



American Electrical Institute

2023 NEC Code Change Definitions



AMERICAN ELECTRICAL INSTITUTE

N16 W23217 Stone Ridge Drive, Suite 290

Waukesha, WI 53188

855-780-5046

www.aeitraining.com

DISCLAIMER NOTE: This course is APPROVED for continuing education to renew your electrical license and is not intended to replace or supersede any state or local adopted codes

ANSWER SHEET • 2023 NEC CODE CHANGE DEFINITIONS

First Name: _____ Last Name: _____ Date: _____

Address: _____ City: _____ State: _____ ZIP: _____

License #: _____ Phone: _____ Email: _____

**** See instructions on the inside cover page to submit your exams and pay for your course**

- | | | | |
|---|---|---|--|
| 1. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 26. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 51. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 76. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 2. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 27. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 52. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 77. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 3. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 28. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 53. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 78. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 4. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 29. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 54. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 79. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 5. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 30. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 55. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 80. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 6. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 31. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 56. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 81. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 7. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 32. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 57. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 82. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 8. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 33. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 58. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 83. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 9. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 34. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 59. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 84. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 10. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 35. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 60. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 85. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 11. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 36. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 61. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 86. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 12. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 37. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 62. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 87. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 13. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 38. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 63. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 88. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 14. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 39. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 64. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 89. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 15. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 40. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 65. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 90. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 16. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 41. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 66. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 91. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 17. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 42. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 67. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 92. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 18. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 43. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 68. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 93. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 19. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 44. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 69. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 94. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 20. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 45. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 70. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 95. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 21. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 46. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 71. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 96. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 22. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 47. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 72. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 97. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 23. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 48. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 73. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 98. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 24. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 49. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 74. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 99. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |
| 25. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 50. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 75. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D | 100. <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D |



2023 NEC Code Change Definitions

(CHANGE) Associated Nonincendive Field Wiring Apparatus. Apparatus in which the circuits are not necessarily nonincendive themselves but that affects the energy in nonincendive field wiring circuits and is relied on to maintain nonincendive energy levels. Such apparatus is one of the following:

Electrical apparatus that has an alternative type of protection for use in the appropriate hazardous (classified) location

Electrical apparatus not so protected that shall not be used within a hazardous (classified) location

Informational Note No. 1: Associated nonincendive field wiring apparatus has designated associated nonincendive field wiring apparatus connections for nonincendive field wiring apparatus and also might have connections for other electrical apparatus.

Informational Note No. 2: See ANSI/UL 121201, Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations, for additional information.

(CHANGE) Attachment Fitting, Weight-Supporting (WSAF) (Weight-Supporting Attachment Fitting). A device that, by insertion into a weight-supporting ceiling receptacle, establishes a connection between the conductors of the attached utilization equipment and the branch-circuit conductors connected to the weight-supporting ceiling receptacle.

Informational Note No. 1: A weight-supporting attachment fitting is different from an attachment plug because no cord is associated with the fitting. A weight-supporting attachment fitting in combination with a weight-supporting ceiling receptacle secures the associated utilization equipment in place and supports its weight.

Informational Note No. 2: See ANSI/NEMA WD 6, American National Standard for Wiring Devices – Dimensional Specifications, for the standard configuration of weight-supporting attachment fittings and related weight-supporting ceiling receptacles.

(NEW) Audio Autotransformer. A transformer with a single winding and multiple taps intended for use with an amplifier loudspeaker signal output.

(NEW) Audio Signal Processing Equipment (Audio Equipment). Electrically operated equipment that produces, processes, or both, electronic signals that, when appropriately amplified and reproduced by a loudspeaker, produce an acoustic signal within the range of normal human hearing (typically 20-20 kHz). Within Article 640, the terms equipment and audio equipment are assumed to be equivalent to audio signal processing equipment.

Informational Note: This equipment includes, but is not limited to, loudspeakers; headphones; pre-amplifiers; microphones and their power supplies; mixers; MIDI (musical instrument digital interface) equipment or other digital control systems; equalizers, compressors, and other audio signal processing equipment; and audio media recording and playback equipment, including turntables, tape decks and disk players (audio and multimedia), synthesizers, tone generators, and electronic organs. Electronic organs and synthesizers may have integral or separate amplification and loudspeakers. With the exception of amplifier outputs, virtually all such equipment is used to process signals (using analog or digital techniques) that have nonhazardous levels of voltage or current.

(NEW) Audio System. The totality of all equipment and interconnecting wiring used to fabricate a fully functional audio signal processing, amplification, and reproduction system.

(NEW) Audio Transformer. A transformer with two or more electrically isolated windings and multiple taps



intended for use with an amplifier loudspeaker signal output.

(CHANGE) Bathroom. An area including a sink with one or more of the following: a toilet, a urinal, a tub, a shower, a bidet, or similar plumbing fixtures.

(NEW) Battery. A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both.

(NEW) Battery, Flow. (Flow Battery) An energy storage component that stores its active materials in the form of one or two electrolytes external to the reactor interface. When in use, the electrolytes are transferred between reactor and storage tanks.

(NEW) Battery, Sealed. (Sealed Battery) A battery that has no provision for the routine addition of water or electrolyte or for external measurement of electrolyte specific gravity and might contain pressure relief venting.



Exam Questions

- 1. What ANSI/UL is referenced for additional information with regards to nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations?**

 - 1534
 - WD 6
 - 121201
 - 70
- 2. What is a device that, by insertion into a weight-supporting ceiling receptacle, establishes a connection between the conductors of the attached utilization equipment and the branch-circuit conductors connected to the weight-supporting ceiling receptacle known as?**

 - Applicator
 - Weight-supporting attachment fitting
 - Associated nonincendive field wiring apparatus
 - Adapters
- 3. What is a transformer with a single winding and multiple taps intended for use with an amplifier loudspeaker signal output known as?**

 - Audio transformer
 - Audio signal processing equipment
 - Audio system
 - Audio autotransformer
- 4. Within what article are the terms equipment and audio equipment assumed to be equivalent to audio signal processing equipment?**

 - 640
 - 420
 - 450
 - 680
- 5. What listed term best defines the totality of all equipment and interconnecting wiring used to fabricate a fully functional audio signal processing, amplification, and reproduction system?**

 - Audio autotransformer
 - Audio signal processing equipment
 - Audio system
 - Audio transformer
- 6. What is a transformer with two or more electrically isolated windings and multiple taps intended for use with an amplifier loudspeaker signal output?**

 - Audio signal processing equipment
 - Audio transformer
 - Audio system
 - Audio autotransformer

7. **What do you call an area including a sink with one or more of the following: a toilet, a urinal, a tub, a shower, a bidet, or similar plumbing fixtures?**
- Lavatory
 - Boudia
 - Bathroom
 - All listed answers
8. **What is defined as a single cell or a group of cells connected together electrically in series, in parallel, or a combination of both?**
- Battery
 - Cell
 - Battery, Flow
 - Cathode
9. **What is an energy storage component that stores its active materials in the form of one or two electrolytes external to the reactor interface?**
- Battery, sealed
 - Battery, stationary standby
 - Battery
 - Battery, flow
10. **Which type of battery has no provision for the routine addition of water or electrolyte or for external measurement of electrolyte specific gravity and might contain pressure relief venting?**
- Battery, stationary standby
 - Battery, sealed
 - Battery
 - Battery, flow

(NEW) Battery, Stationary Standby. (Stationary Standby Battery) A battery that spends the majority of the time on continuous float charge or in a high state of charge, in readiness for a discharge event.

