by ladder and rescue companies operating remotely from an engine company while performing searches may be justified in an attempt to save lives.
   d) The 1st and 2nd due engine companies will only team up if the stretch from the standpipe outlet requires more than 3 lengths of hose

Matching

Siamese connections are color coded for ease of identification. Either the caps or the entire Siamese connection may be painted. Match the following painted Siamese colors with what they indicate:

29. Red A) combination sprinkler/standpipe
30. Green B) standpipe
31. Aluminum C) automatic sprinkler system
32. Yellow D) non-automatic sprinkler or perforated pipe
## Answer key - Week 6 Lesson 20 Part 1

<table>
<thead>
<tr>
<th>AUC 323</th>
<th>Standpipes Chapter 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All</td>
<td>26. All</td>
</tr>
<tr>
<td>2. A,B,D</td>
<td>27. B</td>
</tr>
<tr>
<td>4. A</td>
<td>29. B</td>
</tr>
<tr>
<td>5. All</td>
<td>30. C</td>
</tr>
<tr>
<td>6. C</td>
<td>31. D</td>
</tr>
<tr>
<td></td>
<td>32. A</td>
</tr>
</tbody>
</table>

**H-Type Chapter 8**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>C</td>
</tr>
<tr>
<td>8.</td>
<td>B</td>
</tr>
<tr>
<td>9.</td>
<td>Joist</td>
</tr>
<tr>
<td>10.</td>
<td>B</td>
</tr>
<tr>
<td>11.</td>
<td>D</td>
</tr>
<tr>
<td>12.</td>
<td>E</td>
</tr>
<tr>
<td>13.</td>
<td>A</td>
</tr>
<tr>
<td>14.</td>
<td>F</td>
</tr>
<tr>
<td>15.</td>
<td>C</td>
</tr>
<tr>
<td>16.</td>
<td>B</td>
</tr>
<tr>
<td>17.</td>
<td>B</td>
</tr>
<tr>
<td>18.</td>
<td>D</td>
</tr>
<tr>
<td>19.</td>
<td>E</td>
</tr>
<tr>
<td>20.</td>
<td>C</td>
</tr>
<tr>
<td>21.</td>
<td>A</td>
</tr>
<tr>
<td>22.</td>
<td>C</td>
</tr>
<tr>
<td>23.</td>
<td>E</td>
</tr>
<tr>
<td>24.</td>
<td>D</td>
</tr>
<tr>
<td>25.</td>
<td>B</td>
</tr>
</tbody>
</table>
Choose the answer that is most correct:

**Forcible Entry Chapter 16**

1. Which of the following is incorrect when forcing inward opening doors?
   a. When forcible entry is required, start immediately. A door should be forced in such a manner as to preserve its integrity.
   b. If upon arrival an open apartment door is found allowing fire and smoke to extend to the public hall, close the door but ensure the door does not lock.
   c. Place the fork of the Halligan approximately 6" above or below the lock with the concave side of the fork next to the door, slightly canted toward the floor or ceiling.
   d. Strike the Halligan with the axe driving it past the interior door jamb.
   e. Apply pressure on the Halligan toward the door, forcing the door open.

**True/False**

2. When forcing doors on the hinge side. The lower hinge is always attacked first so that the smoke and heat will rise while you complete the forcible entry at the top.

3. When forcing outward opening doors, the method used to force these doors is determined by the position of the door in the frame.

4. When forcing doors that are flush fitting, these doors may be forced using only the adz end of the Halligan.

5. When forcing outward opening recessed doors or doors with a wall adjacent to the lock side of the door. Place the adz of the Halligan 6" above or below the lock and drive it into the space between the door and jamb being careful not to penetrate the door stop portion of the jamb. Pry downward and inward with the fork end of the tool.

6. Padlocks are portable or detachable locking devices having sliding and pivoting shackles that pass through a staple and are then made fast. Which of the following is not listed as an attack point?
   a. Staple
   b. Point of attachment
   c. Shackle
   d. Chain
7. How many of the following are listed as tools available to force padlocks?
   a. Bam-bam tool
   b. Axe
   c. Halligan
   d. Duck bill
   e. Bolt cutter
   f. Hydra ram
   g. Rabbit tool
   h. Cutting torch
   i. Saw with aluminum oxide blade
   j. Saw with carbide tip blade

8. Which of the following is incorrect regarding American Lock Series 2000?
   a. The American Lock Series 2000 is a portable or detachable locking device that fits over a staple and locks by use of a movable steel pin located in the body of the lock.
   b. The attack points are the point of attachment or the body of the lock.
   c. Appropriate tools to use are the saw with aluminum oxide blade or the cutting torch.
   d. When cutting this lock, cut through the lock about one-third of the distance up from the keyway, cutting it in two pieces. Then remove the pin from the security gate.

Utility Rope Stretch Chapter 12

9. In order to perform the “utility rope” stretch correctly and according to standard operating procedures Engine companies should carry how many feet of what diameter nylon rope?
   a. 75’ of 3/8” nylon rope
   b. 75” of 3/8’ nylon rope
   c. 65’ of 3/8” nylon rope
   d. 75” of ¼” nylon rope

10. How many of the following instances would the “utility rope” stretch deem useful?
    a. to roofs of low buildings
    b. in vacant buildings when interior stairs are missing or damaged and would present a hazard in supporting an interior search
    c. in buildings with the staircase winding around an elevator shaft
    d. at fires requiring three lines, when the interior stairs already have two lines on them
    e. when CIDS or previous knowledge indicate its use
    f. In non-standpipe project buildings
11. Which of the following is incorrect in performing the “utility rope” stretch?
   a. The officer proceeds to the fire floor with the rope, selects the window to be used and communicates this information to the Control Firefighter.
   b. Sufficient lengths must be brought into the lobby and the folds arranged near the window selected by the officer.
   c. The Nozzle Firefighter attaches the rope to the nozzle, places the nozzle outside the window, then proceeds to the floor below the fire.
   d. The backup firefighter will join the nozzle firefighter when relieved by the control firefighter.

12. When performing the “utility rope” stretch the control firefighter must remain at the window until enough line is hoisted to ensure that the line does not get hung up. Once the line is completely stretched, the control firefighter will check for kinks and join the nozzle team.

