

**Instructions:**

**Fee \$25**

1. Print these pages.
2. Circle the correct answers and transfer them to the [answer sheet](#).
3. Page down to the last page for the [verification forms](#) and mailing instructions.
4. Use the 2014 & 2011 NEC as your reference materials & search for the grey code change areas.
5. All questions are listed in straight order (not random order) throughout the complete quiz.

**Course: 16999 2014 NEC Changes PART 8**

**This course is valid for these credentials:**

<b>Credential Description</b>	<b>Cred Code</b>	<b>Credit Hours</b>
Registered/Beginner Electrician	BE	3.0
Commercial Electrical Inspector	CEI	3.0
Industrial Journeyman Electrician	IJE	3.0
Journeyman Electrician	JE	3.0
Master Electrician	ME	3.0
Residential Journeyman Electrician	RJE	3.0
Residential Master Electrician	RME	3.0
UDC-Electrical Inspector	UEI	3.0

2014 NEC Changes Part 8

1. 700.12 General Requirements. (Sources of Power for Emergency Systems) Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both shall be available within the time required for the application\_\_\_\_\_.
  - a. but not to exceed 5 seconds
  - b. but not to exceed 10 seconds
  - c. but not to exceed 15 seconds
  - d. but not to exceed 20 seconds
2. 700.12 General Requirements. The provisions for 700.12(F) were \_\_\_\_\_into a list format.
  - a. deleted
  - b. added
  - c. relocated
  - d. reformatted
3. 700.12 General Requirements. (F) Unit Equipment (1) Components of Unit Equipment. Individual unit equipment for emergency illumination shall consist of the following:
  - a. A rechargeable battery
  - b. A battery charging means
  - c. both a & b
  - d. none of the above
4. 700.12 General Requirements. (F) Unit Equipment (1) Components of Unit Equipment. Individual unit equipment for emergency illumination shall consist of the following:
  - a. Provisions for one or more lamps mounted on the equipment, or shall be permitted to have terminals for remote lamps, or both.
  - b. A relaying device arranged to de-energize the lamps manually upon failure of the supply to the unit equipment.
  - c. both a & b
  - d. none of the above
5. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1)through (6) (1) The batteries shall be of suitable rating and capacity to supply and maintain at not less than 87 ½ percent of the nominal battery voltage for the total lamp load associated with the unit for a

period of at least \_\_\_\_\_.

- a. 90 minutes
- b. 1 ½ hours
- c. both a & b
- d. none of the above

6. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) (1) Or the unit equipment shall supply and maintain not less than \_\_\_\_\_ percent of the initial emergency illumination for a period of at least 1 ½ hours.

- a. 60
- b. 90
- c. 120
- d. none of the above

7. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6). (1) Storage batteries, whether of the \_\_\_\_\_ type, shall be designed and constructed to meet the requirements of emergency service.

- a. acid
- b. alkali
- c. both a & b
- d. none of the above

8. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) (2) Unit equipment shall be permanently fixed in place (i.e., not portable) and shall have all wiring to each unit installed in accordance with the requirements of any of the wiring methods in Chapter \_\_\_\_\_.

- a. 2
- b. 3
- c. 7
- d. all of the above

9. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) (2) Flexible cord-and plug connection shall be permitted, provided that the cord does not exceed \_\_\_\_\_ in length.

- a. 900 mm
- b. 3 ft.
- c. both a & b
- d. none of the above

10. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) (3) The branch circuit feeding the unit equipment shall be the same branch circuit as that serving the normal \_\_\_\_\_ in the area.

- a. receptacles
- b. lighting
- c. both a & b
- d. none of the above

11. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) (3) The branch circuit feeding the unit equipment shall be connected \_\_\_\_\_ of any local switches.

- a. behind
- b. ahead
- c. both a & b
- d. none of the above

12. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) Exception. In a separate and uninterrupted area supplied by a minimum of \_\_\_\_\_ normal lighting circuits that are not part of a multiwire branch circuit, a separate branch circuit for unit equipment shall be permitted if it originates from the same panelboard as that of the normal lighting circuits.

- a. 1

- b. 2
- c. 3
- d. 4

13. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) Exception. And the above questions exception shall be provided with a lock-on feature.

- a. true
- b. false

14. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) Exception (4) The branch circuit that feeds unit equipment shall be clearly \_\_\_\_\_ at the distribution panel.

