

# Chapter 5 Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

- \_\_\_\_\_ 1. Which piece of PPE can provide a secondary layer of eye protection in addition to an SCBA facepiece? (183) [4.1.1, 4.3.2, 4.3.3]
- A. Fusee
  - B. Neck shroud
  - C. Protective hood
  - D. Helmet faceshield
- \_\_\_\_\_ 2. What is a function of station and work uniforms? (184) [4.1.1, 4.3.2]
- A. Provide respiratory protection
  - B. Protect wearer from hazardous materials
  - C. Provide protection against advanced fire behavior
  - D. Identify wearer as a member of the fire department
- \_\_\_\_\_ 3. While on duty, firefighters should avoid wearing: (184) [4.1.1, 4.3.2]
- A. high-top shoes.
  - B. short-sleeved shirts.
  - C. clothing made from 100 percent cotton.
  - D. clothing made of non-fire-resistant synthetic materials.
- \_\_\_\_\_ 4. In order to avoid contaminating living quarters, \_\_\_\_\_ should NOT be worn during emergency operations. (185) [4.1.1, 4.3.2]
- A. station footwear
  - B. steel-toed boots
  - C. cotton underwear
  - D. synthetic materials
- \_\_\_\_\_ 5. All PPE designed for structural fire fighting must meet the requirements of: (186) [4.1.1, 4.3.2, 4.3.3]
- A. NFPA 1002.
  - B. NFPA 1006.
  - C. NFPA 1971.
  - D. NFPA 1981.

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- \_\_\_\_\_ 6. Which piece of information must be included on the permanent compliance label inside each piece of PPE? (186) [4.1.1, 4.3.2, 4.3.3]
- A. Firefighter's name
  - B. Department name
  - C. Cleaning precautions
  - D. Wearing instructions
- \_\_\_\_\_ 7. What is structural PPE designed to do? (187) [4.1.1, 4.3.2, 4.3.3]
- A. Eliminate exposure to hazardous materials
  - B. Protect from temperatures of up to 1,000°F (540°C)
  - C. Prevent burns from extreme fire behaviors such as flashover
  - D. Cover all portions of skin while reaching, bending, or moving
- \_\_\_\_\_ 8. In order to avoid contact burns and heat stress after leaving a heated environment, firefighters should: (187) [4.1.1, 4.3.2]
- A. thoroughly inspect PPE to check for damage.
  - B. place contaminated PPE in the cab of the apparatus.
  - C. follow rehabilitation protocols and allow clothing to cool.
  - D. make sure that the protective trousers and coat do not overlap.
- \_\_\_\_\_ 9. Which statement regarding the use of fire fighting helmets is accurate? (188) [4.1.1, 4.3.2, 4.3.3]
- A. Chin straps may be worn open or closed.
  - B. Ear flaps are optional if wearing a protective hood.
  - C. Chin strap color and markings indicate a firefighter's rank and unit.
  - D. Ear flaps must be folded down, even if wearing a protective hood.
- \_\_\_\_\_ 10. During structural fire fighting operations, primary eye protection is provided by: (189) [4.1.1, 4.3.2, 4.3.3]
- A. safety glasses.
  - B. the SCBA facepiece.
  - C. the protective hood.
  - D. helmet-mounted faceshield.

- \_\_\_\_\_ 11. Which piece of PPE is donned under the helmet and is designed to protect the neck, ears, and face from exposure to heat, embers, and debris? (190) [4.1.1, 4.3.2, 4.3.3]
- A. SCBA facepiece
  - B. Thermal barrier
  - C. Protective hood
  - D. Moisture barrier
- \_\_\_\_\_ 12. Which statement about structural fire fighting protective coats is accurate? (190) [4.1.1, 4.3.2, 4.3.3]
- A. The outer shell, moisture barrier, and thermal barrier must always be worn together.
  - B. At least two of the three coat components must be worn together in order to provide complete protection.
  - C. The thermal barrier is required during structural operations, but should be removed during rescue or extrication operations.
  - D. The outer shell must be worn at all times, and the additional layers can be added if the situation requires extra protection.
- \_\_\_\_\_ 13. Which component of the protective coat is designed to make firefighters more visible at night or in low light conditions? (191) [4.1.1, 4.3.2, 4.3.3]
- A. Collar
  - B. Wristlets
  - C. Retroreflective trim
  - D. Drag Rescue Device
- \_\_\_\_\_ 14. Protective trousers designed for fire fighting are: (192) [4.1.1, 4.3.2, 4.3.3]
- A. identical to those used in wildland fire fighting and roadway operations.
  - B. designed to protect firefighters from extreme fire behavior such as flashover and rollover.
  - C. required to be sent to the manufacturer for specialized cleaning after each use.
  - D. constructed from the same fabric, moisture barrier, and thermal layering used in protective coats.