13. Before the utility rope is deployed, look out the window and check for obstacles or obstructions such as air conditioners, clotheslines, overhangs or setbacks which might interfere with the rope.

14. Before deploying rope from window, remove child guard if window has one. Raise the upper sash of the window and ensure window remains open.

15. If difficulty is encountered in raising a window, use a different one; never remove glass for fear of broken glass striking members below.

True/False regarding operational considerations using utility rope

12. When performing the “utility rope” stretch the control firefighter must remain at the window until enough line is hoisted to ensure that the line does not get hung up. Once the line is completely stretched, the control firefighter will check for kinks and join the nozzle team.
Chapter 12 In line Pumping

16. Inline pumping is a stretch of the supply line in which the hydrant is located before the fire (in relation to the direction of the pumper’s response). Which of the following is not an example of this evolution?
   a. The supply line stretched from the hydrant to the pumper’s operating point (in this situation the hose would peel off the hose bed as the pumper proceeded to the operating point)
   b. Hand stretching the supply line from the operating point back to the hydrant
   c. “Keying” the hydrant with 3 ½” hose and proceeding to the fire building
   d. Stopping in front of fire building, pulling off sufficient hose to reach the fire, then proceeding to the hydrant

17. Which one of the following is incorrect regarding the hydrant firefighter’s responsibilities?
   a. Takes a hydrant wrench and a 2 ½” gate
   b. Tests the hydrant
   c. The hydrant firefighter mounts the backstep after deeming hydrant serviceable and prepares to use the signal buzzer
   d. Waits for notification from the ECC before opening the hydrant

True/False In Line Pumping

18. The hydrant shall be tested and flushed before the supply line is committed.

19. Hydrant selected for In Line Pumping must be on a 12” or larger main.

20. Pumper shall use 2 ½” hose as the initial supply line from the hydrant to the pumper.

21. Not more than 6 lengths of hose shall be used in the initial supply line.

22. Necessary fittings to connect to a hydrant shall be pre-connected to the 3 ½” supply hose of the pumper.

23. When using the signals from the back step buzzer, you should know that three buzzer tones means the area to the rear of pumper is clear for backing up operations and under proper supervision

24. One buzzer tone means the hose is connected and ready to start water.
25. Which of the following is incorrect regarding the nomenclature and identification of the Akron New Yorker Multiversal Nozzle?
   a. The portable ground base must be used if the multiversal nozzle is operated in the portable position.
   b. The Elevation Control Hand Wheel is used to raise or lower the elevation of the nozzle. The range is from 90 degrees above the horizontal to 35 degrees below the horizontal.
   c. When releasing the horizontal friction lock, 180 degrees can be traversed horizontally
   d. Stacked tips are 1 ¼”, 1 ½”, and 2”

**True/False**

26. When removing the Multiversal Nozzle from the apparatus and lowering it to the ground, two members shall be used.

27. When transporting to point of operation, one member carries the nozzle, while a second member transports the portable ground base and a utility rope

28. The Multiversal Nozzle shall be held with the 2 inlets of the Siamese facing directly to the front and in line with the leg of the portable ground base.

29. To prevent backward movement of the Multiversal Nozzle, it must be secured in position by means of a lifesaving rope.

30. Do not connect the hose lines to the Siamese before tying the required knots, as this would greatly increase the time required to tie knots.
Answer Key

Forcible Entry Chapter 16
1. C
2. False
3. True
4. False
5. False
6. D
7. A, C, D, H, I
8. D

Utility Rope Stretch Chapter 12
9. A
10. All
11. A
12. False
13. True
14. False
15. False

In Line Pumping
16. D
17. C
18. True
19. False
20. False
21. True
22. True
23. True
24. False

Akron New Yorker Chapter 11
25. B
26. True
27. True
28. False
29. False
30. True
FF Candidate Practice Questions
Week 7 Lesson 22 Part 1

Fill in the blank with the answer that is most correct:

**Taxpayers, Chapter 9 pages 36-46**

1. When a fire burns within a structure, particularly a sealed or closed occupancy and the fire is unable to vent itself to the outer air, the available air supply within the structure is used up quickly and since very little seeps in from the outside the flames begin to subside. A high heat condition, with combustible gases and highly heated contents may now be present in the structure. All that is missing is a source of air or oxygen to create an explosive fire. If the conditions described exist when the units arrive, the conditions are favorable for a backdraft unless the building is opened up properly. Which one of the following is an incorrect procedure to help avoid a backdraft?
   a. Open the front door prior to roof venting, ensure a 1 ¾” handline is opened up and operating immediately
   b. Open the roof or area directly over the fire
   c. After roof venting has been accomplished, entry may then be forced at the lower level and lines advanced to extinguish the fire.

2. Canopies or marquees are extensions which are generally supported and attached to the inside of combustible materials in the cockloft by all except which one of the following?
   a. Cables
   b. Ropes
   c. Steel rods
   d. Steel beams

3. In Taxpayers, how many of the following can be found when opening up an outside sidewalk trap door located in front of the building? (more than one)
   a) Wooden, iron, or masonry stairs
   b) Straight iron ladders
   c) Chutes
   d) Conveyors

4. In Taxpayers, where are outside cellar stairs usually located?
   a) Front of building
   b) Right side of building
   c) Left side of building
   d) Rear of building

5. Which of the following is incorrect with regards to windows to cellars in taxpayers?
   a) Usually located above grade
   b) Usually located below grade
   c) Usually covered with gratings
   d) Usually in depressed areas
6. The flooring of the first floor may not be extended under the raised front window display area. By removing the paneling under these windows an opening for ventilation and water application of the cellar can be gained. This is a description of what era of Taxpayers?
   a) Older type Taxpayers (Built up until the 1920’s)
   b) Taxpayers built from the 1920’s into the 1960’s
   c) Newer type Taxpayers built since 1960’s
   d) Newest Taxpayers built since the year 2000

7. Which one of the following is incorrect regarding cellar areas in Taxpayers?
   a) Often divided into a maze of storage spaces
   b) The layout often is identical to the first floor layout
   c) One occupancy may use a large section of the cellar with openings through partitions.
   d) Some occupancies may use smaller areas or none at all

