

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: 2014 NEC Changes PART 4

This course is valid for these credentials:

Credential Description	Cred Code	Credit Hours
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 4

1. 408.55 Wire-Bending Space within an Enclosure Containing a Panelboard. (A) Top and Bottom Wire-Bending Space. The- enclosure for a panelboard shall have the top and bottom wire-bending space sized in accordance with Table 312.6(B) for the largest conductor entering or leaving the enclosure. (B) Side Wire-Bending Space. Side wire-bending space shall be in accordance with Table 312.6(A) for the largest conductor to be terminated in that space. Section (B) Side Wire-Bending Space was _____?
 - a. deleted
 - b. amended
 - c. added
 - d. none of the above
2. 408.55 Wire-Bending Space within an Enclosure Containing a Panelboard. (C) Back Wire-Bending Space. Where a raceway or cable entry is in the wall of the enclosure _____a removable cover, the distance from that wall to the cover shall be permitted to comply with the distance required for one wire per terminal in Table 312.6(A).
 - a. opposite
 - b. opposed to
 - c. same side as
 - d. none of the above
3. 408.55 Wire-Bending Space within an Enclosure Containing a Panelboard. (C) Back Wire-Bending Space. The distance between the center of the rear entry and the nearest termination for the entering conductors shall not be less than the distance given in Table _____.
 - a. 312.6(A)
 - b. 312.6(B)
 - c. 312.6(C)
 - d. 312.6(D)
4. 409.20 Conductor-Minimum Size and Ampacity. (Industrial Control Panels) The size of the industrial control panel supply conductor shall have an ampacity not less than 125 percent of the full-load current rating of all _____plus 125 percent of the full-load current rating of the highest rated motor plus the sum of the full-load current ratings of all other connected motors and apparatus based on their duty cycle that may be in operation at the same time.

- a. resistance heating loads
 - b. heating loads
 - c. both a or b
 - d. none of the above
5. 410.6 Listing Required. All _____ shall be listed.
- a. lampholders
 - b. retrofit kits
 - c. luminaires
 - d. all of the above
6. 410.10 Luminaires in Specific Locations (F) Luminaires Installed in or Under Roof Decking. Luminaires installed in exposed or concealed locations under metal-corrugated sheet roof decking, shall be installed and supported so there is not less than _____ measured from the lowest surface of the roof decking to the top of the luminaire.
- a. 38 mm
 - b. 1 1/2 in.
 - c. both a & b
 - d. none of the above
7. 410.130 General. (Electric-Discharge Lighting Systems of 1000 Volts or Less)(G) Disconnecting Means. (1) General. Exception 4 Exception No. 4: A disconnecting means shall not be required in industrial establishments with restricted public access where conditions of maintenance and supervision ensure that only qualified persons service the installation by written procedures has been _____.
- a. deleted
 - b. amended
 - c. both a & b
 - d. none of the above
8. 410.130 General. (Electric-Discharge Lighting Systems of 1000 Volts or Less)(G) Disconnecting Means. (1) General. Exception 5 has been _____.
- a. deleted
 - b. amended
 - c. relocated to Exception 4
 - d. none of the above
9. 422.5 Ground-Fault Circuit-Interrupter (GFCI) Protection. The device providing GFCI protection required in this article _____ be readily accessible.
- a. should
 - b. may
 - c. shall
 - d. all of the above
10. When a GFCI device is installed in locations such as behind a refrigerator or behind a vending machine, the ability for someone, such as the homeowner or maintenance personnel at a shopping mall, to test the GFCI device is greatly impaired. This location would still be considered "readily accessible".
- a. true
 - b. false
11. 422.11 Overcurrent Protection. (F) Electric Heating Appliances Employing Resistance-Types Heating Elements Rated More Than _____ Amperes shall be protected against overcurrent.
- a. 30
 - b. 48
 - c. 150
 - d. none of the above
12. 422.11 Overcurrent Protection. (F) Electric Heating Appliances Employing Resistance-Types Heating Elements Rated More Than 48 Amperes. (3) Water Heaters and Steam Boilers. Resistance type immersion electric heating elements shall be permitted to be subdivided into circuits not exceeding 120 amperes and protected at not more than _____ amperes.
- a. 30
 - b. 48