Informational Note: Uninterruptible Power Supply (UPS) batteries are an example that falls under this definition.

(NEW) Battery-Powered Lighting Units. Individual unit equipment for backup illumination consisting of a rechargeable battery; a battery-charging means; provisions for one or more lamps mounted on the equipment, or with terminals for remote lamps, or both; and a relaying device arranged to energize the lamps automatically upon failure of the supply to the unit equipment.

(NEW) Berth. The water space to be occupied by a boat or other vessel alongside or between bulkheads, piers, piles, fixed and floating docks, or any similar access structure.

(NEW) Bipolar Circuit. A dc circuit that is comprised of two monopole circuits, each having an opposite polarity connected to a common reference point.

(NEW) Block. A square or portion of a city, town, or village enclosed by streets and including the alleys so enclosed, but not any street.

(NEW) Boatyard. A facility used for constructing, repairing, servicing, hauling from the water, storing (on land and in water), and launching of boats.

(NEW) Bodies of Water, Artificially Made. (Artificially Made Bodies of Water) Bodies of water that have been constructed or modified to fit some decorative or commercial purpose such as, but not limited to, aeration ponds, fish farm ponds, storm retention basins, treatment ponds, and irrigation (channel) facilities. Water depths may vary seasonally or be controlled.

(NEW) Bodies of Water, Natural. (Natural Bodies of Water) Bodies of water such as lakes, streams, ponds, rivers, and other naturally occurring bodies of water, which may vary in depth throughout the year.

(CHANGE) Bonding Conductor (Bonding Jumper). A conductor that ensures the required electrical conductivity between metal parts that are required to be electrically connected.

(CHANGE) Bonding Jumper, Equipment. (Equipment Bonding Jumper)

The connection between two or more portions of the equipment grounding conductor.



(CHANGE) Bonding Jumper, Main. (Main Bonding Jumper) The connection between the grounded circuit conductor and the equipment grounding conductor, or the supply-side bonding jumper, or both, at the service.

(CHANGE) Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper) A conductor installed on the supply side of a service or within a service equipment enclosure(s), or for a separately derived system, that ensures the required electrical conductivity between metal parts required to be electrically connected.



Exam Questions

11. **What best defines a battery that spends the majority of the time on continuous float charge or in a high state of charge, in readiness for a discharge event?**
 - A. Battery
 - B. Battery, sealed
 - C. Battery, stationary standby
 - D. Battery, flow
12. **What term below best defines individual unit equipment for backup illumination consisting of a rechargeable battery and a relaying device arranged to energize the lamps automatically upon failure of the supply to the unit equipment?**
 - A. Battery, sealed
 - B. Battery-Powered Lighting Units
 - C. Battery
 - D. Battery, flow
13. **This term is defined as the water space to be occupied by a boat or other vessel alongside or between bulkheads, piers, piles, fixed and floating docks, or any similar access structure?**
 - A. A slip
 - B. A slot
 - C. A berth
 - D. Expensive
14. **What is a dc circuit that is comprised of two monopole circuits, each having an opposite polarity connected to a common reference point?**
 - A. Monitored circuit
 - B. Monopolar circuit
 - C. Dedicated circuit
 - D. Bipolar circuit
15. **Which of the following terms best defines a square or portion of a city, town, or village enclosed by streets and including the alleys so enclosed, but not any street?**
 - A. Block
 - B. Street
 - C. Alley
 - D. All listed answers
16. **What term best defines a facility used for constructing, repairing, servicing, hauling from the water, storing (on land and in water), and the launching of boats?**
 - A. A slip
 - B. A slot
 - C. Boatyard
 - D. Berth
17. **What defines bodies of water that are artificially made?**
 - A. A water space to be occupied by a boat or other vessel alongside or between bulkheads, piers, piles, fixed and floating docks, or any similar access structure
 - B. Water areas used for constructing, repairing, servicing, hauling from the water, storing (on land and in water), and launching of boats
 - C. Bodies of water that have been constructed or modified to fit some decorative or commercial purpose such as, but not limited to, aeration ponds, fish farm ponds, storm retention basins, treatment ponds, and irrigation (channel) facilities. Water depths may vary seasonally or be controlled
 - D. Bodies of water such as lakes, streams, ponds, rivers, and other naturally occurring bodies of water, which may vary in depth throughout the year

18. What is the definition of natural bodies of water?

- A. Water areas used for constructing, repairing, servicing, hauling from the water, storing (on land and in water), and launching of boats
- B. Bodies of water such as lakes, streams, ponds, rivers, and other naturally occurring bodies of water, which may vary in depth throughout the year
- C. A water space to be occupied by a boat or other vessel alongside or between bulkheads, piers, piles, fixed and floating docks, or any similar access structure
- D. Bodies of water that have been constructed or modified to fit some decorative or commercial purpose such as, but not limited to, aeration ponds, fish farm ponds, storm retention basins, treatment ponds, and irrigation (channel) facilities. Water depths may vary seasonally or be controlled

19. What best defines a conductor that ensures the required electrical conductivity between metal parts that are required to be electrically connected?

- A. Bonding Conductor (Bonding Jumper)
- B. Bonding Jumper, Equipment. (Equipment Bonding Jumper)
- C. Bonding Jumper, Main. (Main Bonding Jumper)
- D. Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper)

20. What best defines the connection between two or more portions of the equipment grounding conductor?

- A. Bonding Conductor (Bonding Jumper)
- B. Bonding Jumper, Equipment. (Equipment Bonding Jumper)
- C. Bonding Jumper, Main. (Main Bonding Jumper)
- D. Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper)

21. What is the connection between the grounded circuit conductor and the equipment grounding conductor, or the supply-side bonding jumper, or both, at the service known as?