- a. marked
- b. identified
- c. listed
- d. labeled

15. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) Exception (5) Emergency luminaires that obtain power from a unit equipment and are not part of the unit equipment shall be wired to the \_\_\_\_\_ as required by 700.10 and by one of the wiring methods of Chapter 3.

- a. lighting circuit
- b. receptacle circuit
- c. unit equipment
- d. all of the above

16. 700.12 General Requirements. (2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6) Exception (6) Remote heads providing lighting for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately \_\_\_\_\_ the exit door.

- a. outside
- b. inside
- c. both a & b
- d. none of the above

17. 700.19 Multiwire Branch Circuits. The branch circuit serving \_\_\_\_\_ shall not be part of a multiwire branch circuit.

- a. emergency lighting
- b. power circuits
- c. both a & b
- d. none of the above

18. New provisions were \_\_\_\_\_ at 700.19 to prohibit multiwire branch circuits from serving emergency lighting and power circuits.

- a. deleted
- b. added
- c. relocated
- d. reformatted

19. 700.24 Directly Controlled Luminaires. Where emergency illumination is provided by one or more directly controlled luminaires that respond to an external control input to bypass normal control upon loss of normal power, such luminaires and external bypass controls shall be individually \_\_\_\_\_ for use in emergency systems.

- a. marked
- b. identified
- c. listed
- d. labeled

20. A new section was \_\_\_\_\_ at 700.24 for "Directly Controlled Luminaires."

- a. deleted
- b. added
- c. relocated

- d. reformatted
- 21. 700.27 Selective Coordination. Emergency system(s) overcurrent devices shall be selectively coordinated with all \_\_\_\_\_-side overcurrent protective devices.
  - a. supply
  - b. line
  - c. upstream
  - d. none of the above
- 22. 700.27 Selective Coordination. Selective coordination \_\_\_\_\_ be selected by a licensed professional engineer or other qualified persons engaged primarily in the design, installation, or maintenance of electrical systems.
  - a. may
  - b. should
  - c. shall
  - d. all of the above
- 23. 700.27 Selective Coordination. The selection \_\_\_\_\_ be documented and made available to those authorized to design, install, inspect, maintain, and operate the system.
  - a. may
  - b. should
  - c. shall
  - d. all of the above
- 24. 700.27 Selective Coordination. Exception: Selective coordination shall not be required between two overcurrent devices located in series if no loads are connected in parallel with the \_\_\_\_\_ device.
  - a. downstream
  - b. upstream
  - c. both a & b
  - d. none of the above
- 25. 700.27 Selective Coordination. A provision was \_\_\_\_\_ to the "Selective Coordination" requirements
  - a. deleted
  - b. added
  - c. relocated
  - d. reformatted
- 26. 702.7 Signs. (C) Power Inlet. Where a power inlet is used for a temporary connection to a portable generator, a warning sign shall be placed near the inlet to indicate the type of derived system that the system is capable of based on the \_\_\_\_\_ of the transfer equipment.
  - a. load
  - b. wiring
  - c. capacity
  - d. none of the above
- 27. 702.7 Signs. (C) Power Inlet. The sign shall display one of the following warnings:
  - a. WARNING: FOR CONNECTION OF A SEPARATELY DERIVED (BONDED NEUTRAL) SYSTEM ONLY
  - b. WARNING: FOR CONNECTION OF A NONSEPARATELY DERIVED (FLOATING NEUTRAL) SYSTEM ONLY
  - c. both a & b
  - d. none of the above
- 28. A new provision was \_\_\_\_\_ at 702.7(C) for "Power Inlet"
  - a. deleted
  - b. added
  - c. relocated
  - d. reformatted
- 29. 702.12 Outdoor Generator Sets. (A) Permanently Installed Generators and Portable Generators Greater Than 15 kW. Where an outdoor housed generator set is equipped with a readily accessible disconnecting means in accordance with 445.18, and the disconnecting means is located within sight of the building or structure supplied, an additional disconnecting means shall not be required where ungrounded conductors \_\_\_\_\_ the building or structure.

