

END-OF-COURSE EXAMINATION

Note to Instructor and Students: There are 12 questions in this examination, with a total of 25 responses possible in the questions. Each response has a value of four points. The student must achieve a grade of 72 percent or select 18 correct responses to complete the training course successfully and receive a National Fire Academy certificate of training.

1. What is the primary role of the first responder at a fire which may be of suspicious origin?

 2. When a fire occurs, the many social and economic costs to the community are devastating. List **two** important costs to the community.
 - a.
 - b.

 3. List **two** safety issues which the first-in officer must consider before assigning tasks at a structure fire.
 - a.
 - b.

 4. Which one of the following elements is not part of the fire tetrahedron?
 - a. sufficient heat to vaporize and ignite material
 - b. vapor density
 - c. fuel
 - d. oxygen
 - e. uninhibited chain reaction

 5. What are the **three** methods of heat transfer?
 - a. convection
 - b. radiation
 - c. backdraft
 - d. conduction
 - e. heat transfer
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ARSON DETECTION FOR THE FIRST RESPONDER

6. At a fire in a structure, you observe flames in the basement and on the third floor, with no flames in between. What kind of building construction is indicated?
- a. ordinary
 - b. fire resistive
 - c. balloon
 - d. heavy timber
 - e. noncombustible
7. The first responder is responsible for critical observations during **five** phases of fire scene operations. List all five.
- a.
 - b.
 - c.
 - d.
 - e.
8. Improving observations of the crowd during sizeup may provide important information about arson fires. List **two** characteristics of individuals gathered at a fire which may indicate arson.
- a.
 - b.
9. During fire suppression activities, the first responder may note indicators of a possible arson incident. List **three** indicators.
- a.
 - b.
 - c.
10. A _____ is a combustible or flammable material used to spread fire from one area to another.
11. It is imperative to control access to a fire scene prior to release. Only **three** groups of persons should have access. Which of the three groups listed below should be allowed on the actual fire scene?
- a. evidence technicians
 - b. tenants
 - c. reporters
 - d. firefighters
 - e. fire investigators
 - f. neighbors and friends who want to save valuables
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12. What is the only situation when a first responder may remove evidence from a fire scene before an investigator secures it?

ANSWER KEY

1. What is the primary role of the first responder at a fire which may be of suspicious origin?

Observe and note conditions which indicate origin and cause of fire.

2. When a fire occurs, the many social and economic costs to the community are devastating. List **two** important costs to the community.

- a. **Loss of tax base**
- b. **Loss of jobs**
- c. **Injuries and deaths of civilians**
- d. **Injuries and deaths to firefighters**

3. List **two** safety issues which the first-in officer must consider before assigning tasks at a structure fire.

- a. **Load-bearing capacity of floors**
- b. **Stability of load-bearing walls**
- c. **Stability of load-bearing roof and ceilings**

4. Which one of the following elements is not part of the fire tetrahedron?

- a. sufficient heat to vaporize and ignite material
- b. **vapor density**
- c. fuel
- d. oxygen
- e. uninhibited chain reaction

5. What are the **three** methods of heat transfer?

- a. **convection**
- b. **radiation**
- c. backdraft
- d. **conduction**
- e. heat transfer

6. At a fire in a structure, you observe flames in the basement and on the third floor, with no flames in between. What kind of building construction is indicated?

- a. ordinary
 - b. fire resistive
 - c. **balloon**
 - d. heavy timber
 - e. noncombustible
-

7. The first responder is responsible for critical observations during **five** phases of fire scene operations. List all five.
 - a. **At the initial call**
 - b. **On route to fire scene**
 - c. **Upon arrival**
 - d. **During fire suppression**
 - e. **During overhaul**

 8. Improving observations of the crowd during sizeup may provide important information about arson fires. List **two** characteristics of individuals gathered at a fire which may indicate arson.
 - a. **Spectator(s) observed at earlier fires**
 - b. **Odors or charring on clothing**
 - c. **Person(s) too eager to help**
 - d. **Manner of dress inappropriate for emergency situation**

 9. During fire suppression activities, the first responder may note indicators of a possible arson incident. List **three** indicators.
 - a. **Blocked doors and passageways**
 - b. **Obstructions to hydrants and standpipe connections**
 - c. **Closed Post Indicator valves (PIVs)**
 - d. **Inoperative alarm bells**
 - e. **Holes in doors**

 10. A **trailer** is a combustible or flammable material used to spread fire from one area to another.

 11. It is imperative to control access to a fire scene prior to release. Only **three** groups of persons should have access. Which of the three groups listed below should be allowed on the actual fire scene?
 - a. **evidence technicians**
 - b. tenants
 - c. reporters
 - d. **firefighters**
 - e. **fire investigators**
 - f. neighbors and friends who want to save valuables
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12. What is the only situation when a first responder may remove evidence from a fire scene before an investigator secures it?

When there is immediate danger of evidence being destroyed by fire.
