Module 23 Unit 1

1. What is a thyristor?
2. What are some applications of SCRs and Triacs?
3. What is a “controlled rectifier”?
4. What is a bistable device?
5. What are the three terminals on a SCR?
6. What is added to a diode to make an SCR?
7. What is anode forward current?
8. How are most SCRs damaged?
9. What is forward breakover voltage?
10. What is holding current?
11. What are the terms used for turning an SCR on and off?
12. How much gate voltage is required to turn on an SCR?
13. What electrical devices are the equivalent of an SCR?
14. How is an SCR typically commutated?
15. What is phase control?
16. At what point in the cycle can an SCR be fired? (degrees)
17. What is the first step in testing an SCR with an ohmmeter?
18. Where must sufficient current flow to trigger an SCR?
19. What is the main advantage of resistor-capacitor triggering?
20. What components are required for full AC load control?
21. What is the main limitation of a triac?
22. What are the terminals typically found on a triac?
23. How is a triac most different in operation from an SCR? (3 ways)

24. What is the main purpose of a Diac?

25. What device is actually a voltage sensitive switch?

26. What is the effect of break-over voltage on a diac?

27. How many terminals are on a Diac?

28. What is the main purpose of a UJT?

29. How many leads are on a UJT?

30. What is a LASCR?

31. How is a LASCR triggered into conduction?

32. How many terminals are on a LASCR?

33. Where is the SCR connected for speed control of a DC shunt motor?

34. List the components found in the regulated battery charging circuit on page 57.

35. How is the triac firing controlled in the Incandescent lamp dimmer circuit?

36. What is the result of setting the rheostat to a high value in the diac-triac lamp dimmer?

37. What device serves to isolate the control portion of a circuit from the power circuit?

38. What function of a motor is typically done by a mechanical switch but can also be accomplished by a triac control circuit?