Pretest Power Quality

1. What is “power quality”? 
2. Which devices are typically more likely to be affected by power quality issues? 
3. What is the main cause of voltage surges at user sites? 
4. What is the difference between a voltage surge and a voltage swell? 
5. What are voltage transients? 
6. How do transient voltage surge suppressors work? 
7. What are metal-oxide varistors used for? 
8. What are harmonics? 
9. What is the major cause of harmonics? 
10. What are non-linear power devices? 
11. What is the difference between harmonics and transients? 
12. Which power is not significantly affected by voltage distortion? 
13. What is a triplen harmonic? 
14. What are some of the most common non-linear loads? 
15. Do three-phase power converters generate third-harmonic currents? 
16. What are the advantages and disadvantages of DC drives compared with AC drives? 
17. What are the advantages of electronic and magnetic ballasts? 
18. What is a saturable device? 
19. What is electrical noise? 
20. What is electromagnetic interference and what is another name for it? 
21. What is normal-mode noise?
22. What is common-mode noise?

23. What is low-voltage noise? High voltage?

24. Which type of disturbances do lightning produce? (common-mode or normal-mode)

25. What is electromagnetic coupling?

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27. What type of connection to ground is required by the NEC and CEC?

28. What is the difference between bonding and grounding? CEC definitions?

29. What is touch potential?

30. What must be done with the grounding conductor from each individual power supply feeding a load?

31. What are the two methods of shielding?

32. What is the primary purpose of surge protection?

33. What are arc discharge devices best suited for?

34. What is a varistor?

35. What is a “Voltage Clamp”?

36. **SKIP PAGES 50-END**