- A. Bonding Jumper, Equipment. (Equipment Bonding Jumper)
- B. Bonding Conductor (Bonding Jumper)
- C. Bonding Jumper, Main. (Main Bonding Jumper)
- D. Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper)

22. What is a conductor installed on the supply side of a service or within a service equipment enclosure(s), or for a separately derived system, that ensures the required electrical conductivity between metal parts required to be electrically connected?

- A. Bonding Jumper, Equipment. (Equipment Bonding Jumper)
- B. Bonding Conductor (Bonding Jumper)
- C. Bonding Jumper, Supply-Side. (Supply-Side Bonding Jumper)
- D. Bonding Jumper, Main. (Main Bonding Jumper)

(CHANGE) Bonding Jumper, System. (System Bonding Jumper)

The connection between the grounded circuit conductor and the supply-side bonding jumper, or the equipment grounding conductor, or both, at a separately derived system.

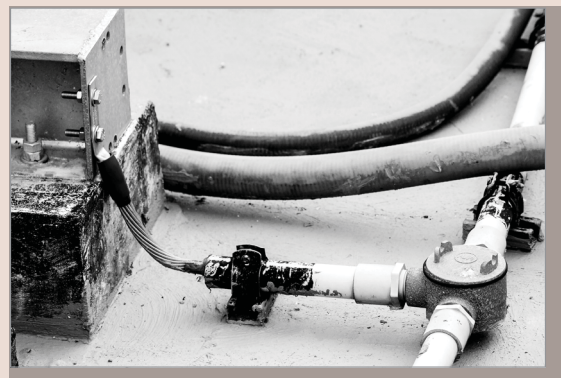
(NEW) Border Light. A permanently installed overhead strip light.

(NEW) Bottom Shield. A protective layer that is installed between the floor and flat conductor cable (Type FCC) to protect the cable from physical damage and may or may not be incorporated as an integral part of the cable.

(CHANGE) Branch Circuit (Branch-Circuit). The circuit conductors between the final overcurrent device protecting the circuit and the outlet(s).

(CHANGE) Branch Circuit, Appliance. (Appliance Branch Circuit) A branch circuit that supplies energy to one or more outlets to which appliances are to be connected and that has no permanently connected luminaires that are not a part of an appliance.

(CHANGE) Branch Circuit, General-Purpose. (General-Purpose Branch Circuit) A branch circuit that supplies two or more receptacles or outlets for lighting and appliances.



(CHANGE) Branch Circuit, Individual. (Individual Branch Circuit)

A branch circuit that supplies only one utilization equipment is called what?

(NEW) Branch Circuit, Motor. (Motor Branch Circuit) The circuit conductors, including equipment, between the motor branch-circuit short-circuit and ground-fault protective device and an individual motor.

(CHANGE) Branch Circuit, Multiwire. (Multiwire Branch Circuit) A branch circuit that consists of two or more ungrounded conductors that have a voltage between them, and a neutral conductor that has equal voltage between it and each ungrounded conductor of the circuit and that is connected to the neutral conductor of the system.

(NEW) Branch-Circuit Selection Current (BCSC). The value in amperes to be used instead of the rated-load current in determining the ratings of motor branch-circuit conductors, disconnecting means, controllers, and branch-circuit short-circuit and ground-fault protective devices wherever the running overload protective device permits a sustained current greater than the specified percentage of the rated-load current. The value of branch-circuit selection current will always be equal to or greater than the marked rated-load current.

(NEW) Breakout Assembly. An adapter used to connect a multipole connector containing two or more branch circuits to multiple individual branch-circuit connectors.

(NEW) Broadband. Wide bandwidth data transmission that transports multiple signals, protocols, and traffic types over various media types.

(NEW) Building, Floating. (Floating Building) A building that floats on water, is moored in a permanent location, and has a premises wiring system served through connection by permanent wiring to an electrical supply system not located on the premises.

(NEW) Building, Manufactured. (Manufactured Building) Any building that is of closed construction and is made or assembled in manufacturing facilities on or off the building site for installation, or for assembly and installation on the building site, other than manufactured homes, mobile homes, park trailers, or recreational vehicles.

(NEW) Building Component. Any subsystem, subassembly, or other system designed for use in or integral with or as part of a structure, which can include structural, electrical, mechanical, plumbing, and fire protection systems, and other systems affecting health and safety.



Exam Questions

23. **What best defines the connection between the grounded circuit conductor and the supply-side bonding jumper, or the equipment grounding conductor, or both, at a separately derived system?**
- Bonding Jumper, System. (System Bonding Jumper)
 - Bonding Conductor (Bonding Jumper)
 - Bonding Jumper, Equipment. (Equipment Bonding Jumper)
 - Bonding Jumper, Main. (Main Bonding Jumper)
24. **What is a permanently installed overhead strip light called?**
- Strip light
 - Border light
 - Fluorescent light
 - Work light

25. **What is a protective layer that is installed between the floor and flat conductor cable (Type FCC) to protect the cable from physical damage and may or may not be incorporated as an integral part of the cable?**
- A. Bottom Shield
 - B. Border Light
 - C. Top Shield
 - D. Overhead Strip
26. **What best defines the circuit conductors between the final overcurrent device protecting the circuit and the outlet(s)?**
- A. Appliance Branch Circuit
 - B. Branch Circuit
 - C. Branch Circuit Multiwire
 - D. Branch Circuit, Individual
27. **What is a branch circuit that supplies energy to one or more outlets to which appliances are to be connected and that has no permanently connected luminaires that are not a part of an appliance?**
- A. Branch Circuit, Individual
 - B. Branch Circuit, General Purpose
 - C. Branch Circuit, Appliance
 - D. Branch Circuit
28. **What best describes a branch circuit that supplies two or more receptacles or outlets for lighting and appliances?**
- A. Branch Circuit, Individual
 - B. Branch Circuit, Appliance
 - C. Branch Circuit
 - D. Branch Circuit, General-Purpose
29. **What is a branch circuit that supplies only one utilization equipment?**
- A. Branch Circuit, Individual
 - B. Branch Circuit, Motor
 - C. Branch Circuit, Appliance
 - D. Branch Circuit, Multiwire
30. **What best describes the circuit conductors, including equipment, between the motor branch-circuit short-circuit and ground-fault protective device and an individual motor?**
- A. Branch-Circuit Selection Current
 - B. Branch Circuit, Motor
 - C. Branch Circuit, Individual
 - D. Branch-Circuit
31. **What best defines a branch circuit that consists of two or more ungrounded conductors that have a voltage between them, and a neutral conductor that has equal voltage between it and each ungrounded conductor of the circuit and that is connected to the neutral conductor of the system?**
- A. Branch-Circuit Selection Current
 - B. Branch Circuit, Motor
 - C. Branch Circuit, Multiwire
 - D. Branch Circuit, Individual
32. **True or False? The value of branch-circuit selection current will always be equal to or greater than the marked rated-load current.**
- A. True
 - B. False
33. **What is an adapter that is used to connect a multipole connector containing two or more branch circuits to multiple individual branch-circuit connectors?**
- A. Assembly Line
 - B. Assembly
 - C. Breakout Assembly
 - D. Assembly Breakout
34. **Which term best defines a bandwidth data transmission that transports multiple signals, protocols, and traffic types over various media types?**
- A. Broadband
 - B. Branding
 - C. Trafficking
 - D. Data Loading
35. **Which is a building that floats on water, is moored in a permanent location, and has a premises wiring system served through connection by permanent wiring to an electrical supply system not located on the premises?**
- A. Electrical Building
 - B. House, Floating
 - C. Floating Building
 - D. Building

