Firefighter I

Pre-Course Assignment

Fire Service Training
# Reading Assignment

**Text:** IFSTA Essentials of Fire Fighting and Fire Department Operations (6\textsuperscript{th} Edition), First Print

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1</td>
<td>Pgs. 10-41</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Pgs. 36-87</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Pgs. 96-123</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Pgs. 134-203</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Pgs. 208-254</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>Pgs. 259-316</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Pgs. 340-359</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Pgs. 370-296</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>Pgs. 422-458</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Pgs. 479-482</td>
</tr>
<tr>
<td>Chapter 11</td>
<td>Pgs. 573-623</td>
</tr>
<tr>
<td>Chapter 12</td>
<td>Pgs. 654-689</td>
</tr>
<tr>
<td>Chapter 13</td>
<td>Pgs. 732-764</td>
</tr>
<tr>
<td>Chapter 14</td>
<td>Pgs. 784-804</td>
</tr>
<tr>
<td>Chapter 15</td>
<td>Pgs. 816-871</td>
</tr>
<tr>
<td>Chapter 16</td>
<td>Pgs. 944-966</td>
</tr>
<tr>
<td>Chapter 17</td>
<td>Pgs. 1004-1056</td>
</tr>
<tr>
<td>Chapter 18</td>
<td>Pgs. 1104-1124</td>
</tr>
<tr>
<td>Chapter 19</td>
<td>Pgs. 1145-1162</td>
</tr>
<tr>
<td>Chapter 21</td>
<td>Pgs. 1222-1240</td>
</tr>
</tbody>
</table>
Chapter 1 Pre-Course

Name: __________________________ Date: __________________________

Directions: Write the correct answers on the blanks provided.

1. The fire service uses an organizational structure based on rank. (22)
   A. True
   B. False

2. Staff personnel deliver emergency services directly to external customers. (24)
   A. True
   B. False

Directions: Match the correct answers with the definitions provided.

3. Guide to decision making in an organization (35)
   A. Procedure
   B. Policy
   C. Standard
   D. Code

4. Set of principles developed through consensus (36)

5. Detailed plan of step-by-step action for conducting policy (36)

6. Collection of rules enacted by law in a particular jurisdiction (36)
Directions: Write the correct answers on the blanks provided.

7. Which of the following fire service trends of change means that fire departments must provide some type of First Responder Care? (16)
   A. Terrorism
   B. Firefighter safety
   C. Emergency medical services
   D. Fire prevention and public safety

8. Which cultural strength within the fire service means a firefighter’s behavior should involve right or just behavior with an emphasis on trust? (19)
   A. Pride
   B. Integrity
   C. Work ethic
   D. Moral character

9. Many fire departments take the ___ approach by providing a variety of services to their communities. (21)
   A. all hazards
   B. one hazard
   C. community-risk reduction
   D. community-risk suppression

10. The layers in the fire service organizational pyramid are composed of what? (22)
    A. Educational level
    B. Number of positions
    C. Type of people to hire
    D. Personnel assigned by rank and duty

11. What is the primary duty of Firefighter I level personnel? (27-28)
    A. Apparatus operation
    B. Fire and life safety education
    C. Perform assigned tasks under supervision of a Firefighter II or company officer
    D. Coordinate actions of other personnel during specific assignments
12. Which position in the fire service is responsible for supervising a fire company? (30)
   A. Airport firefighter
   B. Fire apparatus driver
   C. Fire department officer
   D. Fire department incident safety officer

13. What is the first step to locating information in your department’s regulations? (35)
   A. Ask your supervisor
   B. Look on the Internet
   C. Go to the bulletin board
   D. Look in the division office

14. Which of the following organizations that interact with the fire service can be helpful in alerting the public in large-scale evacuations? (39)
   A. Media
   B. Red Cross
   C. Law enforcement
   D. Community organizations

Directions: Write a brief answer to the questions below.

15. What are the five organizational principles all fire and emergency services organizations adhere to? (33)
Chapter 2 Pre-Course

Name: ___________________________ Date: ___________________________

**Directions:** Write the correct letter on the blank before each question.

_______ 1. The risk management model developed by the Phoenix (AZ) Fire Department is focused on behaviors that support a safety-first mindset. (63)
   A. True
   B. False

_______ 2. Effective safety and health programs depend only on participation from department administrators. (63-64)
   A. True
   B. False

_______ 3. Firefighters should never stand on or in a moving apparatus, no exceptions. (72)
   A. True
   B. False

_______ 4. One way to help minimize risk at an emergency scene is to work individually as each firefighter sees fit. (79-80)
   A. True
   B. False

**Directions:** Write the correct letter on the blank before each question.

_______ 5. Which of the following is an individual’s responsibility in the prevention of respiratory diseases? (51)
   A. Provide respiratory protective equipment
   B. Enforcement of respiratory protection policies
   C. Wear appropriate level of respiratory protection
   D. Provide effective training on prevention methods
6. Which of the following is the most comprehensive standard relating to firefighter safety and health? (56)
   A. NFPA® 1403
   B. NFPA® 1500
   C. NFPA® 1851
   D. NFPA® 1981

7. Occupational Safety and Health Administration (OSHA) regulations relate to: (60)
   A. all firefighters.
   B. all federal employees who fight fires.
   C. all federal private-sector employees who fight fires.
   D. federal and private-sector employees who fight fires.

8. Which of the following typically causes back injuries and strains associated with fire stations and facilities? (74)
   A. Improper lifting
   B. Slippery, uneven surfaces
   C. Cooking and cleaning duties
   D. Inattention when climbing stairs

9. Which of the following is the BEST way to practice safety with tools and equipment? (76)
   A. Modify tools as needed to fit a job
   B. Require new recruits to repair tools
   C. Select the appropriate tool for the job
   D. Allow bystanders to assist when needed

10. When is a collapse zone established? (84)
    A. When interior operations are justified
    B. When a defensive strategy is adopted
    C. When an offensive strategy is adopted
    D. When justified by wind and weather conditions

11. Which of the following personnel accountability systems requires the accountability officer to record an expected exit time? (86)
    A. AO system
    B. Passport system
    C. SCBA tag system
    D. Computer-based electronic accountability system
Directions: Write a brief answer to the questions below.

12. What two behaviors can firefighters use to adopt a healthy lifestyle? (64)

....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................

13. What are the two components of defensive driving skills? (67)

....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................