- \_\_\_\_\_ 15. When properly worn, fire fighting gloves: (192) [4.1.1, 4.3.2, 4.3.3]
- A. offer minimal protection against heat and embers.
  - B. lay flat beneath the wristlets of the protective coat.
  - C. must completely cover the wristlet of the protective coat.
  - D. will protect the fire fighter from exposure to hazardous materials.
- \_\_\_\_\_ 16. Fire fighting boots must be: (192) [4.1.1, 4.3.2, 4.3.3]
- A. low enough to expose to the ankles.
  - B. high enough to protect the lower leg.
  - C. made completely of reinforced leather.
  - D. made completely of high-grade rubber.
- \_\_\_\_\_ 17. Personal alert safety system (PASS) alarms are designed to activate when: (194) [4.1.1, 4.3.2, 4.3.3]
- A. a firefighter is motionless for more than 30 seconds.
  - B. firefighters encounter hazardous materials at an incident scene.
  - C. toxic gases have been detected in the surrounding atmosphere.
  - D. the amount of air in the SCBA air cylinder drops below 50 percent capacity.
- \_\_\_\_\_ 18. Which situation would require firefighters to wear hearing protection? (195) [4.1.1, 4.3.2, 4.3.3]
- A. Inspecting ladders
  - B. Operating power tools
  - C. Using a fire department radio
  - D. Attacking an interior structure fire
- \_\_\_\_\_ 19. Which piece of wildland fire fighting PPE is a piece of flame-resistant fabric that attaches to the helmet? (196) [4.1.1, 4.3.2, 4.3.3]
- A. Fusee
  - B. Fire shelter
  - C. Face/neck shroud
  - D. Chain saw protection

- \_\_\_\_\_ 20. In order to be as visible to motorists as possible during roadway incident operations, firefighters must wear: (196) [4.1.1, 4.3.2, 4.3.3]
- A. high-visibility vests.
  - B. bright orange helmets.
  - C. flame-retardant jumpsuits.
  - D. structural PPE with reflective trim.
- \_\_\_\_\_ 21. Why is it important to ensure that PPE is dry before wearing it into a fire? (197) [4.1.1, 4.3.2]
- A. Wet clothing can create a tripping hazard.
  - B. Wet clothing is more likely to snag or tear.
  - C. Moisture will fuse Velcro® fasteners to one another.
  - D. Moisture can transfer heat rapidly and result in steam burns.
- \_\_\_\_\_ 22. Which is a safety consideration related to PPE? (197) [4.1.1, 4.3.2]
- A. Never share PPE with another firefighter.
  - B. Always wear protective clothing that fits properly.
  - C. Always wear the protective gloves beneath the coat wristlets.
  - D. Make sure there is no overlap between the coat and trousers.
- \_\_\_\_\_ 23. PPE must be properly cleaned because chemicals, oils, and petroleum products on the outer shell: (199) [4.1.1, 4.3.2]
- A. can ignite when exposed to fire.
  - B. may stain the protective outer layer.
  - C. will void the manufacturer's warranty.
  - D. will instantly soak through to the inner layers.
- \_\_\_\_\_ 24. Which statement about inspecting PPE is accurate? (199) [4.1.2]
- A. PPE must be inspected at the start of every shift and after every use.
  - B. PPE must be inspected during rehabilitation for incidents lasting more than two hours.
  - C. Individual firefighters determine their own PPE inspection schedule and guidelines.
  - D. PPE that is not used in fire fighting incidents or live fire training can be exempt from routine inspections.

