

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

Day : Monday
Date : 20-06-2022

S-24550-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Write a note on metal oxide semiconductor field effect transistor MOSFET in detail with relevant sketches (10)

OR

Q.1 Give details of TRIAC with relevant sketches (10)

Q.2 Explicate 3 phase fully controlled bridge converter with neat circuit diagram and waveform (10)

OR

Q.2 Explicate total harmonic distortion THD (10)

Q.3 Elucidate construction and characteristics of TRIAC (10)

OR

Q.3 Elucidate AC voltage regulator with relevant circuit diagram (10)

Q.4 Classify choppers and explain (10)

OR

Q.4 Explicate pulse width modulation PWM technique for controlling chopper (10)

Q.5 Explicate PWM inverter with neat circuit diagram (10)

OR

Q.5 Explicate inverter with multi pulse modulation (10)

Q.6 Elucidate use of power electronics in wind energy (10)

OR

Q.6 Elucidate use of power electronics for smart cities (10)

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