14. What are the keys to maintaining personnel safety during training? (77)

....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................
....................................................................................................................................................
Chapter 3 Pre-Course

Name: ___________________________ Date: ___________________________

Directions: Write the correct letter on the blank before each question.

______ 1. The Public Safety Answering Point (PSAP) is a category of: (96)
   A. public alert system.
   B. personal alert equipment.
   C. communication equipment.
   D. telecommunication system.

______ 2. What percentage of the U.S. has access to Enhanced 9-1-1 systems? (98)
   A. 75 percent
   B. 82 percent
   C. 96 percent
   D. 100 percent

______ 3. The Public Information Officer (PIO) is the contact person for: (100)
   A. local or regional protocols.
   B. emergency or medical calls.
   C. nonemergency or complaint calls.
   D. preincident or postincident surveys.

______ 4. Which of the following is a responsibility when monitoring a fire station’s watch room or booth? (100-101)
   A. Calling alarms
   B. Writing an incident report
   C. Notifying crew members of telephone calls
   D. Directing telephone calls to telecommunicator

______ 5. Assigned units should confirm receipt of dispatch information according to local protocol after: (102-103)
   A. arriving on scene.
   B. units are assigned.
   C. dispatch transmission.
   D. preincident surveys are taken.
6. Internal communications involve transmissions between Incident Commander and: (103)
   A. public media.
   B. reporting callers.
   C. on-scene witnesses.
   D. units at the emergency scene.

7. Which of the following best describes the part of a mobile radio system usually located in the cab within reach of the driver/operator? (104)
   A. Receiver and antenna
   B. Receiver and transmitter
   C. Headset connections and receiver
   D. Headset connections and antenna

8. Most fire departments have a ___ assigned for dispatching only. (108)
   A. signal
   B. system
   C. channel
   D. transmission

9. Which of the following best describes what first happens when a radio is turned on in a trunked radio system? (108-109)
   A. The system controller is notified.
   B. The system controller emits a failure tone.
   C. The system controller emits a three-beep tone.
   D. The system controller assigns a channel to the radio.

10. Which of the following is a feature that sends an alert signal to an agency’s dispatch center? (109)
    A. Clear text
    B. Private call
    C. Multigroup call
    D. Dynamic regrouping

11. Vehicle ignitions, electric motors, and computers all fall into which category of radio limitations? (111)
    A. Interference
    B. Road blocks
    C. Ambient noise
    D. Physical barriers
12. When using a microphone, good practice is to: (113)
   A. speak in slang or unique language.
   B. talk for long periods of time without breaks in between.
   C. use individual names and not unite company names.
   D. key the microphone and wait for a second for a signal to capture an antenna.

Directions: Write a brief answer to the questions below.

13. What information should be gathered for processing emergency calls? (98)

14. List four of the radio procedure guidelines that can be used to ensure your message is heard and understood. (114)
Chapter 4 Pre-Course

Name: ___________________________ Date: ___________________________

Directions: Write the correct letter on the blank before each question.

1. Size and moisture content affect how wood reacts to fire. (134)
   A. True
   B. False

2. Heated gypsum may crack and shatter when struck by a cold fire stream. (140)
   A. True
   B. False

3. Buildings are composed of the same components, all of which can prevent or contribute to fire growth. (157)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

4. Which of the following common building materials performs well under fire conditions but can lose strength through spalling? (138)
   A. Gypsum
   B. Lath and plaster
   C. Reinforced concrete
   D. Composite material

5. Which of the following construction types is considered to be the most collapse resistant? (144)
   A. Type I
   B. Type II
   C. Type IV
   D. Type V
6. Which of the following construction types offers the appearance of Type III construction? (147)
   A. Type I
   B. Type II
   C. Type IV
   D. Type V

7. Noncombustible construction as defined by the National Building Code of Canada achieves fire safety by: (151)
   A. using fire-resistant materials.
   B. avoiding concealed spaces under floors and roofs.
   C. placing limitations on sizes of wood structural methods.
   D. using noncombustible materials for structural members and other building assemblies.

8. What building component supports only its own weight and may divide two areas within a structure? (160)
   A. Flat roof
   B. Pitched roof
   C. Load-bearing wall
   D. Non-load-bearing wall

9. What part of a traditional wood-joisted roof tends to lose strength gradually when exposed to fire? (166)
   A. Webbing
   B. Parallel chord
   C. Solid wood joist
   D. Metal gusset plate

Directions: Write a brief answer to the question below.

10. What are the requirements for the two main types of occupancy classifications? (152)
Chapter 5 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. A physical change causes a change both chemically and in appearance. (208)
   A. True
   B. False

2. All energy can change from one type to another. (209)
   A. True
   B. False

3. In ambient temperatures (about 68°F [20°C]), materials can ignite at oxygen concentrations as low as 14 percent. (231)
   A. True
   B. False

4. The incipient stage is when the fire begins to influence the compartment environment. (242-243)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

5. Which of the following is not actively part of the combustion reaction represented by the fire tetrahedron? (212)
   A. Fuel
   B. Heat
   C. Oxygen
   D. Passive agents
6. What is the most common source of heat in combustion reactions? (217)
   A. Radiant energy
   B. Electrical energy
   C. Chemical energy
   D. Mechanical energy

7. Which of the following BEST describes how understanding heat transfer can help firefighters? (219)
   A. It can help estimate the size of a fire after attack.
   B. It can help estimate the size of a fire before attack.
   C. It allows firefighters to look for rapid fire behaviors.
   D. It teaches firefighters how to avoid rapid fire behaviors.

8. Sufficient heat during flaming combustion causes fuel and oxygen to form: (234)
   A. free radicals and initiates a reaction.
   B. stable product and initiates a reaction.
   C. free radicals and interferes with a reaction.
   D. stable product and interferes with a reaction.

9. What fire behavior is the result of an increase in low-level ventilation prior to upper level ventilation? (248-249)
   A. Rollover
   B. Flashover
   C. Backdraft
   D. Smoke explosion

10. Which of the following is the most commonly used fire-suppression method? (250)
    A. Fuel removal
    B. Oxygen exclusion
    C. Temperature reduction
    D. Chemical flame inhibition
Directions: Write a brief answer to the questions below.

11. What are the main differences between the two types of ignition? (210-212)

12. What are the three physical states of fuel? (225)

13. What are five of the factors that affect fire development? (234-235)

14. List the stages of fire development (not including rapid fire behavior). (234)
Chapter 6 Pre-Course

Name: ___________________________ Date: ___________________________

Directions: Write the correct letter on the blank before each question.