- \_\_\_\_\_ 25. What should be done during routine inspections of PPE, such as after use at an incident? (199) [4.1.2]
- A. Perform a hydrostatic test
  - B. Perform specialized cleaning
  - C. Complete a fabric strength test
  - D. Look for damage like rips or tears
- \_\_\_\_\_ 26. What should you do if you determine that your PPE requires advanced repairs? (199) [4.1.2]
- A. Throw the PPE away and order a new set
  - B. Report the needed repairs to your supervisor
  - C. Continue using the PPE until more can be purchased
  - D. Repair the PPE yourself and report it to the supervisor
- \_\_\_\_\_ 27. Which type of cleaning can be done at an incident scene by brushing off loose debris and rinsing the PPE? (200) [4.1.2]
- A. Routine cleaning
  - B. Contract cleaning
  - C. Advanced cleaning
  - D. Specialized cleaning
- \_\_\_\_\_ 28. What should be done if an article of protective clothing is damaged beyond repair? (201) [4.1.2]
- A. It should be removed from service and destroyed.
  - B. It should be returned to the manufacturer for repairs.
  - C. It may be worn until a replacement can be purchased.
  - D. It may be traded in for a newer model of the same item.
- \_\_\_\_\_ 29. What is an effective way to protect yourself from the health hazards caused by inhaling smoke and other products of combustion? (201) [4.3.1]
- A. Exercise daily
  - B. Eat a healthy diet
  - C. Wear respiratory protection
  - D. Schedule annual physical exams



- \_\_\_\_\_ 30. What is the primary type of respiratory protection used in the fire service? (202) [4.3.1]
- A. Air-purifying respirator (APR)
  - B. Atmosphere-supplying respirator (ASR)
  - C. Closed-circuit breathing apparatus (CCBA)
  - D. High-efficiency particulate air filter (HEPA)
- \_\_\_\_\_ 31. Which situation would likely have an oxygen-deficient atmosphere in which respiratory protection would be necessary? (202) [4.3.1]
- A. Rescue in a sewer
  - B. Swift water rescue
  - C. Vehicle extrication
  - D. High-angle rope rescue
- \_\_\_\_\_ 32. SCBA can help protect from \_\_\_\_\_, which can be caused by inhaling heated gases. (203) [4.3.1]
- A. fatigue
  - B. asphyxiation
  - C. contact burns
  - D. low blood sugar
- \_\_\_\_\_ 33. Firefighters should wear SCBA in hazardous atmospheres, because exposure to particulate contaminants such as \_\_\_\_\_ can cause lung cancer or cardiovascular disease. (203) [4.3.1]
- A. carbon dioxide
  - B. oil or fuel residue
  - C. ammonium chloride
  - D. vehicle exhaust emissions
- \_\_\_\_\_ 34. Hazardous materials incidents can involve potentially dangerous nonfire gases and vapors, so firefighters must: (206) [4.3.1]
- A. wear SCBA until air monitoring demonstrates that the atmosphere is safe.
  - B. leave the scene until air monitoring demonstrates that the atmosphere is safe.
  - C. take more frequent rehabilitation breaks if not wearing SCBA.
  - D. spend at least 80 percent of their time at the incident outside of the hot zone.

- \_\_\_\_\_ 35. Airborne pathogens may cause illness through inhalation or: (206) [4.3.1]
- A. ingestion.
  - B. absorption.
  - C. adsorption.
  - D. direct contact.
- \_\_\_\_\_ 36. Which piece of respiratory equipment provides insufficient protection against airborne pathogens? (206) [4.3.1]
- A. PAPR
  - B. SCBA
  - C. Surgical masks
  - D. HEPA filter masks
- \_\_\_\_\_ 37. Open-circuit SCBA models: (207) [4.3.1]
- A. provide pure oxygen to the wearer.
  - B. provide compressed air to the wearer.
  - C. are most commonly used in shipboard operations.
  - D. are most commonly used by industrial fire brigades.
- \_\_\_\_\_ 38. The SCBA backplate and harness assembly: (208) [4.3.1]
- A. contain the speaking diaphragm.
  - B. contain the heads up display unit.
  - C. is only found on certain SCBA models.
  - D. is used to hold the breathing air cylinder.
- \_\_\_\_\_ 39. Which SCBA component includes a control valve and a high-pressure hose attached to one end? (208) [4.3.1]
- A. Harness
  - B. Regulator
  - C. Facepiece
  - D. Air cylinder
- \_\_\_\_\_ 40. On an SCBA air cylinder, the pressure gauge is used to: (208) [4.3.1]
- A. control the flow of air to the regulator.
  - B. set the working pressure for the cylinder.
  - C. reset the heads up display when necessary.
  - D. display the amount of air left in the cylinder.



