

PART C

Answer any two full questions, each carries 15 marks.

- 14 a) For a single phase fully controlled ac voltage controller supplying a resistive load, (15)
derive expression for, rms value of the output voltage.
- 15 a) Explain the operation of single phase to single phase step up single phase (10)
cycloconverter.
- b) Enumerate some of the merits and applications of cycloconverters. (5)
- 16 a) Explain different types of load torques. (6)
- b) Explain in detail about steady state stability. (9)
- 17 a) Write down the basic performance equations for a dc motor (7)
- b) Derive the expression of motor torque of load with rotational motion (8)