- a. serve
  - b. pass through
  - c. both a & b
  - d. none of the above
30. 702.12 Outdoor Generator Sets. (A) Permanently Installed Generators and Portable Generators Greater Than 15 kW. Where the generator supply conductors terminate at a disconnecting means \_\_\_\_\_ a building or structure, the disconnecting means shall meet the requirements of 225.36.
- a. in
  - b. on
  - c. both a & b
  - d. none of the above
31. 702.12 Outdoor Generator Sets. (B) Portable Generators 15 kW or Less. Where a portable generator, rated 15 kW or less, is installed using a \_\_\_\_\_, a disconnecting means shall not be required where ungrounded conductors serve or pass through a building or structure.
- a. flanged inlet
  - b. other cord- and plug-type connection
  - c. both a & b
  - d. none of the above
32. The requirements for outdoor generator sets covered at 702.12 were \_\_\_\_\_ into two new subsections.
- a. divided
  - b. deleted
  - c. added
  - d. relocated
33. Section 705.12(D) was rearranged and \_\_\_\_\_ for clarity.
- a. reorganized
  - b. deleted
  - c. added
  - d. relocated
34. 705.12 Point of Connection. (Interconnected Electric Power Production Sources) The output of an interconnected electric power source shall be connected as specified in 705.12(A), (B), (C), or(D). (D) Utility-Interactive Inverters. (2) Bus or Conductor Ampere Rating include:
- a. Feeders
  - b. Taps
  - c. Busbars
  - d. all of the above
35. 708.52 Ground-Fault Protection of Equipment. [Critical Operations Power System (COPS)] (D) Selectivity. Ground-fault protection for operation of the service and feeder disconnecting means shall be fully selective such that the feeder device, but not the service device, shall open on ground faults on the \_\_\_\_\_ side of the feeder device.
- a. load
  - b. line
  - c. both a & b
  - d. none of the above
36. 708.52 Ground-Fault Protection of Equipment. [Critical Operations Power System (COPS)] (D) Selectivity. Separation of ground-fault protection time-current characteristics shall conform to manufacturer's recommendations and shall consider all required tolerances and disconnect operating time to achieve \_\_\_\_\_ percent selectivity.
- a. 70
  - b. 80
  - c. 90
  - d. 100
37. 708.52 Ground-Fault Protection of Equipment. [Critical Operations Power System (COPS)] (D) Selectivity. For the 2014 NEC, the "six-cycle minimum separation between the service and feeder ground-fault tripping bands" and the "time spread between these two bands" was \_\_\_\_\_.

- a. relocated
  - b. removed
  - c. added
  - d. none of the above
38. Power-Limited Tray Cable (PLTC). A factory assembly of two or more insulated conductors rated at \_\_\_\_\_ volts, with or without associated bare or insulated equipment grounding conductors, under a nonmetallic jacket.
- a. 200
  - b. 250
  - c. 300
  - d. 600
39. A new definition was \_\_\_\_\_ for power-limited tray cable (PLTC) in Article 725.
- a. reorganized
  - b. deleted
  - c. added
  - d. relocated
40. 725.3 Other Articles. (Class 1, Class 2, and Class 3 Remote Control, Signaling, and Power-Limited Circuits) 725.3 Other Articles. Circuits and equipment shall comply with the articles or sections listed in 725.3(A) through (\_\_\_\_).
- a. J
  - b. k
  - c. L
  - d. M
41. 725.3 Other Articles. \_\_\_\_\_ new condition(s) were added to "Other Articles" applying to Class 1, Class 2, and Class 3 circuits:
- a. 1
  - b. 2
  - c. 3
  - d. 4
42. 725.3 Other Articles. (K) Installation of Conductors with Other Systems. Installations shall comply with \_\_\_\_\_.
- a. 300.6
  - b. 300.7
  - c. 300.8
  - d. 300.9
43. 725.3 Other Articles. (L) Corrosive, Damp, or Wet Locations. Class 2 and Class 3 cables, installed in \_\_\_\_\_ locations, shall comply with the applicable requirements in 110.11, 300.5(B), 300.6, 300.9, & 310.10(G)
- a. corrosive
  - b. damp
  - c. wet
  - d. all of the above
44. 725.154 Applications of Listed Class 2, Class 3, and PLTC Cables. Class 2, Class 3, and PLTC cables shall comply with any of the requirements described in 725.154(A) through \_\_\_\_\_ and as indicated in Table 725.154.
- a. C
  - b. D
  - c. E
  - d. I
45. The application requirements for Class 2, Class 3, and power-limited tray cables (PLTC) were \_\_\_\_ for clarity
- a. revised
  - b. deleted
  - c. added
  - d. relocated
46. 725.154 Applications of Listed Class 2, Class 3, and PLTC Cables. (\_\_\_\_) Class 2, Class 3, PLTC Circuit Integrity (CI) Cable or Electrical Circuit Protective System.