8. In Taxpayers, which one of the following is correct regarding cellars?
   a) Cellar ceilings are not required to be fire retarded
   b) Plaster covering on ceilings may be deficient
   c) Partition walls between cellars are usually of non-combustible or fireproof construction
   d) Joist channels at cellar ceilings are often fire stopped

9. How many of the following can be found in the cellar of Taxpayers? (more than one)
   a) Flammable, fast burning or poisonous materials
   b) Pressurized containers
   c) Refrigeration machinery and piping
   d) Gas supply with gas meters and piping
   e) Walk in refrigerated areas.
   f) Electrical supply entrance points with panel boxes and large amounts of wiring

10. Which of the following is correct regarding cockloft areas in Taxpayers?
    a) Usually a common area extending over all the stores of the structure
    b) Can vary in height from four inches to more than six feet
    c) Both a and b

11. In Taxpayers, columns can be made from all of the following except which one?
    a) Wood
    b) Cast iron
    c) Trusses
    d) Steel
    e) Masonry
12. Cast iron columns are unpredictable and fail, on the average, in about how long in fire endurance tests?
   a) 5 minutes  
   b) 10 minutes  
   c) 20 minutes  
   d) 30 minutes

13. Which one of the following is incorrect regarding columns in building construction?
   a) Some columns fail sooner than cast iron columns  
   b) The failure of a column is generally not as serious as the failure of a girder or beam  
   c) The failure of a column in the cellar can cause the subsequent collapse of the floors and roof  
   d) Coating or spraying the columns with fire proofing material on new type construction is often a haphazard process.

14. How many of the following are listed as a cause of collapse in Taxpayers?
   a) Backdrafts  
   b) Heating of unprotected structural members  
   c) Water, snow or ice loads on the roof  
   d) Impact loads  
   e) Presence of water absorbent materials

**True or False**

15. An impact load has a much greater effect than the same weight carried as a static load.

16. An inverted or raised roof feels “spongy” when you walk on it.

17. A warning sign that will signal a potential structural collapse would be a heavy body of fire which has been burning out of control for how long?
   a) 5 minutes  
   b) 10 minutes  
   c) 15 minutes  
   d) 20 minutes

18. Which of the following is correct regarding new type of Taxpayer construction?
   a) The construction is much better than the traditional or older type from a fire protection viewpoint  
   b) Many of the newer type Taxpayers are built on a concrete slab foundation  
   c) Basement or cellar fires, however, are still a major problem  
   d) Partition walls are constructed well due to the use of a steel and aluminum stud system which employs gypsum blocks and sheathing as a bearing or nonbearing wall system
19. Roof systems in newer Taxpayers are generally all but which one of the following?
   a) Bow string truss
   b) Light weight steel bar joists
   c) Flat wood trusses

20. In Taxpayers, horizontal fire extension can take place in all of the following except which one?
   a) Via common cockloft
   b) Via butted joists
   c) Through flimsy partitions
   d) Via light and ventilation shafts from interior bathrooms and offices

21. In Taxpayers, vertical fire extension can take place in all of the following except which one?
   a) Via open stairs or trap doors
   b) Via pipe recesses
   c) Between the beams in common ceilings
   d) Convection (mushrooming at upper levels)

22. An exceptionally dangerous condition when dealing with floors in Taxpayers is when which of the following is placed over a wood floor joist construction?
   a) Tongue and groove boards
   b) Plywood
   c) Heavy Terrazzo
   d) Concrete
   e) Both c and d
Matching

By looking at the occupancy signs, or through knowledge gained during building inspection, units should be aware of the presence of hazardous materials. This will alert them to the precautions that must be taken before starting operations. Match the occupancy with the descriptions of the Hazardous Materials from below:

23. Smoke shops______
24. Swimming pool supply store_____ 
25. Supermarkets______
26. Bakeries______ 
27. Paint stores______ 
28. Drug stores______
   a) Presence of combustible, explosive, and flammable materials, which if mixed with each other, or if water is applied, or if exposed to the heat of a fire, may unleash poisonous or corrosive fumes or create an explosion or explosive atmosphere
   b) Potential for extensive gas leaks due to large ovens
   c) Large stock of oxidizing agents
   d) Contains various drug paraphernalia including the storage of ether, butane and acetone
   e) Contains various combustibles or flammables of lacquers or varnishes
   f) Have many different aerosol sprays and refrigerants, compressed cylinders and lye in containers.

29. Any units encountering a fire in these occupancies should stretch a line and proceed with extreme caution. Consideration should be given to knocking down the fire from sidewalk area before entry is attempted. What size line is recommended?
   a) 1 ¾”
   b) 2 ½”

30. Which one of the following is incorrect regarding trusses?
   a) Used where large areas, free of roof support columns, are desired
   b) The truss was developed to allow greater spans while minimizing the increase in the size of spanning members.
   c) The truss is composed of two major members, the Top Web and the Bottom Web
   d) There are many variations, but all are essentially the same; a combination of interdependent components used to span large distances through the use of smaller pieces fastened together.
Answer Key

1. A
2. B
3. All
4. D
5. A
6. A
7. B
8. B
9. All
10. C
11. C
12. D
13. B
14. All
15. True
16. T
17. D
18. C
19. A
20. D
21. C
22. E
23. D
24. C
25. F
26. B
27. E
28. A
29. B
30. C
Basic Emergencies Ch. 17

Fill in the blank with the answer that is most correct:

1. Most of us, before we became firefighters thought that the Fire Department responded only to fires. In reality we are present at every type of emergency situation that occurs in New York City. These responses account for 21% or our turnouts- and in recent years 38% of the work we do is of an emergency nature. Water leaks are just one of these emergencies. Our job is to determine the source of the leak and locate the corresponding water shut off valve. Of the following, how many are possible locations of where to find this shut off valve? (more than one answer)
   a) On the wall near the ceiling of the apartment directly below
   b) On riser line of apartments in basements
   c) Where main enters building usually near front building wall (often in a corner)
   d) where main enters building usually near rear building wall

2. Regarding the water pipe, what are some characteristics to help in identifying it? (More than one correct)
   a) Pipe is warmest in the building
   b) Pipe is coldest in building and may also have condensation on outside
   c) Listen for sound of running water
   d) Armored ground cable may be attached to main from electrical meter