_______ 1. Atmosphere-supplying respirators (ASRs) only filter particulates out of ambient air. (287)
   A. True
   B. False

_______ 2. Air-purifying respirators (APRs) are classified in three categories of filter degradation: N, R, and P. (294)
   A. True
   B. False

_______ 3. SCBA checks should be performed only once a week. (297)
   A. True
   B. False

_______ 4. The inspection period for protective breathing apparatus is established by NFPA® 1852. (303)
   A. True
   B. False

_______ 5. Empty SCBA cylinders should be kept with full cylinders. (311)
   A. True
   B. False

_______ 6. SCBA air supply duration depends only on physical conditioning. (313)
   A. True
   B. False
Directions: Write the correct letter on the blank before each question.

_______  7. Which of the following types of protective clothing is designed to prevent heat transfer from fire to the body? (263)
   A. Technical rescue
   B. Emergency medical
   C. Roadway operations
   D. Structural fire fighting

_______  8. Which of the following types of special protective clothing may be dual certified for emergency medical use? (274)
   A. Ice rescue
   B. Technical rescue
   C. Hazardous materials
   D. Proximity fire fighting

_______  9. Which of the NFPA® defined types of cleaning does not require removal from service? (278)
   A. Routine
   B. Contract
   C. Advanced
   D. Specialized

_______ 10. Which of the following respiratory hazards is most commonly caused by combustion? (282)
   A. Gases and vapors
   B. Oxygen deficiency
   C. Airborne pathogens
   D. Particulate contaminants

_______ 11. Which of the following respiratory hazards targets the heart and brain? (285)
   A. Hydrogen cyanide
   B. Carbon monoxide
   C. Airborne pathogens
   D. Nonfire gases and vapors
12. Which of the following wearer limitations for respiratory protection requires the user to have the ability to overcome stress and fear? (296)
   A. Lack of agility
   B. Unique facial features
   C. Psychological limitations
   D. Lack of physical condition

13. Which of the following equipment limitations of respiratory protection can result in minor leaks? (296)
   A. Decreased mobility
   B. Decreased endurance
   C. Low air cylinder pressure
   D. Poor condition of apparatus

14. Which of the following safety precautions taken when refilling SCBA prevents it from overheating? (307)
   A. Fill cylinder slowly
   B. Visually inspect for damage
   C. Don eye and hearing protection
   D. Ensure cylinder is completely full but not overpressurized

15. Which of the following is a nonemergency exit indicator? (313)
   A. Changes in temperature
   B. Indications of new hazards
   C. Necessary to replace air cylinder
   D. Presence of APR/PAPR breakthrough symptoms

16. Which of the following is an emergency exit indicator? (313)
   A. SCBA failure
   B. Situation stabilized
   C. Assignment completed
   D. Changes in operational strategy

17. Which of the following nonemergency exit techniques requires using the same path to exit an IDLH environment as to enter? (315)
   A. Egress paths
   B. Buddy system
   C. Controlled breathing
   D. Accountability systems
Directions: Write a brief answer to the questions below.

18. What is the purpose of personal protective equipment? (259-261)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

19. How can wearing PPE affect a firefighter’s situational awareness? (280)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Chapter 7 Pre-Course

Name: ___________________________ Date: ___________________________

Directions: Write the correct letter on the blank before each question.

1. Portable fire extinguishers are only classified by the type of extinguishing agent used. (340)
   A. True
   B. False

2. Types of portable fire extinguishers are organized by the type of agent and method used to expel contents. (342)
   A. True
   B. False

3. Portable fire extinguisher ratings are classified according to the types of fire for which they are intended. (351)
   A. True
   B. False

4. Most portable fire extinguishers are operated in very different ways. (354)
   A. True
   B. False

5. Maintenance for both fire department and privately owned portable fire extinguishers is based on NFPA® 10. (357)
   A. True
   B. False
Directions: Write a brief answer to the questions below.

6. List and then briefly define the classifications of portable fire extinguishers. (341-342)

   ____________________________
   
   ____________________________
   
   ____________________________
   
   ____________________________

7. List four types of portable fire extinguishers and then briefly describe what each is designed for. (345-348)

   ____________________________
   
   ____________________________
   
   ____________________________
   
   ____________________________

8. List the class ratings used for portable fire extinguishers and describe the test or qualifications each is based on. (351-352)

   ____________________________
   
   ____________________________
   
   ____________________________
   
   ____________________________
9. What are the two goals used when selecting a portable fire extinguisher? (354)

10. List at least three factors that impact selecting portable fire extinguishers. (354)
Chapter 8 Pre-Course

Name: _______________________________ Date: __________________________

Directions: Write the correct letter on the blank before each question.

1. There is no standard that regulates requirements for life safety rope. (370-371)
   A. True
   B. False

2. Synthetic rope is resistant mildew, mold, and rotting. (373)
   A. True
   B. False

3. Only life safety rope must be inspected after each use. (376)
   A. True
   B. False

4. There are two parts of rope used when tying a knot. (384)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

5. Which of the following types of rope construction is used for life safety rope? (373)
   A. Laid rope
   B. Braided rope
   C. Kernmantle rope
   D. Braid-on-braid rope
6. Which of the following BEST describes what could happen if a rope is subjected to a sustained load for more than two days? (378)
   A. Rope may begin to show fuzzy spots
   B. Rope strands are bruised by compression
   C. Rope may break well below the rated load limit
   D. Rope strength is reduced by as much as 50 percent

7. What type of webbing is best suited for use as a part of a search line system? (384)
   A. Utility webbing
   B. Life safety Class I webbing
   C. Life safety Class II webbing
   D. Life safety Class III webbing

8. A tighter bend in a knot leads to: (385)
   A. a less useable knot.
   B. a more secure knot.
   C. more strength lost in the knot.
   D. more strength added by the knot.

9. Which type of knot is used as a safety measure when tying other knots? (387)
   A. Bowline
   B. Clove hitch
   C. Figure-eight
   D. Overhand safety

10. The load ability of a rope: (390)
    A. relates only to hoisting conditions.
    B. relates only to the type of rope used.
    C. must exceed weight of object hoisted.
    D. must match the weight of object hoisted.

11. Which of the following is BEST to use when creating a mechanical advantage for hoisting? (390)
    A. Pulley
    B. Carabiner
    C. Pike pole
    D. Control line
Directions: Write a brief answer to the questions below.

