1. The manufacturer of a selected diode gives the rate of fall of the diode current di/dt = 20 A/µs, and a reverse recovery time of trr = 5 µs. What value of peak reverse current do you expect? [44.72 A]
2. Explain reverse recovery characteristics of a power diode.
3. Explain V-I Characteristics of a thyristors.
4. Explain the switching characteristics of a thyristors.
5. Explain the various methods of turning-on a thyristors.
6. Write a short notes on the following:
7. Latching current
8. Holding current
9. Forward break-over voltage
10. LASCR
11. Two equal source voltages of 220V peak and phase shifted from each other by 180˚ are supplying a common load as shown. (a) Show the load voltage & voltage across D1; (b) describe when diode D1 will experience *VRRM*; and (c) determine the *VRRM* magnitude considering a safety factor of 1.5.

