

ADMISSION NUMBER												

## School of Engineering B.TECH Electrical Engineering

B.TECH Electrical Engineering Mid Term Examination - Nov 2023

Duration : 90 Minutes Max Marks : 50

## Sem V - G2UB503C - Power Electronics

<u>General Instructions</u> Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

1)	Compare the different power electronic switches.	K2 (2)					
2)	Define duty cycle.	K1 (3)					
3)	Explain the principle of chopper operation.						
4)	Illustrate the types of power transistors.						
5)	Model a step-down chopper circuit.	K3 (6)					
6)	Develop differences between holding current and latching current in an SCR.	K3 (9)					
7)	Classify the power electronic converters into different types.	K4 (8)					
8)	Analyse the features of MOSFET and BJT.	K4 (12)					
	OR						
	Analyse how a dual convertor using two full convertors give four	K4 (12)					

Analyse how a dual converter using two full converters give four <sup>K4 (12)</sup> quadrant operation.