12. What are at least three safety guidelines that should be used when hoisting equipment? (391)
Chapter 9 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. Firefighters use knowledge of building floor plans to conduct effective structural searches. (422)
   A. True
   B. False

2. Ultimate responsibility for size-up rests with the first arriving officer on-scene. (425)
   A. True
   B. False

3. If there is a possibility of extreme fire behavior, a firefighter should not attempt entry until coordinated fire control and ventilation is implemented. (426)
   A. True
   B. False

4. To exit a building, turn in the same direction you entered a room. (428)
   A. True
   B. False

5. Before entry into an immediately dangerous to life and health area, firefighters should be aware of alternate means of egress. (428)
   A. True
   B. False

6. During the primary search, firefighters check both known and likely locations of victims and fire conditions. (430)
   A. True
   B. False
7. Most occupants will need assistance when evacuating a structure. (439)  
   A. True  
   B. False

8. Escape is the best option when a firefighter has a completely exhausted air supply. (450)  
   A. True  
   B. False

9. After a MAYDAY transmission, the rescue intervention crew or team (RIC/RIT) should first gather needed equipment. (454)  
   A. True  
   B. False

10. After locating the downed firefighter, the first priority of the rescue intervention crew or team (RIC/RIT) is usually to stabilize injuries. (456)  
    A. True  
    B. False

**Directions:** Write the correct letter on the blank before each question.

11. Which of the following situational awareness clues alert firefighters to the possibility a building may be occupied? (425)  
    A. Vehicles in the driveway  
    B. Exterior indications of size of fire  
    C. Types of landscaping near the structure  
    D. Structural integrity of building based on age

12. Which of the following is the BEST way to perform a quick visual survey of conditions while on the fire floor? (432)  
    A. Get low to the floor  
    B. Control egress passageways  
    C. Follow a systematic search pattern  
    D. Start searches as far from the fire as possible
13. Which of the following victim removal methods is common in both hospitals and correctional facilities? (440)
   A. Escape
   B. Rescue
   C. Shelter-in-place
   D. Self-evacuation

14. Which of the following is the most important survival technique for firefighters? (443)
   A. Prevention
   B. Recognition
   C. Communication
   D. Avoid potential hazards

15. Which of the following MAYDAY situations is MOST common when a structure has been on fire for an extended period of time or while it is under construction? (445)
   A. Entanglement
   B. Air emergencies
   C. Lost/disoriented
   D. Collapse/trapped

16. Which of the following survival actions is BEST used in order to buy more time to escape? (450)
   A. Escape
   B. Breach a wall
   C. Remain in place
   D. Seek safe haven
Directions: Write a brief answer to the questions below.

17. What predictions can firefighters make about fire development if they have knowledge of building construction? (422)

18. What are the differences between the primary search and secondary search? (430-431)
Chapter 10 Pre-Course

Name: ___________________________ Date: ___________________________

Directions: Write the correct letter on the blank before each question.

1. Vehicle-mounted generators produce more power than portable units. (480)
   A. True
   B. False

2. Fixed lights are used to light remote areas of the incident scene. (481)
   A. True
   B. False

3. Only junction boxes and adapters are required to be waterproof; other auxiliary electrical equipment may not need to be. (482)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

4. Which of the following is the most common power source used by emergency services personnel? (480)
   A. Extension cords
   B. Electrical cables
   C. Electrical generators
   D. Portable lighting equipment
5. Which of the following BEST describes the limitations of electrical cables and extension cords? (483)
   A. They are only limited when used at outside scenes.
   B. They are only limited by the reach of portable cord reels.
   C. They can be used with equipment whose power demands exceed capacity if needed.
   D. They should only be used with equipment whose power demands do not exceed capacity.

Directions: Write a brief answer to the questions below.

6. What are the three main categories of emergency scene lighting equipment firefighters should be able to identify? (479)
Chapter 11 Pre-Course

Name: ___________________________  Date: ___________________________

Directions: Write the correct letter on the blank before each question.

1. Security barriers block escape routes for both firefighters and occupants. (575)
   A. True
   B. False

2. Nontraditional types of locks provide a higher level of security. (575)
   A. True
   B. False

3. The pumping mechanism for hydraulic prying tools can only be powered. (588)
   A. True
   B. False

4. No single forcible entry tool handles all situations. (591)
   A. True
   B. False

5. Cutting around a lock is another way to open a resisting door. (599)
   A. True
   B. False

6. Interior pocket doors can be forced with the same technique used for sliding doors. (601-602)
   A. True
   B. False
7. The best entry point into a burning building is to force entry through windows. (609)
   A. True
   B. False

8. Interior walls are more difficult to breach than exterior walls. (616)
   A. True
   B. False

9. Gates should be pried or cut when forcing entry to cause less damage. (622-623)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

10. Which of the following may have a key pad, card reader, or fingerprint activated screen? (579)
    A. Mortise locks
    B. Multiple bolt locks
    C. Tubular dead bolt locks
    D. Electronic keyless or digital locks

11. Which of the following should be done to prevent injury when using a saw? (592)
    A. Maintain situational awareness
    B. Keep blades dull to prevent chipping
    C. Use a combination of tools with saws
    D. Wear two pairs of gloves when operating

12. Which of the following is MOST accurate about the care and maintenance of forcible entry tools? (593)
    A. Keep tools freshly painted
    B. Test tool design and function before use
    C. Continue using damaged tools, avoiding damaged areas
    D. Report damage to tools according to department procedures
13. When performing forcible entry to open a door begin with: (597)
   A. sizing up windows in the structure.
   B. breaking window near a door to reach lock inside.
   C. minimum damage and proceed to maximum damage.
   D. maximum damage and proceed to minimum damage.

14. Which of the following is the term used for two boards connected with long carriage bolts? (615)
   A. Shutters
   B. Strongbacks
   C. Hopper windows
   D. Security bars and grilles

15. Which of the following makes faster, rougher cuts when breaching a floor? (620)
   A. Axe
   B. Chain saw
   C. Rotary saw
   D. Cutting torch

16. A barbed wired fence should be cut with a (an): (621)
   A. axe.
   B. rotary saw.
   C. bolt cutter.
   D. cutting torch.