- a. C
- b. D
- c. B
- d. I

47. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. Class 2, Class 3, and Type PLTC cables, nonmetallic communications raceways, and cable routing assemblies installed as wiring methods within buildings shall be \_\_\_\_\_ as being resistant to the spread of fire and other criteria in accordance with 725.179(A) through (I) .

- a. marked
- b. identified
- c. listed
- d. labeled

48. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. Class 2, Class 3, and Type PLTC cables, nonmetallic communications raceways, and cable routing assemblies installed as wiring methods within buildings shall be \_\_\_\_\_ in accordance with 725.179(I).

- a. marked
- b. identified
- c. listed
- d. labeled

49. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. (F) Circuit Integrity (CI) Cable or Electrical Circuit Protective System. Cables that are used for survivability of critical circuits under fire conditions shall \_\_\_\_\_.

- a. meet 725.179(F)(1)
- b. meet 725.179 (F)(2)
- c. be listed
- d. both a & b

50. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. (F) (1) Circuit Integrity (CI). Cables. Circuit Integrity (CI) cables, specified in 725.154(A), (B), (D)(1), and (E), and used for survivability of critical circuits, shall have the additional classification using the suffix "\_\_\_\_\_."

- a. CE
- b. CI
- c. CF
- d. CC

51. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. (F) (1) Circuit Integrity (CI). Circuit integrity (CI) cables shall only be permitted to be installed in a raceway where specifically \_\_\_\_\_ as part of an electrical circuit protective system as covered in 725.179(F)(2).

- a. marked
- b. identified
- c. listed
- d. both a & c

52. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. (F) (2) Electrical Circuit Protective System. Cables specified in 725.154(A),(B), (D)(1), (E), and (F)(1) that are part of an electrical circuit protective system shall be \_\_\_\_\_ with the protective system number and hourly rating printed on the outer jacket of the cable.

- a. marked
- b. identified
- c. listed
- d. both a & c

53. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways. (F) (2) Electrical Circuit Protective System. Cables specified in 725.154(A),(B), (D)(1), (E), and (F)(1) that are part of an electrical circuit protective system shall be installed in accordance with the \_\_\_\_\_ of the protective system.

- a. marking
- b. identification
- c. listing

d. both a & c

54. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways.

Informational Note No. 1: One method of defining circuit integrity (CI) cable or an electrical circuit protective system is by establishing a minimum \_\_\_\_-hour fire-resistive rating when tested in accordance with UL 2196-2012, Standard for Tests of Fire Resistive Cables.

a. ½

b. 1

c. 2

d. none of the above

55. 725.179 Listing and Marking of Class 2, Class 3, Type PLTC Cables, and Signaling Raceways.

Informational Note No. 2: UL guide information for electrical circuit protective systems (FHIT) contains information on proper installation requirements to maintain the \_\_\_\_ rating.

a. smoke

b. fire

c. flame

d. all of the above

56. Article 728 Fire-Resistive Cable Systems. A new article entitled "Fire-Resistive Cable Systems" has been \_\_\_\_\_ to address installations of fire-resistive cables.

a. revised

b. deleted

c. added

d. relocated

57. Article 728 Fire-Resistive Cable Systems. 728.5 Installations include (A) through (\_\_\_\_).

a. E

b. F

c. G

d. H

58. 760.24 Mechanical Execution of Work. (A) General. Fire alarm circuits shall be installed in a neat workmanlike manner. Cables and conductors installed exposed on the surface of \_\_\_\_\_ shall be supported by the building structure in such a manner that the cable will not be damaged by normal building use.

a. ceilings

b. sidewalls

c. both a & b

d. none of the above

59. 760.24 Mechanical Execution of Work. (A) Such cables shall be supported by straps, staples, cable ties, hangers, or similar fillings \_\_\_\_ so as not to damage the cable. The installation shall also comply with 300.4(D).

a. designed

b. installed

c. both a & b

d. none of the above

60. 760.24 Mechanical Execution of Work. (B) Circuit Integrity (CI) Cable. Circuit integrity (CI) cables shall be supported at a distance not exceeding \_\_\_\_\_.

a. 610 mm

b. 24 in.

c. both a & b

d. none of the above

61. 760.24 Mechanical Execution of Work. (B) Circuit Integrity (CI) Cable. Where located within 2.1 m (7 ft.) of the floor, as covered in 760.53(A)(1) and 760.130(B)(1), as applicable, the cable shall be fastened in an approved manner at intervals of not more than \_\_\_\_\_.

