## **Chapter 27 Test: Protective Grounds**

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Class: ELT 211	Date:	

Carefully read each question, and circle the letter next to the correct answer.

- 1. The installation of protective grounds and short circuiting leads at the worksite protect against what hazards?
  - a. Static charges on the line
  - b. Induced voltages
  - c. Accidental energizing of the line
  - d. All of the above

2. Finish this statement: If it isn't grounded \_\_\_\_\_\_.

- a. That's okay
- b. It isn't dead
- c. Lock it out
- d. It's floated
- 3. What must occur before previously energized lines are grounded?
  - a. One phase must be tested for voltage
  - b. The neutral must be tested for voltage
  - c. Each phase must be tested for voltage
  - d. The line must be locked out

- 4. How should the first connection be competed when connecting protective grounds?
  - a. The first connection should be to a grounded conductor
  - b. The first connection should be to the nearest phase conductor
  - c. The first connection should be made to the lineman
  - d. The first connection should be made to the furthest conductor
- 5. If it's not grounded, it's not dead.
  - a. True
  - b. False
- 6. Which of these is not a requirement for a good protective ground?
  - a. Loose connections
  - b. A low resistance path to earth
  - c. Adequate current carrying capacity of grounding equipment
  - d. Connections made to proper points
- 7. An inadequately installed can be what?
  - a. An inconvenience
  - b. Safe during most conditions
  - c. Aesthetically unpleasing
  - d. A safety hazard
- 8. How should protective grounds be removed after work is done, and the line is ready to be reenergized?
  - a. In the same order as they were installed
  - b. The first connection should be the one attached to the grounding conductor
  - c. The sequence doesn't matter
  - d. In the reverse order of installation

- 9. An anchor rod, or ground rod can be used as a grounding point if a neutral or static wire is not available.
  - a. True
  - b. False
- 10.If a good grounding point is unavailable, what must be done by the lineman to insure a good ground is available?
  - a. A copper wire is laid on the ground
  - b. The truck is use as a grounding point
  - c. The conductors are connected together
  - d. A ground rod must be driven
- 11. If a work location is in sight of the disconnecting means used to deenergize the line, must occur to insure that the line is in fact deenergized?
  - a. Work is permitted without grounds in sight of a disconnecting means
  - b. If the disconnecting means is in sight the line is considered grounded
  - c. Grounds must be installed at the worksite
  - d. Both a and b
- 12. What is the purpose of a cluster block?
  - a. To create an equipotential zone for the lineman to work
  - b. To provide a platform for the lineman to stand
  - c. To make the grounds more highly visible
  - d. To provide the lineman a place to store hot line tools
- 13. If protective grounds are not installed on a line it is to be considered what?
  - a. Energized
  - b. Deenergized
  - c. Defective
  - d. Safe

## 14. If a deenergized conductor is to be cut or opened, what must occur?

- a. It must be grounded on both sides of the open
- b. As long as one side is grounded the conductor is considered deenergized
- c. It must be bridged with a jumper cable at the point to be opened
- d. Both a and c

## 15. How are protective grounds installed?

- a. With rubber gloves
- b. With a hot line tool
- c. With bare hands
- d. Both a and b

16.It is possible to ground underground circuits at riser poles.

- a. True
- b. False
- 17.If an underground circuit is to be worked on while not energized, is it necessary to ground the circuit?
  - a. Yes
  - b. No
  - c. occasionally
  - d. The circuit is already grounded
- 18. When a circuit is deenergized, what precautions must be taken to insure the line is not reenergized?
  - a. Lock out, tag out, try out
  - b. Hold off tagging
  - c. Jumpers must be arranged so that they will be hard to reconnect, and it should be communicated that work is being performed on the line
  - d. All of the above

- 19. How are conductors to be treated until protective grounds are installed?
  - a. As deenergized
  - b. As safe
  - c. As live conductors
  - d. As an inconvenience

20. What special ground is used in the process of stringing wire?

- a. A running ground
- b. A walking ground
- c. A traveling ground
- d. A stringing block