



Chapter 6

Firefighter Personal Protective Equipment

Multiple Choice

Write the letter of the best answer on the blank provided.

- 1. Personal protective equipment (PPE) is designed to protect from hazards and: (259-261)
 - A. completely prevent injury.
 - B. minimize risk of injury or fatality.
 - C. enable less physically fit firefighters to perform tasks.
 - D. enable firefighters to use the same PPE for differing emergencies.
- 2. Personal protective equipment (PPE) components must be compatible because each type of PPE: (262)
 - A. only fits with specific other components.
 - B. must match in order to protect the wearer.
 - C. is only intended to protect from specific hazards.
 - D. works the same way, no matter what the environment.
 - 3. Which of the following BEST describes the impact of altering personal protective equipment (PPE)? (262)
 - A. May cause confusion at an incident scene
 - B. May cause misidentification with Incident Command
 - C. May void manufacturer's warranty and endanger lives
 - D. May significantly increase heart rate and skin temperature
- 4. What part of structural fire fighting personal protective equipment (PPE) protects the head from impact injuries caused by objects or falls? (264)
 - A. Boots
 - B. Helmet
 - C. Protective coat
 - D. Eye protection devices
- 5. What part of structural fire fighting personal protective equipment (PPE) must meet ANSI Standard Z87.1? (265)
 - A. Boots
 - B. Helmet
 - C. Protective coat
 - D. Prescription safety glasses

- 6. What part of structural fire fighting personal protective equipment (PPE) provides limited protection from direct flame contact, hot water, and other environmental hazards? (266)
 - A. Boots
 - B. Helmet
 - C. Protective coat
 - D. Eye protection devices
- 7. Which of the following design features is required for structural fire fighting protective coats by NFPA® 1971? (267)
 - A. Cargo pockets
 - B. Closure system
 - C. SCBA facepiece pockets
 - D. Reinforcement in high compression areas
 - 8. Which of the following structural fire fighting personal protective equipment (PPE) components prevents crushing wounds to toes and insteps? (267)
 - A. Protective coats
 - B. Protective hoods
 - C. Protective trousers
 - D. Protective footwear
- 9. What part of structural fire fighting personal protective equipment (PPE) assists in attempting to locate trapped, unconscious, or incapacitated firefighters? (270)
 - A. PASS device
 - B. Drag rescue device
 - C. Eye protection devices
 - D. Hearing protection devices
 - 10. What part of wildland personal protective clothing must close securely around boot tops? (272)
 - A. Jackets
 - B. Trousers
 - C. Jumpsuits
 - D. Long-sleeve shirts
- 11. What part of wildland personal protective clothing protects the firefighter from convected and radiant heat? (272)
 - A. Fire shelter
 - B. Chain saw protection
 - C. Respiratory protection
 - D. Load-carrying equipment
 - 12. Which of the following describes the BEST protection for firefighters during roadway operations? (273)
 - A. Be visible to motorists by wearing proximity PPE with reflective vest
 - B. Be visible to motorists by wearing station uniform with reflective vest
 - C. Be visible to motorists and work behind barrier formed by apparatus
 - D. Be visible to motorists and work in front of barrier formed by apparatus

- _____ 13. What part of emergency medical protective clothing is designed to provide impact, penetration, and electrical insulation protection? (274)
 - A. Footwear
 - B. Facemask
 - C. Medical helmet
 - D. Eye/face protection device
- 14. What type of special protective clothing must meet the requirements of NFPA® 1994? (276)
 - A. CBRN
 - B. Ice rescue
 - C. Technical rescue
 - D. Proximity fire fighting
 - _ 15. Which of the following BEST describes the function of station/work uniforms? (276)
 - A. Reflect high levels of radiant heat
 - B. Provide buoyancy and thermal protection
 - C. Identify wearer as member of organization
 - D. Protect against physical, thermal, and liquid hazards
- 16. Station/work uniform shoes/boots are only worn in the station if: (276)
 - A. they have not been used in emergency operations.
 - B. they have not been tested during live fire training.
 - C. they are easy to remove and replace with other boots.
 - D. they are easy to maneuver in once at an emergency operation.
- 17. Which of the following BEST describes why personal protective equipment (PPE) must be properly maintained? (277)
 - A. It allows firefighters to have pride in their unit.
 - B. It gives firefighters something to do at the beginning of shift.
 - C. Some parts of PPE must be dried periodically to remain effective.
 - D. Some contaminants reduce the effectiveness of retroreflective trim.
 - 18. Which of the following BEST describes damage to look for during routine inspection of personal protective clothing? (278)
 - A. Confirm SCBA facepiece fits in provided pocket
 - B. Ensure prescription safety glass lenses meet ANSI Z87.1
 - C. Look for thermal damage, including charring and melting
 - D. Check that coat and trouser overlap is a minimum of 2 inches (50 mm)
 - _____ 19. What type of NFPA® defined cleaning is required when bodily fluids not removed by other methods of cleaning are present? (279)
 - A. Routine cleaning
 - B. Contract cleaning
 - C. Advanced cleaning
 - D. Specialized cleaning

