

Class test II

Sub: ETU 503 Power electronics

Marks: 15

Date: 22nd sept, 2015

Note: Que.no 1 is compulsory. Solve any one from question no.2 and 3.

Q1. A 1-phase ^{Half} semiconverter is operated from 110 V, 50Hz ac supply and load is of $10\ \Omega$. If the average output voltage is 30% of the max. possible average output voltage then determine a) Firing angle b) Rms & average output current c) Rms & average thyristor current 6M

Q2. a) With the help of circuit diagram, explain the working of step up/step down chopper.

b) Explain the different control strategies used for operating the switches in dc chopper. 6M

Q3. Explain the operation of single phase, half controlled bridge converter with resistive load and inductive load with the associated waveforms. 6M

Q4. Explain the basic principle of operation of cycloconverter. 3M

OR

Q5. Explain the basic principle of operation of dual converter. 3M