- \_\_\_\_\_ 41. Which SCBA component controls air flow from the cylinder when the regulator fails? (209) [4.3.1]
- A. Diaphragm
  - B. Bypass valve
  - C. Mainline valve
  - D. Pressure gauge
- \_\_\_\_\_ 42. If the pressure reading on the remote pressure gauge does not match the reading on the regulator gauge, which reading should be assumed correct? (212) [4.3.1]
- A. The lowest number reading
  - B. The highest number reading
  - C. Neither of the pressure readings
  - D. An average of the pressure readings
- \_\_\_\_\_ 43. The end-of-service-time indicator (EOSTI): (213) [4.3.1]
- A. is a gauge on the facepiece that shows the wearer how much breathing air is left in the SCBA cylinder.
  - B. uses an audible alarm and flashing light or vibration to warn the wearer that the air supply is almost depleted.
  - C. is a series of lights in the SCBA facepiece that indicate when it is safe to work in the atmosphere without SCBA.
  - D. is used to assess dangerous conditions in the emergency scene environment and determine the need for SCBA.
- \_\_\_\_\_ 44. Which SCBA component allows the air cylinder to be transfilled from another cylinder in the event of an emergency? (213) [4.3.1]
- A. Heads up display (HUD)
  - B. End-of-service-time indicator (EOSTI)
  - C. Emergency Escape Breathing Support System (EEBSS)
  - D. Rapid intervention crew universal air coupling (RIC UAC)
- \_\_\_\_\_ 45. What is the function of the heads up display (HUD) on the SCBA facepiece assembly? (214) [4.3.1]
- A. Shows the location of other team members nearby
  - B. Allows the wearer to communicate with team members
  - C. Displays lights that indicate the amount of air left in the SCBA cylinder
  - D. Helps create an airtight seal between the wearer's face and the SCBA facepiece

- \_\_\_\_\_ 46. Factors that firefighters have the most control over that affect the success of SCBA use include physical condition, agility, and: (215) [4.3.1]
- A. cylinder size.
  - B. lung capacity.
  - C. tasks assigned.
  - D. experience in similar situations.
- \_\_\_\_\_ 47. How can a firefighter overcome psychological limitations such as fear and claustrophobia while wearing SCBA? (215) [4.3.1]
- A. Proper fit testing
  - B. Exercise and a proper diet
  - C. Regular medical evaluations
  - D. Repeated training with the SCBA
- \_\_\_\_\_ 48. Which SCBA equipment limitation would MOST directly impact a firefighter's ability to navigate on scene? (215) [4.3.1]
- A. Limited visibility
  - B. Decreased mobility
  - C. Low air cylinder pressure
  - D. Poor equipment condition
- \_\_\_\_\_ 49. How can a firefighter help ensure that they will not be affected by limitations caused by equipment that is in poor condition? (215) [4.3.1]
- A. Proper facepiece fit testing
  - B. Repeated training with the SCBA unit
  - C. Frequent inspections and maintenance
  - D. Physical fitness and endurance training
- \_\_\_\_\_ 50. Immediately prior to donning SCBA, firefighters should: (216) [4.3.1]
- A. record inspections in the SCBA log.
  - B. perform a hydrostatic test on the cylinder.
  - C. check to make sure that the bypass valve is disabled.
  - D. check the cylinder gauge to make sure the cylinder is full.