36. What is a building that is of closed construction and is made or assembled in manufacturing facilities on or off the building site for installation, or for assembly and installation on the building site, other than manufactured homes, mobile homes, park trailers, or recreational vehicles?
- Manufactured Building
 - Cabin
 - Casita
 - Floating building
37. What best defines any subsystem, subassembly, or other system designed for use in or integral with or as part of a structure, which can include structural, electrical, mechanical, plumbing, and fire protection systems, and other systems affecting health and safety?
- Building Component
 - Safety Protocol
 - Structure Component
 - Emergency system

(NEW) Bulkhead. A vertical structural wall, usually of stone, timber, metal, concrete, or synthetic material, constructed along, and generally parallel to, the shoreline to retain earth as an extension of the upland, and often to provide suitable water depth at the waterside face.

(NEW) Bull Switch. An externally operated wall-mounted safety switch that can contain overcurrent protection and is designed for the connection of portable cables and cords.

(NEW) Bundled. Cables or conductors that are tied, wrapped, taped, or otherwise periodically bound together.

(NEW) Busbar. A noninsulated conductor electrically connected to the source of supply and physically supported on an insulator providing a power rail for connection to utilization equipment, such as sensors, actuators, A/V devices, low-voltage luminaire assemblies, and similar electrical equipment.



(NEW) Busbar Support. An insulator that runs the length of a section of suspended ceiling bus rail that serves to support and isolate the busbars from the suspended grid rail.

(NEW) Busway. A raceway consisting of a metal enclosure containing factory-mounted, bare or insulated conductors, which are usually copper or aluminum bars, rods, or tubes.

(NEW) Cable, Abandoned. (Abandoned Cable) Installed cable that is not terminated at equipment other than a termination fitting or a connector and is not identified for future use with a tag.

Informational Note: See 640.6(B), 645.5(G), 722.25, 760.25, 770.25, and 800.25 for requirements covering the removal of abandoned cables.

(NEW) Cable, Armored (Type AC). (Armored Cable) A fabricated assembly of insulated conductors in a flexible interlocked metallic armor.

(CHANGE) Cable, Circuit Integrity (CI). (Circuit Integrity Cable) Cable(s) marked with the suffix “-CI” used for remote-control, signaling, power-limited, fire alarm, optical fiber, or communications systems that supply critical circuits to ensure survivability for continued circuit operation for a specified time under fire conditions.

Informational Note: See 728.4 for power circuits installed for survivability.

(CHANGE) Cable, Coaxial. (Coaxial Cable) A cylindrical assembly composed of a conductor centered inside a metallic tube or shield, separated by a dielectric material, and usually covered by an insulating jacket.

(NEW) Cable, Festoon. (Festoon Cable) Single- and multiple-conductor cable intended for use and installation where flexibility is required.

(NEW) Cable, Flat Conductor (Type FCC). (Flat Conductor Cable) Three or more separate flat copper conductors placed horizontally edge-to-edge and enclosed within an insulating assembly.

(NEW) Cable, Instrumentation Tray (Type ITC). (Instrumentation Tray Cable) A factory assembly of two or more

insulated conductors, with or without an equipment grounding conductor(s), enclosed in a nonmetallic sheath.

(NEW) Cable, Integrated Gas Spacer (Type IGS). (Integrated Gas Spacer Cable) A factory assembly of one or more conductors, each individually insulated and enclosed in a loose fit, nonmetallic flexible conduit as an integrated gas spacer cable rated 0 volts through 600 volts.

Exam Questions

38. **What section is NOT listed for requirements covering the removal of abandoned cables?**
- 680.55
 - 640.6(B)
 - 645.5(G)
 - 800.25
39. **What term is used to define a vertical structural wall, usually of stone, timber, metal, concrete, or synthetic material, constructed along, and generally parallel to, the shoreline to retain earth as an extension of the upland, and often to provide suitable water depth at the waterside face?**
- Header
 - Bulkhead
 - Building System
 - Bullhead
40. **What is the definition of a Bull Switch?**
- A mounted safety switch that cannot contain overcurrent protection and is made for the connector of portable cables and cords.
 - An internally operated wall-mounted safety switch that can contain overcurrent protection and is designed for the connection of portable cables and cords.
 - An externally operated wall-mounted safety switch that can contain overcurrent protection and is designed for the connection of portable cables and cords.
 - An externally operated wall-mounted toggle switch that can contain overcurrent protection and is designed for the connection of portable cables and cords.
41. **Cables or conductors that are tied, wrapped, taped, or otherwise periodically bound together, are considered to be what?**
- Packaged
 - Bundled
 - Bound together
 - Zip tied
42. **What is a noninsulated conductor electrically connected to the source of supply and physically supported on an insulator providing a power rail for connection to utilization equipment, such as sensors, actuators, A/V devices, low-voltage luminaire assemblies, and similar electrical equipment?**
- Busbar Support
 - Busway
 - Support Beam
 - Busbar
43. **What is an insulator that runs the length of a section of suspended ceiling bus rail that serves to support and isolate the busbars from the suspended grid rail known as?**
- Busbar Standoff Insulator
 - Copper Support
 - Busbar Connector
 - Busbar Support
44. **What term is used to define a raceway consisting of a metal enclosure containing factory-mounted, bare or insulated conductors, which are usually copper or aluminum bars, rods, or tubes.**
- Tunnel
 - Busway
 - Cable
 - Bus Duct