**Directions:** Write a brief answer to the questions below.

17. How should each of the following tools be carried to ensure safety? (593)

   Axe - 

   Prying tool - 

   Pike pole or hook - 

   Striking tool - 

   Power tool - 

Chapter 12 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. The halyard and pulleys are components of an extension ladder. (657)
   A. True
   B. False

2. The ladder tip is secured and the foot anchored only during training, when the ladder may be used for repeated exercises. (666-667)
   A. True
   B. False

3. An easy way to determine the proper distance between the ladder butt and the building is to divide the working length of the ladder by four. (668)
   A. True
   B. False

4. To climb a ladder smoothly, the right hand and foot move together, then the left hand and foot. (685-686)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

5. Ladders constructed of ___ retain strength when exposed to heat and have better resistance to bouncing when climbed. (658)
   A. brass
   B. wood
   C. aluminum
   D. fiberglass
6. What is the purpose of the ladder positioning label? (659)
   A. Indicate the balance point
   B. Indicate the proper climbing angle
   C. Indicate firefighter position for raising
   D. Indicate the apparatus mounting bracket position

7. Which is the BEST procedure to follow when an inspection reveals possible deterioration of components? (664)
   A. Mark ladder for training use only
   B. Paint the components to prevent further deterioration
   C. Tighten all bolts before returning the ladder to service
   D. Remove the ladder from use until it can be service tested

8. What is the maximum number of firefighters that can use a ladder without overloading? (667)
   A. Two firefighters per section
   B. Three firefighters on any ladder
   C. One firefighter every 3 feet (1 m)
   D. One firefighter every 10 feet (3 m)

9. Which of the following BEST describes means of escape required when personnel are working on a roof or upper story? (668)
   A. At least one ground ladder and one roof ladder
   B. At least two ground ladders and one aerial device
   C. At least two ladders at remote locations from one another
   D. At least two ladders no more than ten feet from one another

10. To prevent personal injuries, ladders should be lifted and lowered using which group of muscles? (669)
    A. Leg
    B. Arm
    C. Back
    D. Chest

11. How many firefighters should be used to raise ladders of 35 feet (11 m) or longer? (673)
    A. Two
    B. Three
    C. One per ladder section
    D. One per five feet of working length
12. Heeling and tying-in are two methods of: (684)
   A. preventing the firefighter from falling from the ladder.
   B. preventing the fly section from retracting unexpectedly.
   C. preventing the ladder from moving away from the building.
   D. preventing an unconscious victim from falling from the ladder.

13. Which of the following can safely secure a firefighter to the ladder while performing work? (686-687)
   A. Pawls, tie rods
   B. Rope hose tool
   C. Ladder belt, leg lock
   D. Halyard rope, safety knot

14. Which of the following is the BEST placement for a ladder intended to be used for rescue through a narrow window? (687)
   A. Ladder tip raised to just below sill
   B. Ladder tip 3-4 rungs above roof line
   C. Ladder tip on wall above window opening
   D. Ladder tip even with top of window on windward side

Directions: Write a brief answer to the questions below.

15. List and briefly define or describe five parts of a ladder. (655-657)
16. When performing a one-firefighter low-shoulder carry, why does the firefighter carry the butt forward and slightly lowered? (672)

17. List and briefly describe two procedures for moving raised ground ladders. (683)
Chapter 13 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. Tactical ventilation should only be performed when the fire attack hoselines and teams are in place and ready to advance toward the fire. (732)
   A. True
   B. False

2. The two general types of tactical ventilation used for structure fires are horizontal and vertical. (742)
   A. True
   B. False

3. The triangle cut ventilation hole provides the least reliable information of conditions beneath the roof. (756)
   A. True
   B. False

4. A trench cut is used to create a fire break that increases the spread of fire in a common attic structures or large structures. (758)
   A. True
   B. False

5. Restoring the HVAC system to operation after a fire is the responsibility of the building engineer or maintenance superintendent. (763)
   A. True
   B. False

6. Smoke control systems usually have a system diagram in the same location as the control panel, indicating where the alarm originated. (763-764)
   A. True
   B. False
Directions: Write the correct letter on the blank before each question.

7. Air flow is the movement of air toward burning fuel and: (737)
   A. movement of smoke in to the compartment.
   B. movement of smoke out of the compartment.
   C. pressure differentials inside the compartment.
   D. pressure differentials outside the compartment.

8. For vertical ventilation to be effective, a horizontal inlet opening at or below the level of the fire is needed to provide a flow path for: (742)
   A. flames to exit the structure.
   B. for smoke to enter the structure.
   C. for fresh air to exit the structure.
   D. for fresh air to enter the structure.

9. Mechanical ventilation methods using fans, blowers, and smoke ejectors can be applied to horizontal and vertical ventilation, but is most often used for: (743)
   A. natural ventilation.
   B. vertical ventilation.
   C. hydraulic ventilation.
   D. horizontal ventilation.

10. When conditions are appropriate, natural horizontal ventilation operations should work with existing atmospheric conditions, taking advantage of: (745)
    A. natural inlets.
    B. natural air flow.
    C. positive pressure.
    D. negative pressure.

11. Which mechanical ventilation method uses higher pressure inside a building to force smoke through openings to the lower-pressure area outside? (746)
    A. Positive-pressure ventilation
    B. Positive-hydraulic ventilation
    C. Negative-pressure ventilation
    D. Negative-hydraulic ventilation
12. Positive pressure ventilation is applied to a building at ground level through the use of one or more: (747)
   A. blowers.
   B. exit points.
   C. entry points.
   D. smoke ejectors.

13. Which of the following actions should firefighters do to determine the difference in feel of supported and unsupported areas of a roof? (754)
   A. Cut the roof
   B. Sound the roof
   C. Step on the roof
   D. Bounce an item off the roof

14. Roofs that may fail early in a fire and are extremely dangerous to work under are roofs supported by: (754)
   A. heavy weight slate or tiles.
   B. lightweight composition shingles.
   C. lightweight or engineered trusses.
   D. heavy weight or mechanical trusses.

15. HVAC equipment in windowless buildings may cause spread of smoke, heat, and fire unless specifically: (761)
   A. designed for this purpose.
   B. inspected for high occupancy.
   C. designed to cool building only.
   D. inspected prior to a fire occurring.
Directions: Write a brief answer to the questions below.

