

FDNY – C14 Certificate of Fitness Quiz

Name: _____

Date: _____

1. Who issues a New York City laboratory permit? _____
 - a) Department of Environmental Protection (DEP)
 - b) Department of Environmental Conservation (DEC)
 - c) Occupational Safety and Health Administration (OSHA)
 - d) Fire Department of New York (FDNY) Fire Commissioner

2. When is a C-14 required? _____
 - a) When flammable gas storage exceeds 75 SCF
 - b) When laboratory operations require a FDNY permit
 - c) When more than 1 gallon of flammable or combustible liquids are stored
 - d) When using a fume hood
 - e) All of the above

3. Who is responsible for making sure all fire safety regulations and procedures are obeyed in the laboratory? _____
 - a) The Principal Investigator
 - b) The C-14 certificate of fitness holder
 - c) The department head
 - d) The fire safety officer

4. When does a combustible liquid have a flash point? _____
 - a) at or above 100° F
 - b) below 100° F
 - c) none of the above

5. A flammable liquid is any liquid with a flash point below 100° F: True False

6. A vapor is considered flammable when the concentration of flammable constituents in the air exceeds what percent of their lower flammable limit (LFL)? _____
 - a) 15%
 - b) 20%
 - c) 25%
 - d) 30%

7. The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion is called the flash point. True False

8. A material that is so chemically unstable that it may ignite spontaneously at a temperature at or below 130°F is called: _____
 - a) Explosive
 - b) Pyrophoric
 - c) Flammable
 - d) Combustible

9. A "type II" laboratory includes all of the following features EXCEPT? _____
 - a) 25 gallons of flammable material
 - b) sprinklers
 - c) 2-hour fire rated
 - d) 40lbs of oxidizing material

10. Compressed gas containers shall be kept away from: _____
- Sources of ignition
 - Corrosive Chemicals
 - Falling objects
 - All of the above
11. Which of the following has the highest hazard rating? _____
- Class V
 - Class 1
 - Class II
 - Class 4
12. What are the proper color codes for the NFPA Diamond sign? _____
- Blue, red, yellow
 - Green, red, blue
 - Black, orange, yellow
 - Red, yellow, pink
13. Hazard severity on the NFPA diamond goes from 0 to 4 with 4 being the highest hazard.
True False
14. If a C-14 Certificate of Fitness holder notices there is no fire extinguisher in the laboratory, they should immediately notify: _____
- The P.I.
 - The building owner or designated building employee.
 - The fire department
 - The fire extinguisher company
15. Incompatible materials can be isolated by a noncombustible partition not less than how many inches above and to the sides of the material? _____
- 12
 - 14
 - 18
 - 24
16. Where would you look for specific information about the health and physical hazards of a material being used? _____
- SDS sheets
 - The library
 - Laboratory study material
 - The label on the material
17. Flammable gas is permitted to be stored below grade. True False
18. Which sign would you not find on a laboratory door? _____
- Laboratory- potentially hazardous materials
 - No smoking
 - Radioactive
 - Danger
19. Fume hoods are inspected and tested: _____
- Weekly
 - Monthly
 - Semi-annually
 - Annually

20. Fume hoods should have an average face velocity range of 80 to 150 fpm at a sash height of: _____
- 6-10 inches
 - 12-18 inches
 - 18-24 inches
 - Closed
21. Where more than 5 gallons of corrosive liquids or flammable liquids are stored, handled, or used; fixed overhead or flexible hand-held safety showers must be available in the laboratory or outside the laboratory within how many feet? _____
- 25
 - 15
 - 5
 - 10
22. An occupied lab should have how many air changes per hour? _____
- 5
 - 6
 - 7
 - 8
23. In a sprinklered lab storage shall be maintained at least 18" below sprinkler heads.
True False
24. If a material can become hazardous during prolonged storage (Isopropyl ether, picric acid): _____
- It must be dated when opened
 - After 6 months picric acid shall be evaluated for dryness
 - After 6 months isopropyl ether shall be evaluated for peroxides
 - All of the above
25. All chemicals shall be clearly labeled except light sensitive chemicals wrapped in foil.
True False
26. In a chemical laboratory what type of refrigerator can flammable liquids be stored in? _____
- Explosion Proof
 - Flammable liquids storage refrigerator
 - Domestic refrigerator
 - Only A & B
27. The primary purpose of a fire alarm system is to warn building occupants and transmit signal to the fire department. True False
28. What are parts of a fire prevention and protection systems? _____
- Smoke detector
 - Sprinkler system
 - Standpipe system
 - Manual pull station
 - All of the above
29. How many different classes of fire are there? _____
- 3
 - 4
 - 5
 - 6

30. Fire extinguishers should be inspected monthly for: _____
- a) See that it's in place
 - b) See it has not been activated
 - c) See there is no physical damage
 - d) All of the above
31. All of the following are flammable materials, with the exception of: _____
- a) methanol
 - b) nitric acid
 - c) acetone
 - d) ethanol
32. A star stamped on a compressed gas cylinder indicates: _____
- a) It has passed its pressure test
 - b) It should be tested every 5 years
 - c) It should be tested every 10 years.
 - d) It has failed its pressure test
33. Compressed gas cylinders must be secured from tipping over. True False
34. Combustible waste should be kept how many feet from compressed gas cylinders? _____
- a) 3
 - b) 5
 - c) 10
 - d) 15
35. A compressed gas cylinder shall be considered empty when the container pressure is at atmospheric pressure or: _____
- a) 5 psia
 - b) 10 psia
 - c) 15 psia
 - d) 20 psia
36. Which extinguisher should be used to extinguish an electrical fire? _____
- a) Class A
 - b) Class B
 - c) Class C
 - d) Class D

Classify each fire:

37. Class _____ fires: Occur when ordinary combustible materials are ignited. For example wood, cardboard, and most plastics.
38. Class _____ fires: Occur when they involve combustible metals, such as magnesium, titanium, potassium, sodium and lithium.
39. Class _____ fires: Occur when flammable liquids such as gasoline, kerosene, grease and oil are ignited.
40. Class _____ fires: Occur when electrical equipment catches fire.

41. In general, a fire alarm system can be classified as: _____
- a) Automatic
 - b) Manually activated
 - c) Remotely
 - d) Both A & B
42. Containers holding a peroxide-forming compound must be labeled with the words: _____
- a) "Dangerous" and "Peroxide"
 - b) "Hazardous" and "Chemical"
 - c) "Date Received", "Date Opened", and "Expiration Date"
 - d) "Date Used" and "Date Closed"
43. Solid oxidizers are less likely to pose problems than liquids and gases due to their physical characteristics. True False
44. Empty, but not clean, containers should be handled as having the same hazards as non-empty containers. True False
45. In the new fire code, laboratories are classified either Class B or Class D. True False
46. Educational and instructional labs and labs in health care occupancies shall comply with Class B requirements only. True False
47. Flammable/combustible material can be stored near open flames or other ignition sources:
True False
48. Under the new fire code, Class I liquids, or flammable solids can be stored below the ground level.
True False
49. Storage of chemicals shall be maintained a minimum of 18 inches below sprinkler head deflectors in areas protected by a sprinkler system. True False
50. Compressed gases may be transferred from one commercial container or another:
True False

Signature: _____