- c. 150
- d. none of the above

13. 422.11 Overcurrent Protection. (F) Electric Heating Appliances Employing Resistance-Type Heating Elements Rated More Than 48 Amperes. (3) Water Heaters and Steam Boilers. Resistance type immersion electric heating elements shall be permitted to be subdivided into circuits not exceeding 120 amperes and protected at not more than 150 amperes as follows: Where contained in _____ vessels

- a. ASME rated
- b. stamped
- c. both a & b
- d. none of the above

14. 422.11 Overcurrent Protection. (F) Electric Heating Appliances Employing Resistance-Type Heating Elements Rated More Than 48 Amperes. (3) Water Heaters and Steam Boilers. Resistance type immersion electric heating elements shall be permitted to be subdivided into circuits not exceeding 120 amperes and protected at not more than 150 amperes as follows: Where included in _____ instantaneous water heaters

- a. listed
- d. identified
- c. approved
- d. marked

15. 422.11 Overcurrent Protection. (F) Electric Heating Appliances Employing Resistance-Type Heating Elements Rated More Than 48 Amperes. (3) Water Heaters and Steam Boilers. Resistance type immersion electric heating elements shall be permitted to be subdivided into circuits not exceeding 120 amperes and protected at not more than 150 amperes as follows: Where installed in _____.

- a. low-pressure water heater tanks
- b. open outlet water heater vessels
- c. both a & b
- d. none of the above

16. 422.23 Tire Inflation and Automotive Vacuum Machines. Tire inflation machines for public use shall be protected by a _____ circuit-interrupter.

- a. ground-fault
- b. arc-fault
- c. both a & b
- d. none of the above

17. 422.23 Tire Inflation and Automotive Vacuum Machines. Automotive vacuum machines provided for public use shall be protected by a _____ circuit-interrupter.

- a. ground-fault
- b. arc-fault
- c. both a & b
- d. none of the above

18. 422.49 High-Pressure Spray Washers. Cord and plug-connected high-pressure spray washing machines as specified in (1) or (2) shall be provided with factory-installed ground-fault circuit-interrupter protection for personnel that is an integral part of the attachment _____.

- a. outlet
- b. receptacle
- c. plug
- d. circuit

19. 422.49 High-Pressure Spray Washers. Cord and plug-connected high-pressure spray washing machines as specified in (1) or (2) shall be provided with factory-installed ground-fault circuit-interrupter protection for personnel that is located in the supply cord within _____ of the attachment plug.

- a. 30 mm
- b. 12 in.
- c. both a & b
- d. none of the above

20. 422.49 High-Pressure Spray Washers. Cord and plug-connected high-pressure spray washing machines as specified in (1) or (2) shall be provided with factory-installed ground-fault circuit-interrupter protection for personnel. This includes the following:

- a. All single-phase equipment rated 250 volts or more
- b. All three-phase equipment rated 208Y/120 volts and 60 amperes or less.
- c. both a & b
- d. none of the above

21. 422.51 Vending Machines (A) Cord-and Plug-Connected. Cord-and plug connected vending machines _____ on or after January 1, 2005, shall include a ground fault circuit interrupter.

- a. manufactured
- b. remanufactured
- c. both a & b
- d. none of the above

22. 422.51 Vending Machines (A) Cord-and Plug-Connected. Continuing question 21 above. This ground fault circuit interrupter shall include a ground fault circuit interrupter identified for portable use as an integral part of the attachment plug or be located within 300 mm (12 in.) of the attachment _____.

- a. outlet
- b. receptacle
- c. plug
- d. circuit

23. 422.51 Vending Machines (A) Cord-and Plug-Connected. Older vending machines manufactured or remanufactured prior to _____, shall be connected to a GFCI-protected outlet.

