

Lesson 1 Questions:

1. When does the current NEC code become effective?
 - a. January 2005
 - b. Upon local or state adoption
 - c. July 2005
2. What is the purpose of the NEC Code?
 - a. The training of electrical inspectors.
 - b. As an instruction manual for electrical contractors.
 - c. The practical safeguarding of persons and property from hazards arising from the use of electricity.
 - d. All the above
3. Why is the code arrangement important?
 - a. The chapters go from the easiest to the hardest.
 - b. Chapters 1-4 refer to general wiring and 5-8 supplements and modify the others for special conditions.
 - c. The chapters are arranged in the order of inspecting an electrical installation.
 - d. All the above
4. How does Article 110 Requirements for Electrical Installations relate to an electric sign installation?
 - a. Access to the electrical equipment (Signs).
 - b. Approval of conductors and equipment (Signs).
 - c. Require installation instructions for listed equipment (Signs).
 - d. All the above.

Answers:

1. b
2. c
3. b
4. d

Lesson 2 Questions:

1. Where is the information to size the primary branch circuits?
 - a. Article 210
 - b. Article 225
 - c. Article 600
2. What are considered suitable for grounding and bonding?

- a. Listed pressure connectors
 - b. Sheet metal screws
 - c. Soldered connections
 - d. All the above
3. What colors are suitable for insulated bonding conductors?
- a. White
 - b. White with green strip
 - c. Green
 - d. All the above

Answers:

- 1. c
- 2. a
- 3. c

Lesson 3 Questions

1. Why is Chapter 3 important to the complete installation?
- a. It outlines the wiring schematics
 - b. It outlines the wiring methods used in all wiring installations
 - c. It tells us how to bend conduit
 - d. All the above
2. How does Chapter 3 deal with conductors?
- a. Specifies the minimum size of conductors
 - b. Refers to other articles for modification.
 - c. Allows secondary and primary wiring in the same space
 - d. All the above
3. Will GTO wire be found in this section?
- a. Yes
 - b. No
 - c. When provided with sleeving

Answers:

- 1. b
- 2. d
- 3. b

Lesson 4 Questions:

1. Where can you use 3/8" trade size Flexible Metal Conduit (FMC)?
- a. In a wet location
 - b. For primary wiring in lengths not exceeding 6'
 - c. For secondary conductors over 1000 volts
 - d. All the above

2. Where can Liquidtight Flexible Metal Conduit (LFMC) be used?
 - a. For secondary conductors over 1000 volts in ½" trade size
 - b. In a wet location
 - c. For primary wiring
 - d. All the above
3. Where can Electrical Nonmetallic Tubing (ENT) be used?
 - a. In dry location for primary wiring
 - b. For secondary wiring over 1000 volts
 - c. In a wet location

Answers:

1. b
2. d
3. a

Lesson 5 Questions:

1. When an external switch is connected and placed on the raceway of a sign how many purposes can it have?
 - a. Convenience
 - b. As the disconnect within site
 - c. For fire department use
 - d. All the above
2. How is Article 600 different from the first four Chapters?
 - a. It explains how to engineer a sign
 - b. It can supplement and modify other sections of the code
 - c. It specifies how many signs can go on a building or pole
 - d. All the above
3. When do electric signs require Listing?
 - a. When local zoning has adopted the NEC
 - b. When the State has adopted the NEC
 - c. All the above

Answers:

1. d
2. b
3. c

Lesson 6 Questions:

1. Marking and labels when do they need to be visible?
 - a. During installation and relamping
 - b. When the owners representatives are present
 - c. Upon annual return trips by the zoning officials
 - d. All the above
2. How does the wiring methods in 600.5 (C) (2) modify Chapter 3 wiring methods?
 - a. It will allow primary and secondary conductors in the same raceway
 - b. It will allow flood lights to be mounted to signs and connections run in the raceways
 - c. It will allow primary and secondary wiring in our transformer boxes
 - d. All the above
3. When does the branch or control circuit to a sign need to be lockable?
 - a. When it is convenient for the owner to shut off
 - b. When it is out of site of the sign
 - c. During electrical inspection
 - d. All the above

Answers:

1. a
2. d
3. b

Lesson 7 Questions:

1. When is it required to bond all dead metal parts to an equipment grounding conductor?
 - a. Only when an electrical inspection is required
 - b. Always

- c. Only when Listed signs are installed on metal poles
- d. All the above

2. Can equipment grounding conductors be installed in plastic conduit with secondary conductors?

- a. Yes
- b. No
- c. When electrical inspection is required

3. Does Article 250 Grounding and Bonding apply to signs?

- a. Yes
- b. When modified and supplemented by article 600
- c. When mounted on metal poles
- d. All the above

Answers:

- 1. b
- 2. b
- 3. d

Lesson 8 Questions:

1. Do all of our enclosures require to be made of metal?

- a. Yes
- b. Enclosures can be made of other materials if Listed for the purpose
- c. When the enclosures are less than 1000 volts
- d. All the above

2. Do Field installed section letter signs require field inspection?

- a. When installed in conformance with their installation instructions
- b. Yes
- c. When field connections are required
- d. All the above

3. Can transformers be installed over a suspended ceiling?

- a. When securely fastened in place and direct wired
- b. When cord connected
- c. When mounted directly to the ceiling frame
- d. All the above

Answers:

1. b
2. d
3. a

Lesson 9 Questions:

1. Is secondary-circuit ground fault protection required on all transformers?
 - a. Yes
 - b. Only on transformers rated over 1000 volts
 - c. No
 - d. Only on transformers rated at 7500 volts to ground
2. Does Part II apply to all electric signs?
 - a. No
 - b. Only for field installed neon signs
 - c. Only to Listed signs
 - d. Yes
3. Shall wiring methods conform to Chapter 3
 - a. Yes
 - b. Unless modified by Article 600
 - c. Primary wiring shall conform to Chapter 3
 - d. All the above
4. When using non-metallic as a raceway for GTO wire which will apply?
 - a. GTO wire shall be # 14 AWG only
 - b. Non-metallic conduit must be installed 1 ½ from a ground plane
 - c. GTO wire shall be installed in sleeving
 - d. All the above

Answers:

1. c
2. b
3. d
4. b

Lesson 10 Questions:

1. What wiring methods can be used with GTO cable?
 - a. Shall be spaced 1 ½" from other conductors
 - b. Can have zero spacing in a metal conduit
 - c. Shall be installed where they are not subjected to physical damage
 - d. All the above
2. How far can you run a secondary circuit (GTO) conductor in metal conduit from the transformer or power supply to the first tube electrode connection?
 - a. Unlimited as long as it is in sleeving
 - b. 20 feet total
 - c. 40 feet total
 - d. 50 feet total
3. Do electrode receptacles require Listing?
 - a. Only when installed in a wet location
 - b. No
 - c. Yes
 - d. As required by NFPA
4. Do metal letters illuminated with low voltage LEDS require equipment grounding?
 - a. Yes
 - b. No
 - c. Only when used outdoors

Answers:

1. d
2. b
3. c
4. a