

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2020 COURSE)
B.Tech.Sem - IV ELECTRICAL : WINTER- 2022
SUBJECT : POWER ELECTRONICS

Day : Monday

Time : 02:30 PM-05:30 PM

Date : 28-11-2022

W-24550-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.

- Q.1 Write a note on IGBT (10)
- OR
- Q.1 Explicate static induction transistor SIT (10)
- Q.2 Explicate single phase converter with neat circuit diagram and waveform (10)
- OR
- Q.2 Elucidate three phase semi controlled bridge converter with neat circuit diagram and waveform (10)
- Q.3 Elucidate single phase AC voltage regulator with applicable circuit diagram (10)
- OR
- Q.3 Elucidate three phase AC voltage regulator with relevant circuit diagram (10)
- Q.4 What are various types of choppers (10)
- OR
- Q.4 Explicate frequency modulation technique for controlling a chopper (10)
- Q.5 Elucidate voltage source inverter VSI with neat circuit diagram (10)
- OR
- Q.5 Explicate current source inverter CSI with neat circuit diagram (10)
- Q.6 Elucidate use of power electronics in solar energy (10)
- OR
- Q.6 Explicate use of power electronics for smart grids. (10)
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