- a. January 1, 2002
- b. January 1, 2005
- c. January 1, 2008
- d. none of the above

24. 422.51 Vending Machines (B) Other Than Cord-and Plug Connected. Vending machines not utilizing a cord-and plug connection shall be connected to a ground fault circuit interrupter protected _____.

- a. outlet
- b. receptacle
- c. plug
- d. circuit

25. 422.51 Vending Machines Informational Note: For further information, see ANSI/UL 541-_____, Standard for Refrigerated Vending Machines, or ANSI/UL 751-2665 2010, Standard for Vending Machines.

- a. 2005
- b. 2010
- c. 2012
- d. 2014

26. 424.19 Disconnecting Means. (Fixed Electric Space-Heating Equipment) Means shall be provided to _____ disconnect the heater, motor controller(s), and supplementary overcurrent protective device(s) of all fixed electric space-heating equipment from all ungrounded conductors.

- a. time delay
- b. independently
- c. simultaneously
- d. none of the above

27. 424.19 Disconnecting Means. (Fixed Electric Space-Heating Equipment) Where heating equipment is supplied by more than one source, feeder, or branch circuit, the disconnecting means shall be _____.

- a. grouped
- b. marked
- c. both a & b
- d. none of the above

28. 424.19 Disconnecting Means. (Fixed Electric Space-Heating Equipment) The disconnecting means specified in 424.19(A) and (B) shall have an ampere rating _____ of the total load of the motors and the heaters and shall be lockable in accordance with 110.25.

- a. not less than 100 percent
 - b. not less than 115 percent
 - c. not less than 125 percent
 - d. not less than 85 percent
29. 424.66 Installations (A) (Duct Heaters) Duct heaters shall be installed in accordance with the manufacturer's instructions in such a manner that operation does not create a hazard to _____.
- a. persons
 - b. property
 - c. qualified personnel
 - d. both a & b
30. 424.66 Installations (A) (Duct Heaters) Furthermore, duct heaters shall be located with respect to building construction and other equipment so as to permit _____ to the heater.
- a. access
 - b. visibility
 - c. readily accessible
 - d. none of the above
31. 424.66 Installations (A) (Duct Heaters) Sufficient clearance shall be maintained to permit _____ and cleaning of controls and other parts requiring such attention.
- a. replacement of controls
 - b. replacement of heating elements
 - c. adjusting
 - d. all of the above
32. 424.66 Installations (A) (Duct Heaters) Working space about electrical enclosures for resistance heating element type duct heaters which are mounted on duct systems and contain equipment that requires examination, adjustment, servicing, or maintenance while energized shall comply with Section _____.
- a. 424.65(13)
 - b. 424.66(13)
 - c. 424.67(13)
 - d. 424.68(13)
33. 424.66 Installations (B) (Duct Heaters) Where the enclosure is located in a space above a ceiling, all of the following shall apply:
- a. The enclosure shall be accessible through a lay in type ceiling or access panel(s).
 - b. The width of the working space shall be the width of the enclosure or a minimum of 762 mm, whichever is greater.
 - c. The width of the working space shall be the width of the enclosure or a minimum of 30 inches, whichever is lesser
 - d. both a & b
34. 424.66 Installations (B) (Duct Heaters) Where the enclosure is located in a space above a ceiling, all of the following shall apply:
- a. All doors or hinged panels shall open to at least 180 degrees.
 - b. The space in front of the enclosure shall comply with Table 110.26(A)(1) depth requirements.
 - c. Vertical ceiling T-bar is permitted in this space.
 - d. all of the above
35. 430.22 Single Motor. (1) 18 AWG Copper. (1) The circuit supplies a motor with a full-load current rating, as determined by 430.6(A) (1), ampacity greater than 3.5 amperes or less than or equal to 5 amperes and if all the following conditions are met:
- a. The circuit is protected in accordance with 430.52.
 - b. The circuit is provided with maximum Class 10 or Class 10A overload protection in accordance with 430.32.
 - c. Overcurrent protection is provided in accordance with 240.4(D)(1)(2).
 - d. all of the above
36. 430.22 Single Motor. (1) 18 AWG Copper. (2.) The circuit supplies a motor with a full-load current rating, as determined by 430.6(A) (1), of 3.5 amperes or less and all the following conditions are met:
- a. The circuit is protected in accordance with 430.52.