a. 450 mm

b. 18 in.

c. both a & b

d. none of the above

62. 760.24 Mechanical Execution of Work. (B) Circuit Integrity (CI) Cable. Cable supports and fasteners shall be \_\_\_\_\_.
- plastic
  - fiberglass
  - steel
  - all of the above
63. 770.110 Raceways and Cable Routing Assemblies for Optical Fiber Cables. (A) Types of Raceways include:
- Raceways Recognized in Chapter 1.
  - Communications
  - both a & b
  - none of the above
64. 770.110 Raceways and Cable Routing Assemblies for Optical Fiber Cables(C) Cable Routing Assemblies include:
- Horizontal Support.
  - Vertical Support.
  - both a & b
  - none of the above
65. 770.154 Applications of Listed Optical Fiber Cables 770.154 Applications of Listed Optical Fiber Cables. \_\_\_\_\_ applications of listed optical fiber cables shall be as indicated in Table 770.154(a).
- Permitted
  - Non-permitted
  - both a & b
  - none of the above
66. 770.154 Applications of Listed Optical Fiber Cables 770.154 Applications of Listed Optical Fiber Cables. The \_\_\_\_\_ applications shall be subject to the installation requirements of 770.110 and 770.113.
- Permitted
  - Non-permitted
  - both a & b
  - none of the above
67. 770.154 Applications of Listed Optical Fiber Cables 770.154 Applications of Listed Optical Fiber Cables. Informational Note 1: Part V of Article 770 covers installation methods within buildings. This table covers the applications of listed \_\_\_\_\_ in buildings.
- optical fiber cables
  - raceways
  - cable routing assemblies
  - all of the above
68. 770.180 Grounding Devices. Where \_\_\_\_\_ is required, devices used to connect a shield, sheath, or non-current-carrying metallic members of a cable to a bonding conductor or grounding electrode conductor shall be listed or be part of listed equipment.
- banding
  - bonding
  - grounding
  - both b & c
69. 800.2 Definitions: Point of Entrance. The point within a building at which the communication \_\_\_\_\_ emerges from an external wall, from a concrete floor slab, or from a rigid metal conduit (Type RMC) or an intermediate metal conduit (Type IMC).
- wire
  - cable
  - conduit
  - both a & b
70. 800.12 Innerduct. Listed plenum communications raceway, listed riser communications raceway, and listed general purpose communications race way selected in accordance with the provisions of Table 800.154(b) shall be permitted to be installed as innerduct in any type of \_\_\_\_\_ raceway permitted in Chapter 3.
- marked

- b. identified
  - c. listed
  - d. both a & c
71. 800.2 Definitions. Innerduct. A nonmetallic \_\_\_\_\_ placed within a larger raceway.
- a. cable
  - b. wire
  - c. raceway
  - d. all of the above
72. 800.179 Communications Wires and Cables. (G) Circuit Integrity (CI) Cable or Electrical Circuit Protective System. Cables that are used for survivability of critical circuits under fire conditions shall be listed and meet either 800.179)(G)(1) or (G)(2) as follows:
- a. Circuit Integrity (CI) Cables.
  - b. Fire-Resistive Cables.
  - c. both a & b
  - d. none of the above
73. 800.2 Definitions: Electrical Circuit Protective System. A system consisting of components and materials intended for installation as protection for specific electrical wiring systems with respect to the disruption of electrical circuit integrity upon \_\_\_\_\_ fire exposure.
- a. exterior
  - b. interior
  - c. both a & b
  - d. none of the above
74. 800.182 Communications Raceways and Cable Routing Assemblies. Communications. Raceways and cable routing assemblies shall be \_\_\_\_\_ in accordance with 800.182(A) through (C).
- a. marked
  - b. identified
  - c. listed
  - d. both a & c
75. 800.182 Communications Raceways and Cable Routing Assemblies. Informational Note: For information on \_\_\_\_\_ requirements for both communications raceways and cable routing assemblies, see ANSI/UL 2024-2011, Signaling, Optical Fiber and Communications Raceways and Cable Routing Assemblies.
- a. marked
  - b. identified
  - c. listed
  - d. both a & c
76. 800.182 Communications Raceways and Cable Routing Assemblies. (A) Plenum Communications Raceways and Plenum Cable Routing Assemblies. Plenum communications raceways and plenum cable routing assemblies listed as having adequate \_\_\_\_\_ characteristics.
- a. fire-resistant
  - b. low smoke-producing
  - c. both a & b
  - d. none of the above
77. 800.182 Communications Raceways and Cable Routing Assemblies. (B) Riser Communications Raceways and Riser Cable Routing Assemblies. Riser communications raceways and riser cable routing assemblies shall be listed as having adequate fire-resistant characteristics capable of preventing the carrying of fire from \_\_\_\_\_.
- a. floor to ceiling
  - b. floor to roof
  - c. floor to floor
  - d. wall to floor
78. 800.182 Communications Raceways and Cable Routing Assemblies. (C) General-Purpose Communications Raceways and General-Purpose Cable Routing Assemblies. General-purpose communications raceways and general purpose cable routing assemblies shall be listed as being \_\_\_\_\_ to the spread of fire.
- a. resistant
  - b. resilient