True or False

3. Once a water valve is located, in order to shut off water the valve must be turned counter-clockwise.

4. When dealing with flooded basements, it’s important to remove the danger of standing water. One tactic to drain water would be to locate the waste pipe and open the street trap on the house side. This will allow water to drain to sewer.
5. Of the following statements regarding fire company’s actions when responding to flooded roof emergencies, which one is incorrect?

   a) Clear drain blockage on roof with gloved hands to protect from being cut with glass
   b) Clear drain blockage with 6’ hook or applicable tool
   c) Bring hose line to roof, fill with water and use as a siphon
   d) Remove a brick at a low point on a parapet wall which will serve as a scupper

6. Correct actions in shutting down a hydrant at the street shut off include all of the following except?

   a) Turn hydrant wrench counterclockwise 17 turns to shut off
   b) Not until about 12 full turns is there a noticeable decrease in flow
   c) After removing the cover, which is sometimes difficult, you may have to direct some water to clear chamber of mud and debris
   d) Nut is usually found off center on the sidewalk side of the chamber

7. When responding to a steam emergency in which a flow valve has been blown off a radiator, which one of the following in replacing the valve would be considered incorrect?

   a) Generally the valve will be nearby and undamaged
   b) Make sure flow handle is in closed position
   c) Replace fitting to open piping by turning nut on in clockwise direction
   d) Use of a compound or sealant on threads may be beneficial in obtaining a seal

8. Which of the following is an incorrect action when responding to and operating at overhead electrical service emergencies?

   a) All Fire Department units are to treat downed wires as live until an on scene utility company confirms that the wires have been de-energized
   b) Do not attempt to move wires with any hook or rope
   c) Isolate area, notify utility company and stand by until a utility crew responds.
   d) Keep apparatus nearby for protection.

9. More correct actions to be taken in overhead electrical emergencies can be found in all of the following except?

   a) Check nearby buildings for heat at fuse box/electrical service entrance box
   b) Check fuse box for heat with a gloved hand
   c) Caution civilians trapped in vehicles with an electrical line over it to remain in their vehicle until the wires are de-energized.
   d) Stretch line with fog nozzle and keep at least 25’ away from any downed wire while operating this handline
10. How many of the following guidelines should be followed for the safety of all members?

a) Fallen or hanging wires are not to be moved by members
b) Avoid metal gratings, manholes, fences, puddles, wet grass.
c) The ground immediately near a fallen wire may be energized, keep away from the wire.
d) Do not place weighted objects on downed wires
e) Do not open the house service

**Self Rescue Chapter 6, 7**

11. When a member becomes entangled or trapped where he/she needs to do an emergency procedure, that person MUST give a MAYDAY radio transmission. Waiting to give a MAYDAY transmission after you have attempted to free yourself may be too late for fellow firefighters to assist you. Cancel the MAYDAY after you have become free and safe. The procedure to be used when the SCBA assembly becomes entangled in the rear is called the _____________.

a) Quick release escape  
b) Low profile maneuver  
c) Reduced profile maneuver  
d) Swim move

12. When using the swim move in an attempt to get through a narrow opening such as wall studs, the member should place what body part through the studs first?

a) Right knee, right shoulder and head  
b) Left knee, left shoulder and head  
c) Right foot, right shoulder and head  
d) Left foot, left shoulder and head

13. The procedure to be used when necessary to pass beneath low clearance overhead obstructions, generally when crawling through or operating in a confined space is called the ________________.
a) Quick release escape
b) Low profile maneuver
c) Reduced profile maneuver
d) Swim move

14. In order to properly perform the quick release maneuver, the member should do the following:
   a) Leave the facepiece on if operating in a contaminated area
   b) Squeeze alligator clips and fully extend both shoulder straps
   c) With left hand grasp left shoulder strap as high as possible.
   d) Slip right arm through right shoulder strap and unbuckle waist belt
   e) As left hand continues to grasp shoulder strap, member should turn to their right 180 degrees to face the entangled SCBA.

15. Communication among members operating is necessary to jointly accomplish tasks. More importantly is the need to maintain respiratory protection while operating in toxic atmospheres. Of the following which is a correct procedure while communicating with handie talkie’s?

   a) Leave the microphone on the harness clip and turn your head towards the direction of the voicemitter
   b) Place the microphone directly on the voicemitter
   c) It is also acceptable to slightly pull up facepiece to speak into microphone
   d) Place the microphone in the proximity of the regulator

16. When one member forcibly strikes another member with _________ distinct blows on the shoulder and then pulls that member in a specific direction, the second member will recognize that the other member knows of an emergency and should promptly follow in that direction.

   a) 2
   b) 3
   c) 4
   d) 5
17. When a PASS alarm is activated in the full cycle for _______ seconds, the member hearing the alarm should immediately notify the Incident Commander. An immediate investigation of the alarm must be made to determine the cause. The results of the investigation must be transmitted to the Incident Commander as soon as possible.

a) 5  
b) 10  
c) 15  
d) 20

Chapter 7

18. When operating at a subway fire or emergency, an effective HT relay must be established whether the station is equipped with a repeater or not. Members of the 1st truck and the Officer of the 1st engine shall be utilized when establishing a HT relay. Which of the following procedures is incorrect?

a) Truck chauffeur takes a position at the bottom of subway entrance stairs  
b) If the token booth is within 50’ of stairs to street, the chauffeur contacts main dispatcher through the clerk. (There is a telephone in the booth)  
c) Information obtained should be relayed to the company officer and Incident Commander  
d) Truck officer proceeds to the location of the fire

19. Of the following Handie Talkie relay positions, which one is incorrect?

a) OV Firefighter takes a position at the foot of the stairs leading to the train platform if it is within 50 yards of chauffeur  
b) Roof firefighter takes a position approximately 50 yards from the stairs on platform  
c) Engine officer takes a position approximately 100 yards from the roof firefighter on the platform  
d) Additional Handie Talkie equipped members every 50 yards if necessary
20. Of the following, which is an incorrect action regarding use, care and maintenance of Handie Talkie’s?

a) A visual check of all Handie Talkie’s assigned to the unit must be made weekly at Multi Unit Drill
b) To reduce damage to the HT unit and to protect it from adverse weather conditions, the unit must be worn under the bunker coat
c) Any malfunction discovered should be brought to the attention of the Officer immediately
d) When more than one HT is being used in close proximity to another, a whining or screeching noise (feedback) may result interfering with the use of ht. this can be overcome by keeping a hand over the remote mic, if so equipped, of the unused radios in the area.

