1. What are the four categories of central electric heating?

2. What are the main components of an electric furnace?

3. Why is an electric furnace more versatile than an oil or gas furnace? (Several reasons)

4. What is the standard rating for each bank in an electric furnace-heating element?

5. Why are the elements in electric furnaces designed to heat without glowing red?

6. How are electric heating elements in furnaces protected from over heating?

7. What are the four functions of a central electric heating control system?

8. What type of thermostat is typically used for central electric heating units?

9. At what point in the operation of a furnace should the blower start?

10. How is airflow verified in the control system before the elements are energized in an electric furnace?

11. Why is airflow necessary before the elements are energized in an electric furnace?

12. Why is it not necessary for the fan to continue after the last element is de-energized?

13. What is an electric heat sequencer and what is its purpose?

14. How does a thermal-delay relay operate?

15. What is the sequence of events when a call for heat is initiated in an electric furnace?

16. What is multi-stage control of an electric furnace?

17. List two methods of control for a two-stage system on an electric furnace?

18. What are the two types of limit protection for an electric furnace?
19. Why is a plenum high-limit control not used for electric furnaces?
20. How is an electric boiler different from an electric hot air furnace?
21. How many aquastats are on a typical electric boiler?
22. How is pressure maintained in an electric boiler system?
23. How is expansion and contraction of heating water accommodated?
24. What is the advantage of open-coil elements in duct heaters?
25. Where are tubular or finned elements used in duct heaters?
26. What are the two types of construction for duct heaters?
27. What are the four applications of duct heaters?
28. What is the term used to describe the heating of supply air for an air handling system with a duct heater?
29. What term is used for a duct heater installed in a heat pump system for peak times?
30. Why is minimum airflow necessary when duct heaters are installed in air control systems?
31. How much straight duct should be left before a transition or bend when installing a duct heater?
32. How much clearance is required around an electric furnace less than 50 kW?
33. Which type of duct heater can be mounted in any position?
34. Which type of duct heater can only be mounted in the horizontal position?
35. What is the main problem with on/off, multi-stage control?
36. What is multi-stage, step control?
37. What is the advantage of using more, smaller units for a heating element?
38. What is the benefit of SCR control of an electric heating element?

39. Describe combination control of an electric heating element in a central electric heating system?