- b. The circuit is provided with maximum Class 20 overload protection in accordance with 430.32.
 - c. Overcurrent protection is provided in accordance with 240.4(D)(1)(2).
 - d. all of the above
37. 430.52 Rating or Setting for Individual Motor Circuit (C) Rating or Soiling. (5) Power Electronic Devices. Suitable _____ intended for the protection of electronic devices shall be permitted in lieu of devices listed in Table 430.52 for power electronic devices, associated electromechanical devices (such as bypass contactors and isolation contactors) and conductors in a solid-state motor controller system, provided that the marking for replacement fuses is provided adjacent to the fuses.
- a. circuit breakers
 - b. time delayed fuses
 - c. semiconductor fuses
 - d. semiconductor breakers
38. 430.53 Several Motors or Loads on One Branch Circuit. (D) Single Motor Taps. (2) No conductor to the motor shall have an ampacity less than _____ that of the branch-circuit conductors, with a minimum in accordance with 430.22.
- a. one-quarter
 - b. one-third
 - c. one-half
 - d. none of the above
39. 430.53 Several Motors or Loads on One Branch Circuit. (D) Single Motor Taps. (2) The conductors from the point of the tap to the motor overload device shall be not more than _____ long and being protected from physical damage by being enclosed in an approved raceway or by use of other approved means.
- a. 7.5 m
 - b. 25 ft.
 - c. both a & b
 - d. none of the above
40. 430.233 Guards for Attendants. Where live parts of motors or controllers operating at over ____ volts to ground are guarded against accidental contact only by location as specified in 430.232, and where adjustment or other attendance may be necessary during the operation.
- a. 50
 - b. 75
 - c. 100
 - d. 150
41. 430.233 Guards for Attendants. Where adjustment or other attendance may be necessary during the operation of the apparatus, suitable insulating mats or platforms shall be provided so that the attendant cannot readily touch live parts unless standing on the _____.
- a. mats
 - b. platforms
 - c. both a & b
 - d. none of the above
42. 440.9 Grounding and Bonding. Where air conditioning and refrigeration equipment are installed outdoors with wiring methods consisting of _____, a wire type equipment grounding conductor shall be provided in the outdoor portion of the raceway.
- a. liquidtight flexible metal conduit
 - b. electrical metallic tubing
 - c. both a & b
 - d. none of the above
43. 440.9 Grounding and Bonding. This section was _____.
- a. amended
 - b. replaced
 - c. added
 - d. relocated

44. 440.9 Grounding and Bonding. Where air conditioning and refrigeration equipment are installed outdoors a wire type equipment grounding conductor, as specified in _____, shall be provided in the outdoor portion of the raceway.
- 250.118(1)
 - 250.118(2)
 - 250.118(3)
 - 250.118(4)
45. 445.11 Marking. Each generator shall be provided with a nameplate giving the _____.
- manufacturer's name
 - the rated amperage
 - power factor
 - both a & c
46. 445.11 Marking. Each generator shall be provided with _____.
- the number of phases if of ac
 - the rating in kilowatts or kilovolt-amperes
 - the subtransient and transient impedances
 - both a & b
47. 445.11 Marking. Each generator shall be provided with _____.
- the insulation system class
 - the temperature time rating
 - the rated ambient temperature
 - both a & b
48. 445.11 Marking. Nameplates for all stationary generators and portable generators rated _____ shall also give the power factor, the subtransient and transient impedances, the insulation system class, and the time rating.
- less than 15 kW
 - more than 15 kW
 - > 10 kW
 - none of the above
49. 445.11 Marking. Marking shall be provided by the manufacturer to indicate whether or not the generator neutral is bonded to the _____.
- truck frame
 - generator frame
 - building frame
 - all of the above
50. 445.11 Marking. Where the bonding of a generator is modified in the field, additional _____ shall be required to indicate whether the generator neutral is bonded to the generator frame.
- listing
 - identification
 - approval
 - marking
51. 445.18 Disconnecting Means Required for Generators Informational Note. 445.18 Disconnecting Means Required for Generators. Generators shall be equipped with disconnect(s), lockable in the open position, by means of which the generator and all protective devices and control apparatus are able to be disconnected _____ from the circuits supplied by the generator.
- temporarily
 - individually
 - exclusively
 - entirely
52. Continuing the question above. Except where *both* of the following conditions apply: (1) Portable generators that are direct connected or (2) Where both of the following conditions apply in sections (a) & (b).
- true
 - false
53. 445.18 Disconnecting Means Required for Generators Informational Note. 445.18 Disconnecting Means Required for Generators. Continuing the question above. Except where both-of the following conditions apply:

