

## Multiple Choice

*Identify the choice that best completes the statement or answers the question.*

1. The minimum voltage rating of a power limited Fire Alarm cable is \_\_\_\_\_.
  - a. 12 volts
  - b. 24 volts
  - c. 150 volts
  - d. 300 volts
2. A rectifier converts?
  - a. AC to DC
  - b. Voltage to Amperage
  - c. Millivolts to Voltage
  - d. AC to Horsepower
3. Nonpower-limited fire protection signaling circuit cables installed in a duct used for environmental air must be of what type?
  - a. FPLP
  - b. NPLFP
  - c. THHN
  - d. TW
4. Class 2 Division 1 is defined as locations with
  - a. non-flammable liquids
  - b. flammable gases
  - c. combustible dust
  - d. easily ignitable fibers
5. Cables run through bored holes in wood members of building shall be kept at least how far from the nearest edge?
  - a. 1"
  - b. 1 1/2 "
  - c. 1 1/4"
  - d. 2"
6. Notification appliances used outdoors may result in \_\_\_\_\_ unless listed for such use.
  - a. ground faults
  - b. open circuits
  - c. both a and b
  - d. none of the above
7. Audible notification appliances must be mounted \_\_\_\_\_ above the finished floor and not less than \_\_\_\_\_ from the ceiling.
  - a. 80" / 4"
  - b. 90" / 4"
  - c. 80" / 6"
  - d. 90" / 6"
8. A speaker tapped at its highest setting may suffer from distortion.
  - a. True
  - b. False
9. Which article of the *NEC* covers burglary system wiring?
  - a. Article 725
  - b. Article 727
  - c. Article 760
  - d. None of the above
10. Failure to remove conduit burrs usually results in ground faults.
  - a. True
  - b. False
11. *NEC* \_\_\_\_\_ requires electrical penetrations to be firestopped.
  - a. 320.21
  - b. 300.21
  - c. 321.20
  - d. 321.21

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

12. A  $27\text{ k}\Omega$  resistor would have which colors on its first 3 bands?  
a. red, violet, orange      c. orange, yellow, violet  
b. yellow, violet, red      d. red, white, blue

13. Which of the following signals is produced by a fire alarm system?  
a. Trouble      c. Alarm  
b. Supervisory      d. all of the above

14. Opens and grounds on a fire alarm circuit will result in a(n) \_\_\_\_\_ signal.  
a. alarm      c. supervisory  
b. guard's tour      d. trouble

15. Duct smoke detectors are sometimes permitted to cause a(n) \_\_\_\_\_ signal in place of an alarm signal.  
a. guard's tour      c. supervisory  
b. MNS      d. trouble

16. Signaling line circuits monitor for integrity by polling or interrogating field devices.  
a. True      b. False

17. Which circuit class is considered as "fail-safe"?  
a. Class A      c. Class C  
b. Class B      d. Class D

18. Secondary power supplies must supply power to an in-building fire emergency voice/alarm communications fire alarm system for a minimum of \_\_\_\_\_.  
a. 24 hours of standby followed by 15 minutes of alarm      c. 48 hours of standby followed by 15 minutes of alarm  
b. 24 hours of standby followed by 5 minutes of alarm      d. 48 hours of standby followed by 5 minutes of alarm

19. The disconnecting means (branch circuit) for the primary power of a fire alarm system must be \_\_\_\_\_ in color.  
a. black      c. red  
b. orange      d. white

20. Which of the following devices is used to directly detect flames?  
a. Heat detector      c. Smoke detector  
b. Radiant energy-sensing fire detector      d. Supervisory

21. The most appropriate type of detection for a smoldering fire is a(n) \_\_\_\_\_.  
a. ionization-type detector      c. radiant energy-sensing fire detector  
b. photoelectric-type smoke detector      d. rate-of-rise heat detector

22. Which type of smoke detector works best in large open areas?  
a. Ionization-type      c. Spot-type  
b. Projected beam-type      d. All of the above