16. What three incident priorities are accomplished when tactical ventilation is done correctly? (733)

17. What three indicators help determine fire behavior? (737)
Chapter 15 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. Hose size refers to the external diameter of the hose. (818)
   A. True
   B. False

2. A hose clamp should be applied approximately 5 feet (1.5 m) from the coupling on the supply side. (841)
   A. True
   B. False

3. NFPA® 1901 lists the minimum quantity of hose to be carried on a standard pumper or engine. (846)
   A. True
   B. False

4. In a forward lay, the first coupling to come off the hose bed should be male. (856)
   A. True
   B. False

5. When advancing hose up and down a stairway, the hose should be uncharged when conditions allow. (863)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

6. Which type of fire hose requires the most care in cleaning? (832)
   A. Hard intake hose
   B. Woven-jacket hose
   C. Hard-rubber booster hose
   D. Rubber-jacket collapsible hose
7. Which of the following items allow the number of hoselines operating on the fire ground to be increased or decreased? (837)
   A. Valves
   B. Fittings
   C. Valve devices
   D. Intake strainers

8. Which of the following statements is an advantage of the accordion load? (848)
   A. It is the easiest to load and is suitable for any size of supply hose.
   B. It leaves fewer sharp bends in the hose than the horseshoe or flat loads.
   C. Only three or four firefighters are required to carry the hose from the bed to the fire scene.
   D. Firefighters can easily pick up a number of folds and place on one shoulder to carry hose from the bed.

9. Which preconnected hose load is designed to be pulled by one person and must be completely removed from the bed before deploying the nozzle end? (854)
   A. Minuteman load
   B. Triple layer load
   C. Combination load
   D. Preconnected flat load

10. Which type of hose lay is the most expedient if the apparatus must stay at the water source? (858)
    A. Reverse lay
    B. Forward lay
    C. Apparatus lay
    D. Combination lay

11. When deploying preconnected hoselines, which load should result in the hoseline deploying with fewer kinks and bends? (861)
    A. Flat load
    B. Triple layer load
    C. Minuteman load
    D. Combination load
Directions: Write a brief answer to the questions below.

12. List four recommended fire hose cleaning practices after chemical exposure. (828-829)

13. What should be done if a fire hose coupling swivel becomes difficult to spin? (835)

14. When handling large hoselines, what can the nozzle operator do to reduce fatigue? (869-870)
Chapter 14 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. Two or more primary feeders should run from the source of the water supply to high-risk and industrial districts along separate routes. (789)
   A. True
   B. False

2. Fire hydrant locations are generally determined by the fire department. (792)
   A. True
   B. False

3. Dry-barrel hydrants are designed to have water inside them at all times. (795)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

4. Isolation and control valves are usually constructed of: (791)
   A. PVC.
   B. brass.
   C. plastic.
   D. aluminum.

5. Which of the following is a hydrant that receives water from only one direction? (793)
   A. Limited hydrant
   B. Dead-end hydrant
   C. Circulating hydrant
   D. Unidirectional hydrant
6. Standard three-way fire hydrants require a ___-inch (mm) valve opening. (795)
   A. 3 (75)
   B. 4 (100)
   C. 5 (125)
   D. 6 (150)

7. Floating strainers can draft water from sources as shallow as: (799)
   A. 12 inches (300 mm).
   B. 24 inches (600 mm).
   C. 36 inches (900 mm).
   D. 48 inches (1200 mm).

**Directions:** Write a brief answer to the questions below.

8. Knowledge of fire hydrant operation is necessary in order to perform what duties? (796)

9. What are some examples of alternative water supplies? (799)
10. In relay pumping, the number of pumpers needed and the distance between the pumpers is determined by what factors? (803)
Chapter 15 Pre-Course

Name: ____________________________ Date: ____________________________

**Directions:** Write the correct letter on the blank before each question.

1. Hose size refers to the external diameter of the hose. (818)
   - A. True
   - B. False

2. A hose clamp should be applied approximately 5 feet (1.5 m) from the coupling on the supply side. (841)
   - A. True
   - B. False

3. NFPA® 1901 lists the minimum quantity of hose to be carried on a standard pumper or engine. (846)
   - A. True
   - B. False

4. In a forward lay, the first coupling to come off the hose bed should be male. (856)
   - A. True
   - B. False

5. When advancing hose up and down a stairway, the hose should be uncharged when conditions allow. (863)
   - A. True
   - B. False

**Directions:** Write the correct letter on the blank before each question.

6. Which type of fire hose requires the most care in cleaning? (832)
   - A. Hard intake hose
   - B. Woven-jacket hose
   - C. Hard-rubber booster hose
   - D. Rubber-jacket collapsible hose
Which of the following items allow the number of hoselines operating on the fire ground to be increased or decreased? (837)

A. Valves  
B. Fittings  
C. Valve devices  
D. Intake strainers

Which of the following statements is an advantage of the accordion load? (848)

A. It is the easiest to load and is suitable for any size of supply hose.  
B. It leaves fewer sharp bends in the hose than the horseshoe or flat loads.  
C. Only three or four firefighters are required to carry the hose from the bed to the fire scene.  
D. Firefighters can easily pick up a number of folds and place on one shoulder to carry hose from the bed.

Which preconnected hose load is designed to be pulled by one person and must be completely removed from the bed before deploying the nozzle end? (854)

A. Minuteman load  
B. Triple layer load  
C. Combination load  
D. Preconnected flat load

Which type of hose lay is the most expedient if the apparatus must stay at the water source? (858)

A. Reverse lay  
B. Forward lay  
C. Apparatus lay  
D. Combination lay

When deploying preconnected hoselines, which load should result in the hoseline deploying with fewer kinks and bends? (861)

A. Flat load  
B. Triple layer load  
C. Minuteman load  
D. Combination load
Directions: Write a brief answer to the questions below.

12. List four recommended fire hose cleaning practices after chemical exposure. (828-829)

13. What should be done if a fire hose coupling swivel becomes difficult to spin? (835)

14. When handling large hoselines, what can the nozzle operator do to reduce fatigue? (869-870)
Chapter 16 Pre-Course

Name: __________________________ Date: __________________________

Directions: Write the correct letter on the blank before each question.