- c. impervious
- d. none of the above

79. 810.6 Antenna Lead-in Protectors. Where an antenna lead-in surge protector is installed, it shall be listed as being suitable for limiting surges on the cable that connects the antenna to the receiver/transmitter electronics and shall be connected between the conductors and the \_\_\_\_\_.

- a. grounded shield
- b. other ground connection
- c. both a & b
- d. none of the above

80. 810.6 Antenna Lead-in Protectors. The antenna lead-in protector shall be grounded using a \_\_\_\_\_ conductor installed in accordance with 810.21 (F).

- a. bonding
- b. grounding electrode
- c. both a & b
- d. none of the above

81. 820.3 Other Articles Circuits and equipment shall comply with 820.3(A) through (\_\_\_\_)

- a. G
- b. H
- c. I
- d. J

82. 820.3 Other Articles. (B) Wiring in Ducts for Dust, Loose Stock, or Vapor Removal, The requirements of \_\_\_\_\_ shall apply.

- a. 300.22(A)
- b. 300.22(B)
- c. 300.22(C)
- d. 300.22(D)

83. 820.3 Other Articles. (\_\_\_\_)Alternate Wiring Methods. The wiring methods of Article 830 shall be permitted to substitute for the wiring methods of Article 820.

- a. G
- b. H
- c. I
- d. J

84. 820.3 Other Articles. Informational Note: Use of Article \_\_\_\_\_ wiring methods will facilitate the upgrading of Article 820 installations to network-powered broadband applications,

- a. 820
- b. 830
- c. 840
- d. 850

85. 820.47 Underground Coaxial Cables Entering Buildings. Underground coaxial cables \_\_\_\_\_ buildings shall comply with 820.47(A) and (B). (A) Underground Systems with Electric Light, Power, Class 1, or Non-power-Limited Fire Alarm Circuit Conductors.

- a. leaving
- b. entering
- c. under
- d. none of the above

86. 820.47 Underground Coaxial Cables Entering Buildings. Underground coaxial cables in a duct, pedestal, handhole enclosure, or manhole that contains electric light, or power, Class 1, or non-power-limited fire alarm circuit conductors shall be in a section permanently separated from such conductors by means of a suitable \_\_\_\_\_.

- a. obstacle
- b. barricade
- c. barrier
- d. none of the above

87. 830.24 Mechanical Execution of Work. A new last sentence was added to the existing "Mechanical Execution of Work" requirements of 830.24. This new provision calls for nonmetallic cable ties and other nonmetallic cable accessories used to secure and support NPBC cables to be listed as having \_\_\_\_\_properties.
- a. low smoke
  - b. heat release
  - c. both a & b
  - d. none of the above
88. Chapter 9 Tables. Table 1 Percent of Cross Section of Conduit and Tubing for \_\_\_\_\_.
- a. Conductors
  - b. Cables
  - c. both a & b
  - d. none of the above
89. Chapter 9 Tables Notes to Tables. (10) The values for approximate conductor diameter and area shown in Table 5 are based on \_\_\_\_\_case scenario and indicate round concentric-lay-stranded conductors. Solid and round concentric-lay-stranded are grouped together for the purpose of Table 5.
- a. best
  - b. worst
  - c. mediocre
  - d. none of the above
90. Chapter 9 Tables Notes to Tables. (10) Round compact-stranded conductor values are shown in Table 5A. If the actual values of the conductor diameter and area are known, they \_\_\_\_\_ permitted to be used.
- a. may be
  - b should be
  - c. shall be
  - d. none of the above

2014 NEC Changes Part 8-Quiz Answer Sheet

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90 a b c d

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