- \_\_\_\_\_ 51. When donning an unmounted SCBA, the SCBA unit should be: (217) [4.3.1]
- A. stored in an outside compartment of the apparatus.
  - B. placed on the ground with all of the straps extended.
  - C. stored in a specialized compartment inside the apparatus.
  - D. placed behind the firefighter with all of the straps tightened.
- \_\_\_\_\_ 52. Seat-mounted SCBA: (217) [4.3.1]
- A. ensures that SCBA are donned properly every time.
  - B. makes it more difficult for firefighters to check equipment.
  - C. allow firefighters to don the SCBA while still inside the apparatus.
  - D. require that firefighters be breathing cylinder air while en route to the incident.
- \_\_\_\_\_ 53. Side-or rear-mounted SCBA: (218) [4.3.1]
- A. are mounted on the exterior of the apparatus.
  - B. must be stored inside of a sealed storage box.
  - C. can be mounted on the inside of the apparatus cab.
  - D. are more dangerous to don than seat-mounted SCBA.
- \_\_\_\_\_ 54. What is a general guideline for donning an SCBA facepiece? (219) [4.3.1]
- A. Center the harness at the rear of the head.
  - B. Connect the regulator to the facepiece prior to donning.
  - C. Leave a gap between the facepiece and skin to allow fresh air to circulate.
  - D. Ensure that the protective hood is worn underneath the facepiece straps.
- \_\_\_\_\_ 55. What should be done after doffing SCBA? (220) [4.3.1]
- A. Close the cylinder valve.
  - B. Turn on the PASS device.
  - C. Tighten all the facepiece straps.
  - D. Connect the regulator to the facepiece.
- \_\_\_\_\_ 56. A daily/weekly inspection of SCBA should include: (220) [4.5.1]
- A. fit testing.
  - B. a hydrostatic test.
  - C. a check of the regulator and facepiece.
  - D. specialized cleaning by the manufacturer.



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- \_\_\_\_\_ 57. After each use, the SCBA facepiece should be: (221) [4.5.1]
- A. cleaned, dried, and placed out of service.
  - B. washed with warm water and a mild disinfectant.
  - C. sanitized using a machine built specifically for facepieces.
  - D. sent to the manufacturer for a commercial-grade cleaning.
- \_\_\_\_\_ 58. Annual SCBA inspections and maintenance should be performed by: (222) [4.5.1]
- A. a company officer.
  - B. all available firefighters.
  - C. specially trained, factory-qualified technicians.
  - D. the highest-ranking fire department personnel.
- \_\_\_\_\_ 59. Which type of breathing air source would be found inside a high-rise building? (222) [4.5.1]
- A. Stationary fill system
  - B. Auto-cascade fill system
  - C. High-rise specific cascade system
  - D. Firefighter Breathing Air Replenishment System
- \_\_\_\_\_ 60. What is a general safety precaution to take when refilling an SCBA cylinder? (222) [4.3.1, 4.5.1]
- A. Wear full structural fire fighting PPE.
  - B. Fill the cylinder as quickly as possible.
  - C. Perform a hydrostatic test on the cylinder.
  - D. Check the hydrostatic test date of the cylinder.
- \_\_\_\_\_ 61. Which situation would likely be granted an exception to the rule that prohibits filling an unshielded air cylinder while a firefighter is wearing the SCBA? (222) [4.3.1, 4.5.1]
- A. The SCBA was manufactured within the past five to ten years.
  - B. A rapid intervention crew (RIC) is rescuing a trapped or incapacitated firefighter.
  - C. The firefighter filling the empty cylinder is wearing full structural personal protective equipment.
  - D. A firefighter with a higher rank than the firefighter wearing the SCBA cylinder is available to perform the refill.