- a. The driving means for the generator can be readily shut down, rendered incapable of restarting and is lockable in the OFF position in accordance with 110.25.
 - b. The generator is not arranged to operate in parallel with another generator or other source of voltage.
 - c. both a & b
 - d. none of the above
54. 445.20 Ground-Fault Circuit-Interrupter Protection for Receptacles on _____, Portable generators. All 125-volt, single-phase, 15- and 20 ampere receptacle outlets, that are a part of a 15 kW or smaller, portable generator, either shall have ground-fault circuit interrupter protection for personnel integral to the generator or receptacle, or shall not be available for use when the 125/250 volt locking-type receptacle is in use.
- a. 15 kW or Smaller
 - b. more than 15 kW
 - c. > 10 kW
 - d. none of the above
55. 445.20 Ground-Fault Circuit-Interrupter Protection for Receptacles. If the generator does not have a _____ volt locking-type receptacle, this requirement shall not apply.
- a. 115/220
 - b. 125/250
 - c. both a & b
 - d. none of the above
56. 450.10 Grounding (A) Dry-Type Transformer Enclosures. Where separate equipment grounding conductors and supply side bonding jumpers are installed, a terminal bar for _____ conductor connections shall be secured inside the transformer enclosure.
- a. the neutral conductor
 - b. all grounding
 - c. all bonding
 - d. both b & c
57. 450.10 Grounding (A) Dry-Type Transformer Enclosures. The terminal bar shall be bonded to the enclosure in accordance with 250.12 and shall not be installed _____ any vented portion of the enclosure.
- a. on
 - b. over
 - c. under
 - d. both a & b
58. 450.10 Grounding (A) Dry-Type Transformer Enclosures. Exception: Where a dry-type transformer is equipped with wire-type connections (leads), the grounding and bonding connections shall be permitted to be connected together using any of the methods in _____.
- a. 250.8
 - b. 250.8.1
 - c. both a & b
 - d. none of the above
59. 450.10 Grounding (A) Dry-Type Transformer Enclosures. Exception: Where a dry-type transformer is equipped with wire-type connections (leads), the grounding and bonding connections shall be permitted to be connected together and shall be bonded to the enclosure if of _____.
- a. plastic
 - b. wood
 - c. metal
 - d. none of the above
60. 450.10 Grounding (A) Dry-Type Transformer Enclosures. (B) Other Metal Parts. Where grounded, exposed non-current carrying metal parts of transformer installations, including fences, guards, and so forth, shall be grounded and bonded under the conditions and in the manner specified for electrical equipment and other exposed metal parts in Parts _____ of Article 250.
- a. V
 - b. VI
 - c. VII
 - d. all of the above

61. 450.11 Marking (A) General. Each transformer shall be provided with a nameplate giving the following information:

- a. Name of manufacturer
- b. Rated kilovolt-amperes
- c. Frequency
- d. all of the above