45. Which of the following terms is an installed cable that is not terminated at equipment other than a termination fitting or a connector and is not identified for future use with a tag?
- Coaxial Cable
 - Armored Cable
 - Abandoned Cable
 - Limited-Use Cable
46. What is a fabricated assembly of insulated conductors in a flexible interlocked metallic armor known as?
- Cable, Flat Conductor (Type FCC)
 - Cable, Armored (Type AC)
 - Cable, Metal Clad (Type MC)
 - Cable, Limited Use
47. _____ is a cylindrical assembly composed of a conductor centered inside a metallic tube or shield, separated by a dielectric material, and usually covered by an insulating jacket.
- Coaxial Cable
 - Festoon Cable
 - Shielded Cable
 - Twisted Pair Cable
48. Which type of cable is defined as single- and multiple-conductor cables intended for use and installation where flexibility is required?
- Festoon Cable
 - Power Cable
 - Control Cable
 - Armored Cable
49. What type of cable has three or more separate flat copper conductors placed horizontally edge-to-edge and enclosed within an insulating assembly?
- Fire resistant Cable
 - Aluminium Cable
 - Flat Conductor Cable
 - Limited-Use Cable
50. What is a factory assembly of two or more insulated conductors, with or without an equipment grounding conductor(s), enclosed in a nonmetallic sheath?
- Integrated Gas Spacer Cable
 - Instrumentation Tray Cable
 - Metallic Conductor Cable
 - Portable Power Feeder Cable
51. What is a factory assembly of one or more conductors, each individually insulated and enclosed in a loose fit, nonmetallic flexible conduit as an integrated gas spacer cable rated 0 volts through 600 volts?
- Metallic Conductor Cable
 - Protected Optical Fiber Cable
 - Integrated Gas Spacer Cable
 - Flat Conductor Cable System

(NEW) Cable, Limited Use. (Limited-Use Cable) Cables that are intended to be used with protection such as a raceway or for specific restricted applications.

(NEW) Cable, Medium Voltage (Type MV). (Medium Voltage Cable) A single or multiconductor solid dielectric insulated cable rated 2001 volts up to and including 35,000 volts, nominal.

(NEW) Cable, Metal Clad (Type MC). (Metal Clad Cable) A factory assembly of one or more insulated circuit conductors with or without optical fiber members enclosed in an armor of interlocking metal tape, or a smooth or corrugated metallic sheath.

(NEW) Cable, Metallic Conductor. (Metallic Conductor Cable) A factory assembly of two or more conductors having an overall covering.

(NEW) Cable, Mineral-Insulated, Metal-Sheathed (Type MI). (Mineral-Insulated, Metal-Sheathed Cable) A factory assembly



of one or more conductors insulated with a highly compressed refractory mineral insulation and enclosed in a liquidtight and gastight continuous copper or alloy steel sheath.

(NEW) Cable, Nonmetallic-Sheathed. A factory assembly of two or more insulated conductors enclosed within an overall nonmetallic jacket.

(NEW) Cable, Nonmetallic-Sheathed (Type NM). Insulated conductors enclosed within an overall nonmetallic jacket.

(NEW) Cable, Nonmetallic-Sheathed (Type NMC). Insulated conductors enclosed within an overall, corrosion resistant, nonmetallic jacket.

(CHANGE) Cable, Optical Fiber. (Optical Fiber Cable) A factory assembly or field assembly of one or more optical fibers having an overall covering.

Informational Note: A field-assembled optical fiber cable is an assembly of one or more optical fibers within a jacket. The jacket, without optical fibers, is installed in a manner similar to conduit or raceway. Once the jacket is installed, the optical fibers are inserted into the jacket, completing the cable assembly.

(CHANGE) Cable, Optical Fiber, Conductive. (Conductive Optical Fiber Cable) A factory assembly of one or more optical fibers having an overall covering and containing non-current-carrying conductive member(s) such as metallic strength member(s), metallic vapor barrier(s), metallic armor, or metallic sheath.

(CHANGE) Cable, Optical Fiber, Hybrid. (Hybrid Optical Fiber Cable) A cable containing optical fibers and current-carrying electrical conductors.

(CHANGE) Cable, Optical Fiber, Nonconductive. (Nonconductive Optical Fiber Cable) A factory assembly of one or more optical fibers having an overall covering and containing no electrically conductive materials.

(CHANGE) Cable, Optical Fiber, Protected. (Protected Optical Fiber Cable) Optical fiber cable protected from releasing optical radiation into the atmosphere during normal operating conditions and foreseeable malfunctions by additional armoring, conduit, cable tray, or raceway.

Informational Note: See ANSI/UL 60079-28, Explosive Atmospheres – Part 28: Protection of Equipment and Transmission Systems Using Optical Radiation, for additional information.



Exam Questions

52. Which of these cables are intended to be used with protection such as a raceway or for specific restricted applications?
- Limited-Use Cable
 - Metallic Conductor Cable
 - Portable Power Feeder Cable
 - Festoon Cable
53. What is a single or multiconductor solid dielectric insulated cable rated 2001 volts up to and including 35,000 volts, nominal known as?
- Low Voltage Cable
 - High Voltage Cable
 - Medium Voltage Cable
 - Metallic Conductor Cable
54. What is a factory assembly of one or more insulated circuit conductors with or without optical fiber members enclosed in an armor of interlocking metal tape, or a smooth or corrugated metallic sheath referred to as?
- Metallic Conductor Cable
 - Metal Clad Cable
 - Optical Fiber Cable
 - Cable Connector
55. What best describes a factory assembly of two or more conductors having an overall covering?
- Service Entrance Cable
 - Cable, Nonmetallic-Sheathed
 - Protected Optical Fiber Cable
 - Metallic Conductor Cable
56. What is a factory assembly of one or more conductors insulated with a highly compressed refractory mineral insulation and enclosed in a liquidtight and gastight continuous copper or alloy steel sheath referred to as?
- Optical Fiber Cable
 - Mineral-Insulated, Metal-Sheathed Cable
 - Conductive Optical Fiber Cable
 - Hybrid Optical Fiber Cable
57. What is a factory assembly of two or more insulated conductors enclosed within an overall nonmetallic jacket known as?
- Cable, Nonmetallic-Sheathed
 - Cable, Nonmetallic-Sheathed (Type NM)
 - Cable, Nonmetallic-Sheathed (Type NMC)
 - Cable, Mineral-Insulated, Metal-Sheathed (Type MI)
58. What is an Insulated conductor enclosed within an overall nonmetallic jacket referred to as?
- Cable, Optical Fiber, Protected
 - Cable, Optical Fiber, Hybrid
 - Cable, Optical Fiber
 - Cable, Nonmetallic-Sheathed (Type NM)
59. What type of cable has Insulated conductors enclosed within an overall, corrosion resistant, nonmetallic jacket?
- Cable, Nonmetallic-Sheathed (Type NM)
 - Cable, Nonmetallic-Sheathed (Type NMC)
 - Cable, Optical Fiber
 - Cable, Optical Fiber, Nonconductive
60. What is a cable containing optical fibers and current-carrying electrical conductors?
- Nonconductive Optical Fiber Cable
 - Protected Optical Fiber Cable
 - Hybrid Optical Fiber Cable
 - Conductive Optical Fiber Cable
61. Which type of cable is a factory assembly of one or more optical fibers having an overall covering and containing no electrically conductive materials?
- Mineral-Insulated, Metal-Sheathed Cable
 - Protected Optical Fiber Cable
 - Portable Power Feeder Cable
 - Nonconductive Optical Fiber Cable
62. Which of the following cables protect from releasing optical radiation into the atmosphere during normal operating conditions and foreseeable malfunctions by additional armoring, conduit, cable tray, or raceway?
- Power and Control Tray Cable
 - Protected Optical Fiber Cable
 - Power-Limited Tray Cable
 - Cable, Service Entrance