- \_\_\_\_\_ 62. Which statement describes the function of an auto-cascade system? (224) [4.3.1, 4.5.1]
- A. Fill station designed to refill air cylinders during emergency events
  - B. Completely automated fill station that fills air cylinders to a programmable pressure
  - C. Equipment that supplies an endless source of breathing air within the upper floors of a structure
  - D. Equipment specifically designed to fill supplied air respirators (SAR) or a firefighter breathing air replenishment system (FBARS)
- \_\_\_\_\_ 63. What are mobile fill stations designed to do? (224) [4.3.1, 4.5.1]
- A. Refill air cylinders during emergency incidents
  - B. Remove the need for SCBA by filtering ambient air
  - C. Fill air cylinders during incidents at high-rise buildings
  - D. Pre-fill a large number of SCBA at once in preparation for an incident
- \_\_\_\_\_ 64. How do firefighter breathing air replenishment systems make fire fighting operations in high-rise buildings more efficient? (224) [4.5.1]
- A. Eliminate the need to use SCBA within the building
  - B. Require less time to refill air cylinders than other systems
  - C. Enable firefighters to work for a longer duration while on SCBA
  - D. Provide an endless supply of breathing air to any floor within the structure
- \_\_\_\_\_ 65. Which statement about replacing SCBA cylinders is MOST accurate? (225) [4.5.1]
- A. Replacing SCBA cylinders can be accomplished by either one or two people.
  - B. After replacement, empty SCBA cylinders should be thrown away or recycled.
  - C. After replacement, empty SCBA cylinders should be stored with the full cylinders.
  - D. SCBA cylinders may only be replaced if two firefighters are available for the task.

- \_\_\_\_\_ 66. If storing SCBA in seat mounts, be sure to: (225) [4.5.1]
- A. tighten the SCBA harness straps so that they are ready for donning.
  - B. bring a back up SCBA in case the first does not function properly.
  - C. arrange the SCBA so it can be donned without removing your seat belt.
  - D. open the cylinder and bypass valves before placing the SCBA in the mount.
- \_\_\_\_\_ 67. Which guidelines should be followed when using SCBA? (226) [4.3.1]
- A. Turn your SCBA off just before exiting the hazardous area.
  - B. Thermal imagers (TI) should not be used while wearing SCBA.
  - C. Only enter an IDLH atmosphere in teams of three or more firefighters.
  - D. Only enter an IDLH atmosphere if you have been certified to wear SCBA and properly fit tested.
- \_\_\_\_\_ 68. In order to stay as safe as possible while wearing SCBA, it is important to: (226) [4.3.1]
- A. refill the SCBA cylinder once it is below 30% capacity.
  - B. refill the SCBA cylinder once it is below 50% capacity.
  - C. leave a space between the SCBA facepiece and your skin.
  - D. keep SCBA on and activated until you leave the IDLH area.
- \_\_\_\_\_ 69. Situations or events that signal the need for exit are called: (227) [4.3.1]
- A. exit indicators.
  - B. withdrawal guidelines.
  - C. situational exit guidelines.
  - D. ingress/egress procedures.
- \_\_\_\_\_ 70. Which situation would be classified as an emergency exit indicator that would signal the need to leave the hazardous or contaminated area immediately? (227) [4.3.1]
- A. SCBA failure
  - B. Stabilized situation
  - C. Completed assignment
  - D. Need to replace an air cylinder



- \_\_\_\_\_ 71. What should you do if you experience symptoms of oxygen deficiency such as light-headedness or loss of coordination? (228) [4.3.1]
- A. Wait in place until a rescue team can assist you
  - B. Continue working until your low air alarm goes off
  - C. Check to make sure your SCBA isn't malfunctioning
  - D. Report symptoms and immediately evacuate the area
- \_\_\_\_\_ 72. In a situation such as a confined space rescue where a team member must work alone, the second team member should: (228) [4.3.1]
- A. remain outside the area and monitor the search line.
  - B. wait at the Incident Command Post until they are needed.
  - C. rotate time spent in the confined space with the other team member.
  - D. help another team, but remain in radio contact with their own team member.
- \_\_\_\_\_ 73. How do controlled breathing techniques benefit firefighters? (228) [4.3.1]
- A. Allows firefighters to increase breathing rate if injury or panic occurs
  - B. Provides a buffer so that evacuation is not necessary immediately after the low air alarm sounds
  - C. Slows breathing and extends the time it takes to deplete air in the SCBA cylinder
  - D. Reduces incident time and cost because SCBA cylinders do not need to be refilled
- \_\_\_\_\_ 74. When exiting an IDLH environment, it is important to: (228) [4.3.1]
- A. use the same path that you used to enter.
  - B. turn off SCBA just prior to exiting the environment.
  - C. use a different path than the one you used to enter.
  - D. turn on the bypass valve just prior to exiting the environment.