62. 50.11 Marking (A) General. Each transformer shall be provided with a nameplate giving the following information:

- a. Primary power factor
- b. Secondary power factor
- c. Impedance of transformers 35 kVA and larger
- d. none of the above

63. 50.11 Marking (A) General. Each transformer shall be provided with a nameplate giving the following information:

- a. Required clearances for transformers with ventilating openings
- b. Amount and kind of insulating liquid where used
- c. For wet-type transformers, temperature rating for the insulation system
- d. both a & b

64. 450.11 Marking. (B) Source Marking. A transformer shall be permitted to be supplied at the marked _____ voltage, provided that the installation is in accordance with the manufacturer's instructions.

- a. primary
- b. secondary
- c. both a & b
- d. none of the above

65. New 480.3 was _____ for "Battery and Cell Terminations."

- a. deleted
- b. added
- c. revised
- d. none of the above

66. New 480.6 was _____ for "DC Disconnect Methods."

- a. deleted
- b. added
- c. revised
- d. none of the above

67. Section 480.9 was _____ from "Working Space" to "Battery Locations."

- a. deleted
- b. added
- c. revised
- d. none of the above

68. 490.48 Substations. Requirements for substations were removed from 225.70 in their entirety and relocated at new _____.

- a. 490.48(A)
- b. 490.48(B)
- c. 490.48(C)
- d. 490.48(D)

69. 490.48 Substations. New provisions for substations were _____ at 490.48(A) and (C).

- a. deleted
- b. added
- c. revised
- d. none of the above

70. 490.48 Substations. (A) Documentation. Documentation of the engineered design by a qualified licensed professional engineer engaged primarily in the design of substations shall be available upon the request of the _____.

- a. authority having jurisdiction

- b. local fire inspector
- c. both a & b
- d. none of the above

71. 490.48 Substations. (A) Documentation. Documentation of the engineered design by a qualified licensed professional engineer engaged primarily in the design of substations shall include consideration of the items in 490.48(A)(1) through (9): (1) General to included:

- a. Types of enclosures
- b. Rooms and spaces
- c. Supporting electric equipment
- d. all of the above

72. 490.48 Substations. (A) Documentation. Documentation of the engineered design by a qualified licensed professional engineer engaged primarily in the design of substations shall include consideration of the items in 490.48(A)(1) through (9): (1) General to include

- a. Securing electric equipment
- b. Exits
- c. Fire-extinguishing equipment
- d. all of the above

73. 490.48 Substations. (B) Warning Signs. (1) General. A permanent, legible warning notice complying with 110.21CB) and reading DANGER – HIGH VOLTAGE - shall be placed in a conspicuous position in the following areas:

- a. At all entrances to electrical equipment vaults and electrical equipment rooms, areas, or enclosures
- b. At points of access to conductors on all high-voltage conduit systems and cable systems
- c. On all cable trays containing high-voltage conductors with the maximum spacing of warning notices not to exceed 5 m (20 ft.)
- d. both a & b

74. 490.48 Substations. (B) Warning Signs. (5) _____. Where switchgear is installed, the following steps shall be taken defines?

- a. metal enclosed
- b. metal clad
- c. switchgear
- d. none of the above

75. 490.48 Substations. (C) _____. A permanent, single-line diagram of the switchgear shall be provided in a readily visible location within the same room or enclosed area with the switchgear, and this diagram shall clearly identify interlocks, isolation means, and all possible sources of voltage to the installation under normal or emergency conditions. The marking on the switchgear shall cross-reference the diagram.

- a. marking
- b. labeling
- c. diagram
- d. all of the above

76. Section 501.40 and the associated exception dealing with multiwire branch circuits in Class I, Division 1 were _____.