(NEW) Cable, Portable Power Feeder. (Portable Power Feeder Cable) One or more flexible shielded insulated power conductors enclosed in a flexible covering rated from 2001 to 25,000 volts.

(NEW) Cable, Power and Control Tray (Type TC). (Power and Control Tray Cable) A factory assembly of two or more insulated conductors, with or without associated bare or covered equipment grounding conductors, under a nonmetallic jacket.

(CHANGE) Cable, Power-Limited Tray (Type PLTC). (Power-Limited Tray Cable) A factory assembly of two or more insulated conductors rated at 300 volts, with or without associated bare or insulated equipment grounding conductors, under a nonmetallic jacket.

(CHANGE) Cable, Service. (Service Cable) Service conductors made up in the form of a cable.

(NEW) Cable, Service Entrance. (Service Entrance Cable) A single conductor or multiconductor cable provided with an overall covering, primarily used for services.

(NEW) Cable, Service Entrance (Type SE). Service-entrance cable having a flame-retardant, moisture-resistant covering.

(NEW) Cable, Service Entrance (Type USE). Service-entrance cable, identified for underground use, having a moisture-resistant covering, but not required to have a flame-retardant covering.

(NEW) Cable, Type P. A factory assembly of one or more insulated flexible tinned copper conductors, with associated equipment grounding conductor(s), with or without a braided metallic armor and with an overall nonmetallic jacket.

(NEW) Cable, Under Carpet. (Under Carpet Cable) Cables that are intended to be used under carpeting, floor covering, modular tiles, and planks.

(NEW) Cable, Underground Feeder and Branch-Circuit (Type UF). (Underground Feeder and Branch-Circuit Cable) A factory assembly of one or more insulated conductors with an integral or an overall covering of nonmetallic material suitable for direct burial in the earth.

(NEW) Cable Assembly, Flat (Type FC). (Flat Cable Assembly) An assembly of parallel conductors formed integrally with an insulating material web specifically designed for field installation in surface metal raceway.

(NEW) Cable Bundle. A group of cables that are tied together or in contact with one another in a closely packed configuration for at least 1.0 m (40 in.).

Informational Note: Random or loose installation of individual cables can result in less heating. Combing of the cables can result in less heat dissipation and more signal cross talk between cables.

(NEW) Cable Connector. A connector designed to join flat conductor cables (Type FCC) without using a junction box.

(NEW) Cable Connector [as applied to hazardous (classified) locations]. An electrical device that is part of a cable assembly and that, by insertion of two mating configurations, establishes a connection between the conductors of the cable assembly and the conductors of a fixed piece of equipment. PIC 12

Informational Note No. 1: See ANSI/UL 121201, Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations, for information on the use of cable connectors.



Informational Note No. 2: Cable connectors in other than hazardous (classified) locations are referred to as male and female fittings.

Informational Note No. 3: See ANSI/UL 2238, Cable Assemblies and Fittings for Industrial Control and Signal Distribution, and ANSI/UL 2237, Multi-Point Interconnection Power Cable Assemblies for Industrial Machinery, for examples of standards on male and female fittings in other than hazardous (classified) locations.

(NEW) Cable Joint. A connection consisting of an insulation system and a connector where two (or more) medium voltage (Type MV) cables are joined together.

(NEW) Cable Management System. An apparatus designed to control and organize lengths of cable or cord.



Exam Questions

63. **What term is defined as one or more flexible shielded insulated power conductors enclosed in a flexible covering rated from 2001 to 25,000 volts?**
- Portable Power Feeder Cable
 - Power and Control Tray Cable
 - Cable, Service
 - Power-Limited Tray Cable
64. **What type of cable is considered a factory assembly of two or more insulated conductors, with or without associated bare or covered equipment grounding conductors, under a nonmetallic jacket?**
- Protected Optical Fiber Cable
 - Power and Control Tray Cable
 - Nonconductive Optical Fiber Cable
 - Cable, Service
65. **Which cable is best described as a factory assembly of two or more insulated conductors rated at 300 volts, with or without associated bare or insulated equipment grounding conductors, under a nonmetallic jacket?**
- Cable, Underground Feeder and Branch-Circuit (Type UF). (Underground Feeder and Branch-Circuit Cable)
 - Cable, Service Entrance. (Service Entrance Cable)
 - Cable, Power-Limited Tray (Type PLTC). (Power-Limited Tray Cable)
 - Cable Assembly, Flat (Type FC). (Flat Cable Assembly)
66. **What best defines service conductors made up in the form of a cable?**
- Cable, Under Carpet. (Under Carpet Cable)
 - Cable, Service Entrance (Type SE)
 - Cable, Type P
 - Cable, Service. (Service Cable)
67. **What best defines a single conductor or multiconductor cable provided with an overall covering, primarily used for services?**
- Cable, Service. (Service Cable)
 - Cable, Service Entrance. (Service Entrance Cable)
 - Cable, Service Entrance (Type USE)
 - Cable, Under Carpet. (Under Carpet Cable)
68. **Which of the following is a service-entrance cable having a flame-retardant, moisture-resistant covering?**
- Cable, Type P
 - Cable, Service Entrance (Type SE)
 - Cable, Under Carpet. (Under Carpet Cable)
 - Cable Assembly, Flat (Type FC)