21. How many of the following are conditions that require an Emergency Roll Call? (page 15)

a) Mayday condition for collapse imminent/collapse occurred
b) Urgent transmission for interior attack discontinued and exterior attack instituted
c) A loss of water endangering members
d) Anytime the Incident commander determines an Emergency Roll Call is necessary to account for members.

22. Of the following which is an incorrect action taken by firefighters when an Emergency Roll Call is conducted?

a) Maintain radio discipline, only transmit if you have critical information, a mayday or urgent on your own or are called by the Roll Call Officer
b) Complete your assignment if firefighting operations are to continue
c) When answering an emergency roll call via the Handie Talkie always reply giving your assigned unit, not the company you are presently working in.

d) If a member’s involvement in a rescue is necessary and they are unable to complete their firefighting assignment, the IC must be notified.

**Truck Tactical Chapter 16, Definitions**

23. The extension of fire via the exterior of a building from a fire originating in the same building is called ____________.
   a) Flow path
   b) Flashover
   c) Auto exposure
   d) Rollover

24. The on-going activity of assessing what is going on around you during the complex and dynamic environment of a fire incident. Your operations will be more effective and safer by continually observing your surroundings, communicating conditions to other members and monitoring handy talkie transmissions. This is called ________________.
   a) VEIS
   b) Ventilation profile
   c) Situational awareness
   d) Seniority

25. The early stage of fire development where the fire’s progression is limited to a fuel source and the thermal hazard is localized to the area of the burning material. This is called the ________________ stage.
   a) Incipient
   b) Free burning
   c) Decay
   d) Flashover
Answer Key

**Basic Emergencies Chapter 17**

1. A, B, C
2. B, C, D
3. False
4. False
5. A
6. D
7. B
8. D
9. B
10. A, B, C, D, E

**Self-Rescue Chapter 6, 7**

11. A
12. A
13. B
14. E
15. B
16. C
17. B
18. B
19. D
20. A
21. A, B, C, D
22. C

**Definitions Chapter 16**

23. C
24. C
25. A
**Water Loss Scenario, Chapter 12, pages 37-44**

1. The basic premise of the Engine Company operation is just that – Basic. We must stick to the basics of hose line placement to extinguish the fire. While stretching is in progress, there’ll be many variables to contend with; however having a good strong understanding of the basics will get us through a difficult stretch, or one in which there is a loss of water. Which of the following three situations is the easiest to correct and with proper stretching and positioning of the hoseline will reduce its occurrence?

   a) Kinks  
   b) Burst length  
   c) Stretching short

2. All members should monitor handie-talkie communications. When an engine officer calls for additional pressure and the Engine Company Chauffeur (E.C.C) responds that he is supplying sufficient pressure, this is a good indication that?

   a) The company has stretched short of the fire  
   b) There has been a burst length  
   c) There are significant kinks in the line which must be corrected immediately

3. A single kink in an 1 ¾” hoseline can result in the loss of _________ GPM or more?

   a) 10 GPM  
   b) 15 GPM  
   c) 20 GPM  
   d) 25 GPM
4. Successive kinks in a hoseline produces an accumulative affect on reducing flow and a hoseline with 3 kinks could lose ________GPM resulting in an ineffective and unsafe firefighting stream.

   a) 60 GPM  
   b) 70 GPM  
   c) 80 GPM  
   d) 90 GPM

5. Which Engine company position is responsible for estimating the stretch accurately by limiting extra hose to 1 or 2 extra lengths?

   a) E.C.C.  
   b) Control  
   c) Back-up  
   d) Outside vent Firefighter

6. Which Engine Company position is responsible for flaking out hose before it's charged and checking the line for kinks once the line is charged by starting in street and working your way up?

   a) E.C.C.  
   b) Control  
   c) Back-up  
   d) Door

7. How many of the following are good practices that we can do to help prevent a burst length?

   a) Correct estimate of the stretch  
   b) Using the apparatus for as much of stretch as possible  
   c) Keeping extra hose away from the front of the building  
   d) Not flaking out hose directly under any skylight when possible
True or False

8. Extra hose stretched calls for more pump pressure and a greater chance of bursting a length.

9. Hose stretched at fires should be laid as close to the side of the street as possible and on the same side as the hydrant or pumper. If it is necessary for hoselines to cross the street, the lines should cross in front of the fire building. This allows as much room as possible for the maneuvering of apparatus.

10. When any member recognizes a burst length has occurred a (n) ______________ message should be transmitted on the radio.
   a) Mayday
   b) Urgent
   c) Caution

11. Communication of a burst length should be transmitted to the ____________ immediately.
   a) 1st ladder officer
   b) 2nd ladder officer on the floor above
   c) Incident commander
   d) 1st engine officer

12. After confirmation of a burst length, the ______________ must initiate action to correct the problem.
   a) Engine officer
   b) Ladder officer
   c) Battalion chief
   d) 2nd due engine officer
13. Who is considered the Water Resource Officer?

a) 1<sup>st</sup> due engine officer  
b) 2<sup>nd</sup> due engine officer  
c) 3<sup>rd</sup> due engine officer  
d) 4<sup>th</sup> due engine officer

14. When hearing the transmission that a burst length has occurred, the units operating on the floor or floors above should take which of the following action(s)?

a) Immediately back down to the floor below the fire  
b) Seek an area of refuge  
c) Both a or b

15. Any stretch that is ___________ lengths or less is considered a short stretch; all others are considered long stretches.

a) 3  
b) 4  
c) 5  
d) 6

16. When a burst length occurs in the lead or nozzle length in a **Short Stretch**, which of the following action is incorrect?

a) Shut down line at the pumps  
b) Remove nozzle from lead length  
c) Member in the street brings new lead length to fire floor to replace burst.  
d) Once hose butts are attached and confirmed as such, recharge the line
17. When a burst length occurs in the lead or nozzle length in a Long Stretch, which of the following action is incorrect?

a) Shut down line at the pumps
b) Remove nozzle and also remove the lead length of hose from the stretch
c) Insert a new lead length from the apparatus and reattach the nozzle
d) When complete notify the Incident commander to start water

True or False: The following 3 statements deal with a burst length taking place in the middle of the stretch or in the street.

