

Underground residential distribution (URD) systems

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Name: _____

Class: ELT 201

Date: _____

Test #

Results: _____

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

1. What is the name of the piece of hardware in this picture?



- a. elbow arrester
 - b. primary bushing
 - c. load break elbow
 - d. secondary bushing
2. To help protect URD cables during back filling, some utilities fill the areas under and above the cables with _____.
 - a. Concrete
 - b. Sand
 - c. Insulating foam
 - d. Gravel

3. A typical URD system provides _____.
a. Single-phase, three wire secondary service to residential customers
b. Three-phase, three wire secondary service to commercial customers
c. Primary distribution service to rural subdivisions
d. Two-phase service to industrial and residential businesses.
4. A URD installation in which multiple utilities such as electric, gas, cable TV, and telephone lines are buried in the same trench is known as a _____.
a. Shallow, or bored trench
b. Common, or joint trench
c. Dependent, or narrow trench
d. Radial, or plowed trench
5. A type of URD system in which both ends of the system are connected to the same phase of an overhead primary is called a _____.
a. Radial-feed system
b. Double feed system
c. Cross feed system
d. Loop-feed system
6. The cable in this picture can be best described as?



- a. Concentric metallic primary cable
b. Non-stranded primary cable
c. Quadruplex secondary cable
d. Triplex secondary cable

7. The basic purpose of a fault indicator in a URD system is to sense fault current and display some type of indication that _____.
a. Reduces trouble shooting time and effort
b. De-energizes the entire loop
c. Re-energizes the system without the need for repair
d. Pulses the system with high voltage
8. Lightning protection for a URD system is most likely to come in the form of _____.
a. Lightning rods
b. Bayonet fuses
c. Surge arrestors
d. Capacitance discharge units
9. If an elbow surge arrestor is being added to a two-bushing transformer located at the end of a radial feed URD system, the best place to install the surge arrestor is in the _____.
a. Tap selector opening
b. Bayonet fuse holder
c. Elbow connection at either secondary
d. Unoccupied bushing of the transformer
10. A dual-rated cable connector is most likely to be stamped or marked with _____.
a. TWO2
b. THHN
c. ALCU
d. ACLU
11. In a typical electric meter, two secondary cables from a pad-mounted transformer enter the meter and are terminated on the _____.
a. Line side
b. Load side
c. Load break
d. Switch gear

12. Before a termination is applied to the end of a secondary URD cable that has an aluminum conductor, the conductor should be wire brushed and coated with _____.
- a. An insulating gel
 - b. An antioxidant
 - c. Heat shrink
 - d. Rubberized tape