69. **What is a service-entrance cable, identified for underground use, having a moisture-resistant covering, but not required to have a flame-retardant covering?**
- A. Cable, Service Entrance (Type USE)
 - B. Cable, Under Carpet
 - C. Cable Assembly, Flat (Type FC)
 - D. Cable, Underground Feeder and Branch-Circuit (Type UF)
70. **What type of cable is a factory assembly of one or more insulated flexible tinned copper conductors, with associated equipment grounding conductor(s), with or without a braided metallic armor and with an overall nonmetallic jacket?**
- A. Cable, Service Entrance
 - B. Cable, Type P
 - C. Cable, Service
 - D. Cable Bundle
71. **What best defines cables that are intended to be used under carpeting, floor covering, modular tiles, and planks?**
- A. Flat Cable Assembly
 - B. Over Carpet Cable
 - C. Under Carpet Cable
 - D. Cable Connector
72. **True or False? An Underground Feeder and Branch-Circuit Cable is a factory assembly of one or more insulated conductors with an integral or an overall covering of nonmetallic material suitable for direct burial in the earth.**
- A. True
 - B. False
73. _____ is an assembly of parallel conductors formed integrally with an insulating material web specifically designed for field installation in surface metal raceways.
- A. Cable Sheath
 - B. Cable Management System
 - C. Cable Connector
 - D. Flat Cable Assembly
74. **What best defines a group of cables that are tied together or in contact with one another in a closely packed configuration for at least 1.0 m (40 in.)?**
- A. Cable Connector
 - B. Cable Package
 - C. Cable Bundle
 - D. Cable Assembly
75. **What type of connector is designed to join flat conductor cables (Type FCC) without using a junction box?**
- A. Cable Sheath
 - B. Cable Joint
 - C. Cable Bundle
 - D. Cable Connector
76. **What are cable connectors in other than hazardous (classified) locations known as?**
- A. power cable assemblies
 - B. male and female fittings
 - C. standard fittings
 - D. compression fittings
77. _____ is a connection consisting of an insulation system and a connector where two (or more) medium voltage (Type MV) cables are joined together.
- A. Type MV
 - B. Type FC
 - C. Type FCC
 - D. Type PLTC
78. **Which of the following terms is an apparatus designed to control and organize lengths of cable or cord?**
- A. Cable Management System
 - B. Flat Cable assembly system
 - C. Fire-Resistive Cable System
 - D. Power and Control Tray Cable

(NEW) Cable Sheath. A single or multiple layers of a protective covering that holds and protects the conductors or optical fibers, or both, contained inside.

(NEW) Cable System, Fire-Resistive. (Fire-Resistive Cable System) A cable and components used to ensure survivability of critical circuits for a specified time under fire conditions.

(NEW) Cable System, Flat Conductor. (Flat Conductor Cable System) A complete wiring system for branch circuits that is designed for installation under carpet squares.

Informational Note: The FCC system includes Type FCC cable and associated shielding, connectors, terminators, adapters, boxes, and receptacles.

(NEW) Cable Termination. A connection consisting of an insulation system and a connector and installed on a medium voltage (Type MV) cable to connect from a cable to a device, such as equipment.

(NEW) Cable Tray System. A unit or assembly of units or sections and associated fittings forming a structural system used to securely fasten or support cables and raceways.

Cablebus. An assembly of units or sections with insulated conductors having associated fittings forming a structural system used to securely fasten or support conductors and conductor terminations in a completely enclosed, ventilated, protective metal housing. This assembly is designed to carry fault current and to withstand the magnetic forces of such current.

Informational Note: Cablebus is ordinarily assembled at the point of installation from the components furnished or specified by the manufacturer in accordance with instructions for the specific job.

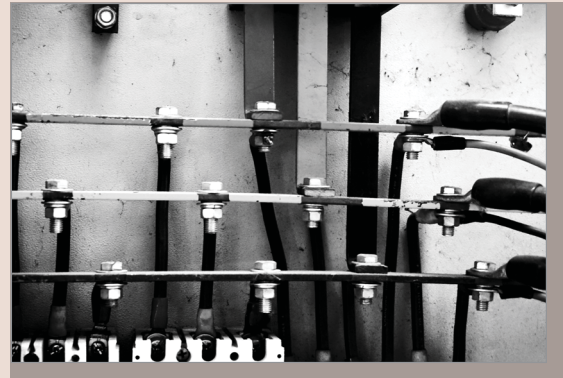
(NEW) Cell (as applied to batteries). The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

(NEW) Cell, Sealed. (Sealed Cell) A cell that has no provision for the routine addition of water or electrolyte or for external measurement of electrolyte specific gravity and might contain pressure relief venting.

(NEW) Cell Line. An assembly of electrically interconnected electrolytic cells supplied by a source of direct-current power.

(NEW) Charger Power Converter. The device used to convert energy from the power grid to a high-frequency output for wireless power transfer.

(NEW) Child Care Facility. A building or structure, or portion thereof, for educational, supervisory, or personal care services for more than four children 7 years old or less.



Exam Questions

79. **What term best defines a single layer or multiple layers of a protective covering that holds and protects the conductors or optical fibers, or both, contained inside?**
- A. Fire-Resistive Cable System
 - B. Cable Sheath
 - C. Flat Conductor Cable System
 - D. Cable Management System
80. **What system is defined as a cable and components used to ensure survivability of critical circuits for a specified time under fire conditions?**
- A. Flat Conductor Cable System
 - B. Fire-Resistive Cable System
 - C. Fire Cable System
 - D. Cable Sheath
81. **What is a complete wiring system for branch circuits that is designed for installation under carpet squares known as?**
- A. Fire-Resistive Cable System
 - B. Cable Tray System
 - C. Flat Conductor Cable System
 - D. Cable Management System
82. **What is a connection consisting of an insulation system and a connector and installed on a medium voltage (Type MV) cable to connect from a cable to a device, such as equipment?**
- A. Cable System
 - B. Cable Installation
 - C. Cable Termination
 - D. Cable Management System
83. **What is a unit or assembly of units or sections and associated fittings forming a structural system used to securely fasten or support cables and raceways is referred to as what kind of system?**
- A. Cable Management System
 - B. Flat Conductor Cable System
 - C. Fire-Resistive Cable System
 - D. Cable Tray System
84. **What assembly is designed to carry fault current and to withstand the magnetic forces of such current?**
- A. Cable termination
 - B. Cable Plus
 - C. Cell
 - D. Cablebus
85. **What is a basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy?**
- A. Cell (as applied to batteries)
 - B. Cell, Sealed. (Sealed Cell)
 - C. Cell Line Attachments and Auxiliary Equipment
 - D. Cell Line
86. **What is a cell that has no provision for the routine addition of water or electrolyte or for external measurement of electrolyte specific gravity and might contain pressure relief venting?**
- A. Sealed Cell
 - B. Unsealed Cell
 - C. Unscented Cell
 - D. Common Cell
87. **True or False? An assembly of electrically isolated electrolytic cells supplied by a source of direct-current power is called a cell line.**
- A. True
 - B. False
88. **What device is used to convert energy from the power grid to a high-frequency output for wireless power transfer?**
- A. Power Converter
 - B. Charger Converter
 - C. Charger Power Converter
 - D. Energy Converter
89. **What do you call a building or structure, or portion thereof, for educational, supervisory, or personal care services for more than four children 7 years old or less?**
- A. Child center
 - B. Child facility
 - C. Care facility
 - D. Child care facility