18. When a burst length occurs in the middle of the stretch you should- Eliminate one length- If the stretch is long enough and it’s possible to eliminate one length, shut down the line at the pumps. Disconnect the butts of the burst length, eliminate it from the stretch, then pull the butts of the adjoining lengths together and reconnect the butts. Call for water to recharge the line when complete.

19. When a burst length occurs in the middle of the stretch you could also- replace the burst length- Shut down the line at the pumps. Have members bring in an extra length of (Rolled/Folded) hose from the apparatus. Do not disconnect the damaged length of hose until the new length arrives. When members arrive with hose, disconnect damage length and insert new length into the stretch. Call for water to recharge the line when complete.

20. Burst length in the street- Control Firefighter and Back-up firefighter return to street, shut down the pumps, replaced the damaged length, recharge the line, and return to fighting the fire.
21. How many of the following are guides in helping to accurately estimate a proper stretch?

a) Distance from apparatus to building entrance  
b) Distance from building entrance to foot of stairs  
c) Type of stairs, i.e. straight run, enclosed, return, around elevator, presence/absence of a well hole  
d) Number of floors to ascend/descend  
e) Distance to fire area from stairs/entrance  
f) Size of fire area  
g) Whether it is a 4 or 5 firefighter engine company

22. When stretching short of the fire area, during a **Long Stretch**, or when the line is already charged, which one of the following would allow us to keep the line in operation without shutting down at the pumps?

a) 1 ¾”  
b) 2 ½”
Answer key

Water Loss Chapter 12, pages 37-44

1. A
2. C
3. C
4. D
5. B
6. B
7. A,B,C,D
8. True
9. True
10. B
11. C
12. A
13. B
14. C
15. B
16. C
17. D
18. True
19. False
20. False
21. A,B,C,D,E,F
22. A
Choose the answer that is most correct:

**MVA 24 pages 1-4**

1. Motor vehicle accidents (MVA) with victims pinned pose a unique challenge to our members. Medical authorities refer to the first hour from the beginning of an accident with critical injuries as the Golden Hour. A victim delivered to a surgical team within this first ________ has the best chance of survival.

   a) Half hour  
   b) Hour  
   c) 90 minutes  
   d) 2 hours

2. How many of the following skills are necessary for every firefighter to master in order to properly remove a victim of an MVA efficiently without compromising member safety?

   a) Knowledge on disentanglement procedures  
   b) Knowledge on new car technology  
   c) Knowledge on tool capabilities  
   d) Knowledge on medical considerations and tactical procedures
3. When responding to an MVA, how many of the following are considerations and factors that will play a role in determining the appropriate actions taken and the order in which they are carried out?

   a) Type and number of vehicles involved
   b) The positions of the vehicles
   c) The number and conditions of the patients
   d) Any external hazards at the scene

4. Which of the following is an inaccurate description of new car technology?

   a) New cars save lives by wrapping occupants in reinforced alloys, impact absorbing crumple zones and as many as sixteen airbags
   b) Reinforced wheel and engine deflection systems that upon impact, deflect the wheels and motor upward
   c) Crumple zones that absorb the energy of the impact, while this has drastically increased the ability of occupants to survive the impact, it has complicated disentanglement efforts.
   d) Reinforced dashboards that have been developed to protect the occupants in case of a front or side impact

5. Of the following which is an accurate description of new car technology?

   a) High strength, low alloy and boron steel is used in vehicles for improved strength to weight ratio.
   b) The side door beam, when driven into the frame upon impact, will make door removal easier.
   c) The transverse dash beam located behind the dashboard ties into the B posts and the floor pan making dashboard lifts more difficult.
   d) Unibody construction results in a vehicle that is pre-formed into one piece with body and chassis one unit
6. Airbags present several challenges. Airbag systems are equipped with an energy storage feature that enables them to deploy even when the battery has been destroyed in an accident. Airbags can either be deployed electronically or mechanically. Disconnecting the battery will start the drain time, which varies, for an electronically activated device, but not a mechanically activated one. Newer systems include the use of dual stage inflators which basically means that just because an airbag has deployed it does not mean that there cannot be a second deployment. In the large majority of our responses the airbags will have already deployed. However our members should always treat the area around the airbag as if they have not deployed. The correct distance that should be observed from an airbag that has not been deployed is followed in which of the following rules?

   a) The rule of 1-5-10
   b) The rule of 2-8-15
   c) The rule of 5-10-20
   d) The rule of 10-20-30

   This means stay away from the deployment path for side, driver, and passenger airbags for these distances in inches.

7. Which of the following is an incorrect description of new car seatbelts?

   a) Seatbelt pretensioners are designed to reduce blunt force trauma as well as impact with airbags
   b) These devices are either mechanically or electrically activated
   c) The mechanically activated pretensioner will shut down when the battery is disconnected
   d) Removal of the seatbelt from a patient as soon as practical is recommended
8. How many of the following locations can a battery be found in a car?

a) Under the hood  
b) In the wheel well  
c) Near the gas tank  
d) Under seats  
e) In the trunk

**True or False**

9. Disentanglement is the physical removal of the victim from the vehicle.

10. Extrication is the removal of wreckage from around the victim.

11. Protect victim/patient with a sheet before disentanglement procedures start.

12. During MVA extrication, the Hurst tool power unit should be placed on the side of the vehicle.

13. The spreaders and cutters are the tools of choice and should be used to complement each other.

14. Never position any part of your body between the tool and the vehicle.
15. When packaging a distressed member using the “Through the leg method” which of the following procedures described is incorrect?

a) Lift one of the distressed member’s legs and place on your shoulder.
b) Take the rappel hook from the personal harness of the distressed member and pull sharply to release the hoof from the belt.
c) Open the gate hook and place the open hook through both of the distressed member’s shoulder straps. The rescuer is moving the hook from left to right.
d) If time permits, half hitches may be tied into both the shoulder and the waist straps of the distressed member’s SCBA.