- a. deleted
- b. added
- c. revised
- d. none of the above

77. Article 504 Intrinsically Safe Systems. New subsections were _____ such as 504.10(C) for "Enclosures";

- a. deleted
- b. added
- c. revised
- d. none of the above

78. Article 504 Intrinsically Safe Systems. New subsections were _____ such as 504.10(D) for "Simple Apparatus";

- a. deleted
- b. added

- c. revised
- d. none of the above

79. Article 504 Intrinsically Safe Systems. New subsections were _____ such as 504.30(C) for separation of intrinsically safe conductors "From Grounded Metal."

- a. deleted
- b. added
- c. revised
- d. none of the above

80. Table 514.3(B)(1) Class 1 Locations - Motor Fuel Dispensing Facilities. Footnote 2 to Table 514.3(B)(1) refers to the existing and renamed Figure 514.3(a) for illustrations of classified areas adjacent to dispensers, in addition to referencing the new Figure 514.3(13) for illustrations of classified areas adjacent to dispensers mounted on _____ storage tanks.

- a. below ground
- b. aboveground
- c. both a & b
- d. none of the above

81. Table 514.3(B)(1) Class 1 Locations - Motor Fuel Dispensing Facilities. Figure 514.3(b) Classified Areas Adjacent to Dispenser Mounted on _____ Storage Tank [30A: Figure 8.3.2(b)]

- a. below ground
- b. aboveground
- c. both a & b
- d. none of the above

82. Article _____ Spray Application, Dipping, and Coating, and Printing Processes Using Flammable or Combustible Materials.

- a. 515
- b. 516
- c. 517
- d. 518

83. 517.2 _____ defines a system of feeders and branch circuits supplying power for task illumination, fixed equipment, select receptacles, and select power circuits serving areas and functions related to patient care and that is connected to alternate power sources by one or more transfer switches during interruption of normal power source.

- a. Critical Branch
- b. Critical Circuit
- c. Critical Outlets
- d. Critical Receptacles

84. 517.2 _____ defines a system of feeders and branch circuits arranged for delayed, automatic, or manual connection to the alternate power source and that serves primarily 3-phase power equipment.

- a. Equipment Branch
- b. Equipment System
- c. both a & b
- d. none of the above

85. 517.2 Life Safely Branch. A system of feeders and branch circuits supplying power for lighting, receptacles, and equipment essential for life safety that is automatically connected to alternate power sources by one or more transfer switches during interruption of the _____ power source.

- a. critical
- b. normal
- c. common
- d. none of the above

86. 517.2 _____ defines a space within a health care facility wherein patients are intended to be examined or treated.

- a. Patient Care Space
- b. Patient Care Area Space
- c. both a & b

d. none of the above

87. 517.2 _____ defines a space in which failure of equipment or a system is not likely to cause injury to the patients or caregivers but may cause patient discomfort.

- a. Basic Care Space
- b. General Care Space
- c. Critical Care Space
- d. Support Space

88. 517.2 _____ defines a space in which failure of equipment or a system is likely to cause minor injury to patients or caregivers.

- a. Basic Care Space
- b. General Care Space
- c. Critical Care Space
- d. Support Space

89. 517.2 _____ defines a space in which failure of equipment or a system is likely to cause major injury or death to patients or caregivers.

- a. Basic Care Space
- b. General Care Space
- c. Critical Care Space
- d. Support Space

90. 517.2 _____ defines a space in which failure of equipment or a system is not likely to have a physical impact on patients or caregivers.

- a. Basic Care Space
- b. General Care Space
- c. Critical Care Space
- d. Support Space

2014 NEC Changes Part 4-Quiz Answer Sheet

1 a b c d
2 a b c d
3 a b c d
4 a b c d
5 a b c d
6 a b c d
7 a b c d
8 a b c d
9 a b c d
10 a b c d
11 a b c d
12 a b c d
13 a b c d
14 a b c d
15 a b c d
16 a b c d
17 a b c d
18 a b c d
19 a b c d
20 a b c d
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2. Fill out this form below completely.
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Office: 920-727-9200 Fax: 888-727-5704 Cell: 920-740-4119 or 740-6723 aklinka@hotmail.com

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Attendee passed the course with a greater than 70% score on date _____

Instructor's signature _____