_______ 1. The primary way water extinguishes fire is by excluding oxygen from the fuel (smothering). (944)
   A. True
   B. False

_______ 2. To prevent water hammer, valves, nozzles, and hydrants should be closed slowly. (949)
   A. True
   B. False

_______ 3. Rotary control valves control both the water flow and the discharge pattern of a fire stream. (963)
   A. True
   B. False

_______ 4. Nozzles should be stored with the control valve bale in the open position. (967)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

_______ 5. The energy required to change a liquid into a vapor is: (944)
   A. steam heat.
   B. specific heat.
   C. latent heat of vaporization.
   D. British thermal unit (Joule).
6. Which of the following statements about fire streams is MOST accurate? (946)
   A. A broken-stream has a smaller surface area.
   B. Water in a solid stream absorbs heat more rapidly.
   C. A solid stream has greater surface area to absorb heat.
   D. Water broken into small droplets absorbs heat more rapidly.

7. Friction loss may be overcome by: (948)
   A. curving the hoseline.
   B. decreasing hose size.
   C. adding additional parallel hoselines.
   D. inserting in-line gauges in the layout.

8. Which of the following fire streams is supplied by 1½- to 3-inch (38 mm to 77 mm) hose, and discharges from 40 to 350 gpm (160 L/min to 1 400 L/min)? (950)
   A. Master stream
   B. Handline stream
   C. Low-volume stream
   D. High-volume stream

9. Which of the following fire stream patterns has the ability to reach areas other streams might not reach? (951)
   A. Fog-stream
   B. Solid stream
   C. Broken-stream
   D. Straight stream

10. Which of the following statements about fog-streams is MOST accurate? (955)
    A. Fog-streams have longer reach than straight streams.
    B. Fog-streams may be used to cool the hot fire gas layer.
    C. Fog-streams are less affected by wind than are solid streams.
    D. Fog-streams are more likely to conduct electricity than solid streams.
11. Which type of nozzle can be adjusted, resulting in different patterns? (959)
   A. Fog  
   B. Bresnan  
   C. Stacked tip  
   D. Smooth bore

12. Which type of nozzle can be used to effectively control fires in concealed spaces? (962)
   A. Piercing  
   B. Stacked tip  
   C. Smooth bore  
   D. Adjustable fog

13. The type of nozzle control valve that seats a moveable cylinder against a shaped cone to turn off the flow of water is the: (963)
   A. ball valve.  
   B. slide valve.  
   C. standpipe valve.  
   D. rotary control valve.

14. When operating a handline, a firefighter should open the control valve slowly: (964)
   A. to increase water hammer.  
   B. to better control nozzle reaction.  
   C. to minimize turbulence in the fire stream.  
   D. to comply with manufacturer’s recommendations.
Chapter 17 Pre-Course

Name: __________________________ Date: __________________________

Directions: Write the correct letter on the blank before each question.

1. A nozzle tip that is too small will not deliver the volume of water required to extinguish the fire. (1011)
   A. True
   B. False

2. Elevators must not be used to transport fire crews to the fire floor. (1016)
   A. True
   B. False

3. Fires in electrical transformers are extremely rare. (1033)
   A. True
   B. False

4. The goal at a fire involving stacked and piled materials is to confine the fire to the pile or building of origin. (1047)
   A. True
   B. False

5. Standard structural turnout clothing is appropriate for fighting ground cover fires. (1054)
   A. True
   B. False

Directions: Write the correct letter on the blank before each question.

6. What strategy is typically selected when property is not salvageable? (1006)
   A. Direct
   B. Indirect
   C. Offensive
   D. Defensive
7. What type of fire attack produces large quantities of steam and must be coordinated with ventilation? (1014)
   A. Direct
   B. Indirect
   C. Offensive
   D. Defensive

8. Which of the following is a form of exterior exposure protection? (1022)
   A. Use passive forms, such as fire-rated walls and doors
   B. Use tactical ventilation to ensure that smoke movement is limited
   C. Close doors or other openings between the fire area and unaffected area
   D. Apply a protective spray of water or foam between the fire and exposures

9. When should water flow from a sprinkler be stopped? (1027)
   A. Once the fire has been brought under control
   B. As soon as the fire department arrives on scene
   C. Once master stream devices have been deployed
   D. After the fire department connection has been disconnected

10. Class D fires: (1037)
    A. are reactive to water.
    B. involve electrical equipment.
    C. involve stacked and piled materials
    D. are easily extinguished with water or foam.

11. A vehicle fire should be attacked from a ___-degree angle. (1039)
    A. 15
    B. 30
    C. 45
    D. 90

12. What type of ground cover fire is the most common type and consumes low-lying grass, shrubs, and other vegetation? (1050)
    A. Crown fire
    B. Ladder fire
    C. Ground fire
    D. Surface fire
13. Ground cover fires are dangerous because which two elements of the fire triangle are always present? (1051)
   A. Oxygen and fuel
   B. Heat and oxygen
   C. Ignition source and fuel
   D. Heat and ignition source

14. Which part of a ground cover fire are the sides, roughly parallel to the main direction of fire spread? (1053)
   A. Heads
   B. Flanks
   C. Islands
   D. Fingers

15. Which method used to attack ground cover fires is generally used against fires that are very hot, very big, and very fast? (1054)
   A. Direct
   B. Indirect
   C. Offensive
   D. Defensive

Directions: Write a brief answer to the questions below.

16. List five pre-entry considerations that are critical to firefighter safety and effectiveness. (1012)
17. What factors contribute to basement fires? (1017-18)

18. What are the four main uses of a master stream device? (1028)

19. List three guidelines for electrical emergencies. (1035-36)

20. List five causes of ground cover fires. (1049)
Chapter 18 Pre-Course

Name: __________________________ Date: _______________________

Directions: Write the correct letter on the blank before each question.

______ 1. The philosophy of loss control describes activities performed before, during, and after a fire incident to minimize losses to property. (1104)
   A. True
   B. False

______ 2. Allowing carbon and ash stains to dry on canvas salvage covers may cause the canvas to rot. (1109)
   A. True
   B. False

______ 3. Synthetic salvage covers require as much maintenance as canvas covers. (1110)
   A. True
   B. False

______ 4. Overhaul procedures typically begin in the area of least severe fire involvement. (1121)
   A. True
   B. False

______ 5. The only way to ensure fires are extinguished in baled items such as rags, cotton, or hay is to break them apart. (1122)
   A. True
   B. False

______ 6. Large smoldering items should be left inside the fire incident structure for thorough extinguishment. (1122)
   A. True
   B. False
Directions: Write the correct letter on the blank before each question.

