1. What is the “Safety valve” in an electrical system?

2. What organizations establish standards (ratings, types, classifications, etc.) for overcurrent devices?

3. What is the maximum value for a fuse when it is permissible to round up to the next common size?

4. What temperature rating is used for switches when the conductors are No. 1/0?

5. What precaution must be taken with a switch that is rated “Isolation Switch Only”?

6. What rating must be on a switch used for a motor circuit?

7. What are some ratings that must be considered when installing fuses other than the amperage rating?

8. What is the maximum allowable circuit breaker for a conductor with a rating of 475 A?

9. What is the maximum allowable circuit breaker for a conductor with a rating of 675 A?

10. What is the term used to describe the maximum value of short circuit or fault current a fuse can safely disconnect at rated voltage?

11. What two factors are used to determine equipment withstand ratings?

12. Which type of current flows within the normal conducting path?

13. How does magnitude of current affect response time for a fuse element?

14. How are the two elements connected in a dual-element fuse? (series or parallel)

15. What are the two sections in a Dual-element fuse? What is the maximum percentage of the motor FLA when using dual-element, time-delay fuses for motor overload protection?

16. What about motors with a SF less than 1.15?

17. Are you allowed to use a TD fuse larger than 175% of the motor FLA?
18. What is the difference between a dual-element, time-delay fuse and a dual-element, time-delay, current-limiting fuse?

19. What material is used for the links in the best current-limiting fuses?

20. Which fuse type has the lowest energy let-through?

21. What information must be shown on a cartridge fuse?

22. What are some methods of ensuring only fuses of the proper rating and type are installed in a system?

23. What unique feature on a Class R fuseblock ensures a standard (non-current-limiting) fuse will not be installed by mistake?

24. Do D-type or P-type standard fuses have low melting characteristics?

25. What is the interrupting capacity of a Class H fuse?

26. Which type of standard code fuse has the highest interrupting rating?

27. What type of protection is provided by HRCI fuses?

28. What type of protection is provided by HRCII fuses?

29. What determines if a fuse is considered “Time-delay”?

30. What is the interrupting rating for HRCI-R fuses?

31. What is the interrupting rating of a HRCI-R fuse installed in a standard (no rejection feature) fuseholder?

32. How do HRCI-J fuses compare physically with Class K and H fuses?

33. How do HRCI-T fuses compare physically with Class J fuses?

34. What is the smallest switch available for Class L type fuses?

35. Supplemental fuses are similar to what Class of fuse?

36. What is the diameter of a Class G fuse?

37. What standard plug fuse type consists of a separate fuse and adapter?
38. Which voltage scales should be used to first test a circuit for a blown fuse?

39. What voltage should be read across (line to load) a good fuse?

40. What resistance is measured across a good fuse that has been removed from the system?

41. What resistance is measured across a bad fuse that has been removed from the system?

42. How do cable protectors differ from fuses?

43. What is the advantage of having separate cable limiters installed on individual customer conductors when they are fed from a transformer?

44. Using the time-current curve in Figure 17-23 how many seconds would a 60 A fuse take to blow with the same 100 A starting current given in the example?

45. What two current values are often used for withstand ratings?

46. What is the peak let-through current for a 40,000 A short-circuit current and a 400 A fuse based on Fig. 17-25?

47. Which has a better current-limiting ability given the same amperage rating, fuses or circuit breakers?

48. What is the most common type of circuit breaker in use today?

49. What does the term “trip-free” mean in relation to a circuit breaker?

50. What is indicated by “SWD” on a breaker?

51. What is the maximum percent loading (continuous) permitted for a breaker that is not marked with a percent?

52. What is the maximum interrupting rating for a breaker that does not have a rating shown on the breaker?

53. Is a breaker rated 347/600 V permitted on a 600V, 3 wire, delta ungrounded system?
54. What are some factors that can affect proper operation of circuit breakers?

55. What must happen when two series-tested combination breakers experience a short circuit?

56. What is required by Rule 14-014(e)?

57. What is the maximum percentage of the motor FLA for instantaneous-trip circuit breaker ratings?