16. When tying half hitches to waist straps and shoulder straps which of the following is incorrect?

a) When tying the half hitch, start with the waist straps first.
b) Wrap excess underneath itself to prevent straps from slipping
c) Depending on the size of the member, the shoulder straps can be tied across their chest
d) Packaging in this manner will allow for horizontal removal only

17. Prior to tightening distressed members shoulder straps, what type of hitch is used to place nylon webbing through these straps?

a) Half
b) Clove
c) Girth
d) Rolling
18. When using the personal harness leg straps, prior to converting the member’s SCBA into a harness, move the firefighter to a sitting position providing we do not suspect any type of spinal injury. Once in a sitting position, rotate the member, if possible, so that their back is facing toward the direction of removal. The benefits of moving the firefighter to a sitting position are found in how many of the following examples?

a) It reduces the members size in half
b) It will allow full control over the distressed member.
c) It will be easier to locate the universal air connection
d) Allows for easier access to the SCBA low pressure hose, facepiece and both shoulder straps.

19. Which one of the following is an incorrect description/ usage of the Drag Rescue Device (DRD)?

a) Is designed to assist in the vertical movement of a non-ambulatory injured or unconscious member
b) The DRD is located just under the collar on the back of the bunker coat
c) There is a reflective activation tab to assist in locating the DRD handle
d) When the DRD handle is pulled, the device is designed to tighten around the member’s shoulders and chest.
20. Which of the following is an incorrect description of FAST truck duties?

a) Be immediately available to assist a trapped member
b) Be immediately available to assist a distressed member or one involved in a serious life threatening situation.
c) Report to and stage on the floor below the fire
d) Send the EFAS trained member to the battalion vehicle

21. The FAST unit should monitor conditions, survey the fire building and develop a plan of action. How many of the following are important details that should be monitored by all members of the FAST unit?

a) Access for portable ladders
b) Type and location of stairs and elevators
c) Determine if any remote access points are available
d) Progress of fire operations

22. Which of the following is not considered a position for a member of the FAST Unit?

a) A member assigned the FAST PAK
b) An EFAS trained member to monitor the EFAS system and the FAST radio
c) Search team
d) A member assigned to assist the ECC in pump operations
e) Roof to perform a life saving rope rescue
23. Which of the following is an incorrect procedure when the FAST Unit arrives at the location of a distressed member?

a) Depress the Emergency Alert Button on their Handie-Talkie
b) Provide the IC or FAST Group supervisor with the information required for the emergency transmission.
c) Confirm positive identification of distressed member
d) Assess Fire, Air and Removal (FAR)

24. In addition to normally assigned ladder company tools, which of the following is the FAST Unit not required to report to the ICP with?

a) FAST PAK
b) CFR equipment
c) Search rope
d) Stokes basket with long backboard
e) 2:1 rope

**True or False**

25. When the FAST Unit arrives at the location of the distressed member, if possible, depress the EAB on the member in distress. The activation of the distressed member's EAB will identify them on EFAS. Notify the IC via handie-talkie prior to this activation.

26. As part of the size-up, other tools that may be needed for the various rescue possibilities are the rebar cutter, Life Saving Rope and Life Belt, saws, elevator keys and flotation devices for operations near bodies of water.
Answer Key

Chapter 24 pages 1-4

1. B  
2. All  
3. All  
4. B  
5. A  
6. C  
7. C  
8. A,B,D,E  
9. F  
10. F  
11. T  
12. F  
13. T  
14. T

Chapter 6a add. 2 and 2a

15. C  
16. D  
17. C  
18. All  
19. A

Chapter 6a add. 3

20. C  
21. A,B,C,D  
22. D  
23. D  
24. B  
25. T  
26. T
Choose the answer that is most correct:

**Tower Ladders, Chapter 3**

1. Which of the following is an incorrect description of the general features of Tower Ladders?

   a) The chassis is supported at six points while the boom is in operation
   b) Two hydraulically operated jacks are located at the front and two at the rear of the vehicle (total of four)
   c) Two out-rigger type jacks are located in the middle of the apparatus
   d) A mechanical lock is also provided at each jack and out-rigger. If time permits, these locks(pins) must be inserted manually

2. General features are accurately described in which one of the following choices?

   a) It is not necessary to lower all jacks and out-riggers to the end of its stroke before raising the boom. Tower ladders are designed to operate with out-riggers and jacks down on one side only.
   b) If apparatus is not level, lower the jacks and the out-rigger on the high side first, then the jacks and the out-rigger on the low side until the unit is level as possible.
   c) Tower Ladders have indentations in the turntable to accept out-riggers
   d) To judge that out-riggers will clear all obstructions, an 10’ hook can be used
3. Any member operating a tower ladder must personally verify the placement of all outriggers and jacks prior to raising the boom from the bedded position. If a member commences to set up a tower ladder apparatus for an operation and then decides to abort the operation, the member must:

   a) Properly place all out-riggers and jacks for operation
   b) Return all out-riggers and jacks to the pre-setup position
   c) Both A or B

4. Tower Ladder boom assembly and basket features are incorrectly described in which one of the following?

   a) The boom assembly consists of four box sections which telescope within each other
   b) The basket is constructed of aluminum alloy and has a floor area of approximately 25 square feet
   c) Whenever a Tower Ladder operation is in progress, the pedestal position must be staffed
   d) The use of the platform control switch is necessary whenever members or civilians enter or leave an elevated basket.
True or False

5. The use of the platform control switch is necessary whenever members or civilians enter or leave elevated basket. This is to insure against movement of basket by accidentally touching the platform control handle.

6. Which of the following is incorrect regarding Tower Ladder functions at the pedestal (turntable) controls?

   a) The pressure gauge indicates system pressure during operation
   b) The communication switch controls intercom system between basket and pedestal
   c) The engine start button allows the engine to be re-started in case of stall from the Master Control Console.
   d) The intercom is an open circuit controlled from the basket.