20. Which of the following BEST describes a specific safety concern when using personal protective equipment (PPE)? (280)

- A. It can delay awareness of temperature increases.
- B. It covers all portions of the skin when reaching and moving.
- C. It can protect against approximately 85 percent of eye hazards.
- D. It prevents heated or scalding water from reaching ears and neck.

21. Which of the following BEST describes the result of prolonged exposure to hot environments while in personal protective equipment (PPE)? (280)

- A. The moisture caused by sweat in protective clothing can create chafing.
- B. The moisture caused by sweat in protective clothing can cause heat stress or burns.
- C. The moisture caused by sweat in protective clothing can restrict movement.
- D. The moisture caused by sweat in protective clothing can cause shrinkage when clothing dries.

22. Which of the following is the MOST effective way to protect a firefighter's health when respiratory hazards are present? (281)

- A. Wear appropriate protection
- B. Ensure the hazard is removed
- C. Leave the scene until the hazard is gone
- D. Create a safe zone away from the hazard
- 23. Which of the following respiratory hazards develops from vehicle exhaust emissions, chemical reactions, and combustion? (283)
 - A. Gases and vapors
 - B. Oxygen deficiency
 - C. Elevated temperatures
 - D. Particulate contaminants

24. Which of the following respiratory hazards is produced by incomplete combustion of nitrogen and carbon containing substances? (285)

- A. Phosgene
- B. Sulfur dioxide
- C. Hydrogen cyanide
- D. Carbon monoxide
- 25. The HEPA filter designations N95, N99, and N100 indicate: (287)
 - A. the percentage of APRs the masks will fit.
 - B. the percentage of nitrogen the masks remove.
 - C. the percentage of particles that the masks remove.
 - D. the percentage of non breathable toxins the masks remove.
- ____ 26. Once an SCBA regulator assembly is set in normal position the valves should: (291)
 - A. not be changed at all.
 - B. changed as frequently as needed.
 - C. changed only when Incident Command orders.
 - D. not be changed unless emergency bypass is needed.

- _ 27. What kind of testing is required to ensure a perfect SCBA facepiece seal? (292)
 - A. Fit-testing
 - B. Certification testing
 - C. End-of-service testing
 - D. Physical fitness testing
- 28. SCBA cylinder pressure readings are most accurate: (293)
 - A. when being actively used.
 - B. when not being actively used.
 - C. at or near the lower range of the gauge.
 - D. at or near the upper range of the gauge.
- _____ 29. What part of SCBA equipment allows cylinders to be transfilled from another cylinder? (293)
 - A. Facepiece assembly
 - B. Remote pressure gauge
 - C. End-of-service indicators
 - D. RIC universal air coupling
 - _____ 30. The *Code of Federal Regulations* defines the N of particulate filters as: (294)
 - A. resistant to oil.
 - B. not resistant to oil.
 - C. resistant to nitrogen based gases.
 - D. not resistant to nitrogen based gases.
 - 31. What wearer limitation of respiratory equipment can cause problems such as heart attack or stroke during strenuous activity? (295)
 - A. Lack of agility
 - B. Lack of physical condition
 - C. Inadequate pulmonary capacity
 - D. Weakened cardiovascular ability
- 32. What equipment limitation of respiratory equipment can hinder voice communication? (296)
 - A. Limited visibility
 - B. Decreased endurance
 - C. Poor condition of apparatus
 - D. Decreased ability to communicate
 - _____ 33. Respiratory protective equipment should be stored so it can be: (296)
 - A. easily cleaned.
 - B. easily transported.
 - C. quickly and easily donned.
 - D. quickly and easily modified.