7. Which of the following BEST describes the results of forcible entry, ventilation, and fire extinguishment operations during loss control? (1104)
   A. Primary damage
   B. Secondary damage
   C. Salvage operations
   D. Overhaul operations

8. Salvage operations may be conducted while suppression activities are underway if the situation permits and: (1106)
   A. on-scene resources are sufficient.
   B. contents of the structure are valuable.
   C. the fire can be extinguished within fifteen minutes.
   D. weather will have no impact on fire fighting operations.

9. Which of the following are designed to be driven into walls or wooden framing to provide strong points to hang objects (1112)
   A. C-hooks
   B. I-hooks
   C. J-hooks
   D. T-hooks

10. Which of the following is typically the MOST convenient method used to carry a folded salvage cover for a two-firefighter spread? (1114)
    A. On the back with open edges next to the neck
    B. On the shoulder with open edges next to the neck
    C. On the forearms with open edges next to the hands
    D. On the shoulder with folded edges facing towards the hands
11. SCBA should be worn even if the air after a fire incident appears to be without smoke to protect firefighters from: (1119)
   A. overexertion.
   B. toxic combustion products.
   C. nontoxic airborne particles.
   D. extremely high levels of oxygen.

12. Which of the following statements about hoselines during overhaul operations is MOST accurate? (1120)
   A. Floor runners protect hoselines from damage by debris.
   B. 3½ inch (90 mm) attack lines must be present during overhaul.
   C. All couplings should be positioned in the middle of the salvage site.
   D. Hoselines should be monitored for leakage, especially at couplings.

13. Firefighters must be especially aware of checking the attic and basement for fire extension in structures using: (1121)
   A. masonry foundation.
   B. balloon construction.
   C. structures with mezzanines or upper floors.
   D. old lath and plaster wall and ceiling construction.

**Directions:** Write a brief answer to the questions below.

14. What are two criteria for areas to be used as a safe location for moving contents during salvage procedures? (1107)
15. Name three materials used for covering openings in roofs after a fire incident. (1116)

<table>
<thead>
<tr>
<th>Material 1</th>
<th>Material 2</th>
<th>Material 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. List the four main activities of overhaul operations once the main body of fire is extinguished. (1118)

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Activity 2</th>
<th>Activity 3</th>
<th>Activity 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. What are three indicators firefighters can use to detect hidden fires by sight? (1121)

<table>
<thead>
<tr>
<th>Indicator 1</th>
<th>Indicator 2</th>
<th>Indicator 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter 19 Pre-Course

Directions: Write the correct letter on the blank before each question.

1. When conducting a search after a structure fire, start inside the burned portion of the structure. (1147)
   A. True
   B. False

2. The area of origin may display unburned materials. (1150)
   A. True
   B. False

3. Searching for the area of origin and cause of a structure fire is similar to vehicle fires. (1150)
   A. True
   B. False

4. The perimeter for explosions should be established at two times the distance from farthest piece of debris found. (1160)
   A. True
   B. False

5. Overhaul operations can be detrimental to the fire cause investigation. (1162)
   A. True
   B. False
Directions: Write the correct letter on the blank before each question.

6. The general location where a fire began is called the: (1145)
   A. area of origin.
   B. point of origin.
   C. ignition source.
   D. chain of custody.

7. Which of the following typically stores materials, debris, trash, and rubbish? (1150)
   A. Interior fires
   B. Exterior fires
   C. Accidental fires
   D. Undetermined fires

8. Which of the following is a fire cause classification that may refer to a situation in which each component of the ignition sequence is not specifically identified? (1154-1155)
   A. Natural
   B. Accidental
   C. Incendiary
   D. Undetermined

9. Ovens, cook tops, and electrical appliances are all examples of: (1155)
   A. ignition sources.
   B. evidence of arson.
   C. natural fire sources.
   D. exterior fire causes.

10. Which of the following may indicate use of accelerants of intentionally disconnected gas lines? (1158)
    A. Fire pattern
    B. Heat intensity
    C. Location of the fire
    D. Fire protection system
11. Which of the following is a responsibility of all fire officers and firefighters at a fire scene? (1159)
   A. Preserving evidence
   B. Conducting investigation
   C. Cleaning up the structure
   D. Determining the point of origin

Directions: Write a brief answer to the questions below.

12. What are the duties of an incident commander and/or a fire or criminal investigator during a fire investigation? (1146-1147)
**Chapter 21 Pre-Course**

**Name:** __________________________________________  **Date:** __________________________

**Directions:** Write the correct letter on the blank before each question.

1. One of the goals of a fire and life safety initiatives program is to encourage and empower citizens to act in a safe manner to reduce the potential for fires, accidents, and injuries. (1222)
   
   A. True  
   B. False

2. A firefighter must be able to answer questions on fire and life safety topics not traditionally covered under the title of fire prevention. (1225)
   
   A. True  
   B. False

3. Company-level preincident surveys are generally conducted on occupied private residences. (1235)
   
   A. True  
   B. False

4. Codes are only enforceable when the authority having jurisdiction (AHJ) adopts them. (1239)
   
   A. True  
   B. False

5. Which fire and life safety program component includes investigating the cause of fires, documenting results, and providing law enforcement agencies with findings? (1225)
   
   A. Education  
   B. Engineering  
   C. Enforcement  
   D. Emergency response
6. Three categories of hazards that can benefit from fire and life safety education are unsafe behaviors, unsafe conditions, and: (1226)
   A. code violations.
   B. natural hazards.
   C. biological hazards.
   D. hazardous processes.

7. Which fire and life safety audience should be positively informed of what to do, rather than being focused on what not to do? (1231)
   A. Older adults
   B. Preschool children
   C. High school students
   D. Middle school students

8. Which of the following topics is MOST appropriate for high school students? (1233)
   A. Careless smoking
   B. Safe driving habits
   C. Stop, Drop, and Roll
   D. Residential sprinklers

9. Which of the following is one step a Firefighter I can take to help locate children at risk of becoming juvenile firesetters? (1236)
   A. Avoid discussing the destructive properties of fire with children
   B. Include juvenile firesetter information in presentations and fire station tours
   C. Protect privacy – don’t discuss fires with personnel from other departments or shifts
   D. Encourage legislators to include provisions against setting fires in amended model codes
Directions: Write a brief answer to the questions below.

10. Threat and Hazard Identification and Risk Assessment (THIRA) threats and hazards are divided into which three categories? (1223)

11. What are the five components of program delivery (the Five Es)? (1224-1226)

12. What is the term for a set of requirements similar to a standard, developed by a consensus group, and used as a starting point for the code adoption process? (1238)