7. Which of the following is incorrect regarding Tower Ladder use and basket controls?

   a) Basket (platform) controls consist of a single handle which controls all functions.
   b) The single handle has a “dead man” trigger which must be depressed before the system operates.
   c) When no other solution is possible, escape from the basket can be made by using the Life Saving Rope in conjunction with the personal harness.
   d) Escape from the basket via the fixed telescoping ladder mounted on top of the boom is a perfectly safe means of escape.
True or False

8. There exists under some conditions of partial elevation and extension, a possibility of boom section adjustment, gradual shifting with one section extending and another section retracting the same distance with no effect on the position of the basket. This results in rungs moving in relation to each other. Because of this possibility, utmost caution must be exercised while using the escape ladder.

9. The Tower Ladder water system is correctly described in all of the following except?

   a) Boom rotation permits water system coverage of 180 degrees
   b) The water system hook-up consists of a 3” x 3” gated Siamese on the left side and a 4 ½” inlet on the right side
   c) There are various model Tower Ladders in the field and companies involved must refer to their manual for specifics.
   d) The water system consists of four telescoping sections of stainless steel pipe, diameter of the smallest is 3 ½”

10. Communications via a Tower Ladder are correctly described in all of the following except which one?

    a) The most effective means of communication between basket to pedestal is via the Handie-Talkie
    b) When the basket is being controlled from the pedestal, it is most important to keep the pedestal man informed regarding the results of the basket movement.
    c) Directions through the intercom must be utilized whenever the need arises for accurate steady movements
    d) Since the pedestal controls allow smoother movements, the pedestal man should, in most cases, perform delicate operations if visibility permits.
11. While operating the chain saw, shall wear how many of the following NFPA compliant and FDNY approved protective items?

   a) Long sleeve work duty shirt or bunker coat
   b) Helmet
   c) Eye protection
   d) Ear protection
   e) Saw protected gloves
   f) Bunker boots
   g) Saw protected chaps

12. General rules regarding chain saw use can be found in how many of the following? (more than one answer)

   a) Hold saw down on a clear level surface with the bar and chain clear of any obstructions
   b) Keep the body to the right side of the chain
   c) Never straddle the saw or lean across chain
   d) Always hold the saw firmly with both hands while the engine is running
   e) Never use a cross handed grip
   f) It is not necessary to warm up the saw prior to any cutting
13. The operating stance while using the chain saw is correctly described in all but which one of the following?

a) Keep weight balanced on both feet- both feet on solid ground  
b) Do not over extend or cut while off balance  
c) Left arm is to be kept in “straight arm” position  
d) Cutting above chest high is permitted

**True or False**

14. Proper grip while holding chain saw must be used at all times. The proper grip is the fingers encircling the handle with the thumb on top of and parallel to the handle.

15. Proper use and technique while operating chain saw is described in all of the following except which one?

a) Throttle up slowly as chain touches the wood  
b) When operating on slopes the saw operator must always stand on the uphill side of the tree/log while cutting  
c) Start cuts with the “bumper spike” against the wood and keep it there.  
d) Exert moderate pressure to help the chain cut the wood. If you have to force the saw, stop until you find out what is prohibiting the cutting
16. Which one of the following is incorrect regarding pull-in when using the chain saw?

a) While cutting upward you will experience a pulling reaction.
b) Pull-in occurs when the chain on the bottom of the bar is suddenly stopped
c) Pull-in frequently occurs when the bumper-spike of the saw is not held securely against the tree or limb
d) Pull-in may be prevented by using wedges to open the kerf

True or False

17. When cutting small size brush and saplings use extreme caution. These may easily catch the chain and pull you off balance.

18. Pull-in frequently occurs when the bumper spike of the saw is not held securely against the tree or limb and when the chain is not rotating at full speed before it contacts the wood.

19. The kerf refers to the space you decide to make the initial cut.

20. Which of the following is a correct statement regarding chain saws and its use?

a) While cutting downward you will experience a pushing reaction.
b) During upward cutting you will feel a pulling reaction.
c) Pushback occurs when the chain on the top of the bar is suddenly stopped when it is pinched, caught or encounters a foreign object in the wood.
d) Cutting more than one log at a time is a good practice to save time
21. Which of the following is an incorrect statement regarding the chain saw?

a) Do not hit the ground with the blade of the saw.

b) Momentarily touching the ground with the chain will not dull the blade.

c) When finished using the saw slowly loosen both the fuel and oil cap

d) Do not twist the saw when withdrawing the bar from an under buck cut because the chain can pinch

---

**Water Rescue Chapter 24**

22. The FDNY is accustomed to responding to many kinds of unusual incidents on a daily basis. Ice, cold water and surf rescues although uncommon, can be among our most difficult and dangerous responses. With regard to Water Rescue Operations, which of the following is correct?

a) The FDNY has equipped some ladder and engine companies as well as all special units with ice/cold water and surf rescue equipment

b) It should be emphasized that any entry into the water or onto ice is considered as a primary removal procedure.

c) The Cold Water Suit and Personal Flotation Device are designed for both underwater and surface rescues.

d) A member who has been trained in the suit and is familiar with its capabilities and limitations should be designated as the Secondary Rescuer.

---

23. When selecting a rescuer, which one of the following would not be considered as a Primary rescuer?

a) Probationary firefighter with 6 months on the fire department trained in the Cold Water Suit

b) Senior firefighter who has 30 years on the FD with no cold water training

c) A member with lifeguard experience

d) A member who is a trained scuba diver
24. The primary concern for FDNY when assigned on a Cold Water Rescue operation is the safety of our members. What is the percentage of drowning victims that entered the water as a would-be rescuer?

a) 5%
b) 10%
c) 15%
d) 20%

25. Tests have shown that members wearing Bunker Gear with or without SCBA can become totally submerged in how much time?

a) Under 30 seconds
b) Under 1 minute
c) Under 2 minutes
d) Under 4 minutes

True or False

26. Bunker gear does not float
Answer Key

Tower Ladder Chapter 3

1. D
2. C
3. C
4. B
5. T
6. D
7. D
8. T
9. A
10. A

Chain Saws Chapter 14

11. All
12. A,C,D,E
13. D
14. F
15. A
16. A
17. T
18. T
19. F
20. C
21. B

Water Rescue Chapter 24

22. A
23. B
24. B
25. B
26. T