- A. 1500
- B. 1852
- C. 1975
- D. 1994
- _ 35. Which of the following BEST describes the impact of a SCBA's extra weight when exiting an apparatus with it on? (300)
 - A. It can be damaged more easily.
 - B. It can make slips and falls more likely.
 - C. It may be exposed to physical hazards.
 - D. It may shift more easily and decrease wearer protection.

36. Which piece of protective breathing apparatus has a regulator and hose connection points that need to be inspected weekly for cleanliness and damage? (303)

- A. Hoses
- B. Facepiece
- C. PASS device
- D. Backplate and harness assembly
- _____ 37. Which piece of protective breathing apparatus has all buckles, fasteners, and adjustments inspected weekly to ensure proper operation? (303)
 - A. Hoses
 - B. Facepiece
 - C. PASS device
 - D. Backplate and harness assembly

_____ 38. Which piece of protective breathing apparatus is checked for abrasions, bubbling, cuts, and cracks, as well as heat and chemical-induced damage? (304)

- A. Hoses
- B. Facepiece
- C. PASS device
- D. Backplate and harness assembly
- 39. Which piece of protective breathing apparatus must have pressure readings within manufacturer's recommended limits? (305)
 - A. Hoses
 - B. Facepiece
 - C. Pressure indicator gauge
 - D. Backplate and harness assembly
- 40. Dirt and debris can prevent what piece of protective breathing apparatus from fitting securely to a facepiece? (305)
 - A. Hoses
 - B. Regulator
 - C. Pressure indicator gauge
 - D. Backplate and harness assembly

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- 41. Cleaning individual facepieces after each use prevents: (306)
 - A. scratching of the lenses.
 - B. straps from wearing out quickly.
 - C. fogging from occurring during use.
 - D. hydrocarbons from contaminating skin.
 - 42. Which of the following BEST describes who must perform annual inspection and maintenance for protective breathing apparatus? (306)
 - A. SCBA manufacturers only
 - B. Local technicians with SCBA experience
 - C. Specially trained, factory qualified technicians
 - D. Special experts with training in routine cleaning
 - 43. What type of SCBA cylinder has an indefinite service life until it fails hydrostatic testing? (307)
 - A. Steel and aluminum
 - B. Fully wrapped KevlarTM
 - C. Fully wrapped fiberglass
 - D. Hoop-wrapped aluminum
- 44. Which of the following BEST describes how breathing quality air is tested for stationary fill stations? (308)
 - A. It must be tested by local units.
 - B. It must be tested during high-use times.
 - C. It must be tested by third-party testing facility.
 - D. It must be tested immediately after high-use times.
- 45. What part of the FBARs system contains the connection fittings, control valves, and gauges? (310)
 - A. Remote air fill panels
 - B. Emergency air storage
 - C. Low air pressure alarms
 - D. Fire department air connection panel
- 46. What part of the FBARs system contains a certified rupture-proof containment fill station, connection and control valves and gauges? (311)
 - A. Remote air fill panels
 - B. Emergency air storage
 - C. Low air pressure alarms
 - D. Fire department air connection panel
- 47. Which of the following BEST describes how to keep full, empty, and damaged SCBA cylinders apart? (311)
 - A. All three should be kept in one central location.
 - B. Full and empty should be kept in the same place.
 - C. Each type should be kept separate and clearly marked.
 - D. Damaged and empty should be kept in the same place.

48. Which of the following BEST describes the steps to take before removing SCBA in an IDLH atmosphere? (313)

- A. Monitor atmosphere, remove SCBA if it causes fatigue
- B. Never remove SCBA, IDLH atmosphere is too dangerous
- C. Visually inspect atmosphere, remove SCBA if it appears to be safe
- D. Test atmosphere with properly calibrated instruments, remove SCBA if found to be safe

_ 49. Which of the following BEST describes when emergency exit procedures are used? (313)

- A. In life threatening situations
- B. When the situation is stabilized
- C. If it is necessary to replace air cylinder
- D. During a change in operational strategy
- _ 50. Exit indicators are BEST described as: (313)
 - A. situations or events that signal need for exit.
 - B. procedures used in life threatening situations.
 - C. safety precautions taken during emergency operations.
 - D. situations or events based on the principles of the buddy system.
 - 51. Nonemergency exit techniques are based on: (314)
 - A. local SOPs.
 - B. the Incident Command System.
 - C. OSHA requirements and NFPA® 1500.
 - D. the Incident Command System and NFPA® 1500.