(CHANGE) Circuit Breaker, Adjustable. (Adjustable Circuit Breaker) A qualifying term indicating that the circuit breaker can be set to trip at various values of current, time, or both, within a predetermined range.

(CHANGE) Circuit Breaker, Instantaneous Trip. (Instantaneous Trip Circuit Breaker) A qualifying term indicating that no delay is purposely introduced in the tripping action of the circuit breaker.

(CHANGE) Circuit Breaker, Inverse Time. (Inverse Time Circuit Breaker) A qualifying term indicating that there is a delay purposely introduced in the tripping action of the circuit breaker, and the delay decreases as the magnitude of the current increases.

(CHANGE) Circuit Breaker, Nonadjustable. (Nonadjustable Circuit Breaker) A qualifying term indicating that the circuit breaker does not have any adjustment to alter the value of the current at which it will trip or the time required for its operation.

(CHANGE) Class 1 Circuit. The portion of the wiring system between the load side of the Class 1 power source and the connected equipment.

(NEW) Class 4 Circuit. The portion of the wiring system between the load side of a Class 4 transmitter and the Class 4 receiver or Class 4 utilization equipment, as appropriate. Due to the active monitoring and control of the voltage and current provided, a Class 4 circuit considers safety from a fire initiation standpoint and provides acceptable protection from electric shock.

Informational Note: A Class 4 circuit is also commonly referred to as a fault-managed power circuit.

(NEW) Class 4 Device. Any active device connected to the Class 4 circuit; examples include a Class 4 transmitter, a Class 4 receiver, or Class 4 utilization equipment.

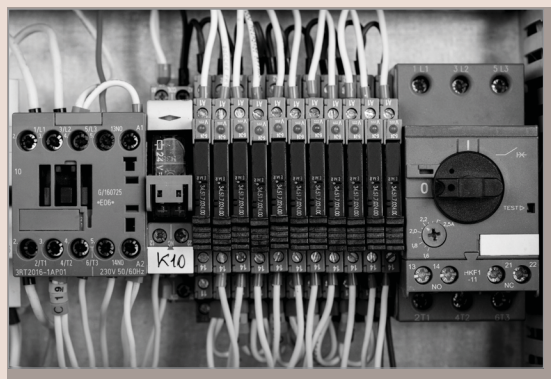
(NEW) Class 4 Power System. An actively monitored and controlled system consisting of one or more Class 4 transmitters and one or more Class 4 receivers connected by a cabling system.

(NEW) Class 4 Receiver. A device that accepts Class 4 power and converts it for use by utilization equipment.

(NEW) Class 4 Transmitter. A device that sources Class 4 power.

Informational Note: A Class 4 transmitter is different from traditional power sources in that it monitors the line for faults (both line-to-line and line-to-ground) and ceases power transmission if a fault is sensed.

(NEW) Class 4 Utilization Equipment. Devices that are directly powered by a Class 4 transmitter without the need for a separate Class 4 receiver (the receiver is integrated into the equipment).



Exam Questions

90. **What is a qualifying term indicating that the circuit breaker can be set to trip at various values of current, time, or both, within a predetermined range?**
- Nonadjustable Circuit Breaker
 - Instantaneous Trip Circuit Breaker
 - Inverse Time Circuit Breaker
 - Adjustable Circuit Breaker
91. **What is a qualifying term indicating that no delay is purposely introduced in the tripping action of a circuit breaker?**
- Instantaneous Trip Circuit Breaker
 - Adjustable Circuit Breaker
 - Inverse Time Circuit Breaker
 - Nonadjustable Circuit Breaker
92. **What is a qualifying term indicating that there is a delay purposely introduced in the tripping action of the circuit breaker, and the delay decreases as the magnitude of the current increases?**
- Nonadjustable Circuit Breaker
 - Instantaneous Trip Circuit Breaker
 - Inverse Time Circuit Breaker
 - Adjustable Circuit Breaker
93. **What is a qualifying term indicating that the circuit breaker does not have any adjustment to alter the value of the current at which it will trip or the time required for its operation?**
- Instantaneous Trip Circuit Breaker
 - Nonadjustable Circuit Breaker
 - Adjustable Circuit Breaker
 - Inverse Time Circuit Breaker
94. **What is the portion of the wiring system between the load side of the Class 1 power source and the connected equipment known as?**
- Class 1 Circuit
 - Class 4 Circuit
 - Class 3 Circuit
 - Class 2 Circuit
95. **What is a Class 4 circuit also known as?**
- Active power circuit
 - Default-managed power circuit
 - Managed power circuit
 - Fault-managed power circuit
96. **What is an active device connected to the Class 4 circuit; examples include a Class 4 transmitter, a Class 4 receiver, or Class 4 utilization equipment?**
- Class 4 Device
 - Class 4 Power System
 - Class 4 System
 - Class 4 equipment
97. **What is an actively monitored and controlled system consisting of one or more Class 4 transmitters and one or more Class 4 receivers connected by a cabling system?**
- Class 4 Circuit
 - Class 4 Receiver
 - Class 4 Device
 - Class 4 Power System
98. **What is a device that accepts Class 4 power and converts it for use by utilization equipment?**
- Class 4 Power System
 - Class 4 device
 - Class 4 Receiver
 - Class 4 Transmitter
99. **What is a device that sources Class 4 power?**
- Class 4 Receiver
 - Class 4 Transmitter
 - Class 4 Utilization Equipment
 - Class 4 Circuit
100. **What are devices that are directly powered by a Class 4 transmitter without the need for a separate Class 4 receiver (the receiver is integrated into the equipment) known as?**
- Class 4 Circuit
 - Class 4 Device
 - Class 4 Utilization Equipment
 - Class 4 equipment