Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION – SUMMER • 2014

Su	bject	Code: 151703 Date: 17-06-2014	
Su	bject	Name: Electronics in Industries	
	ne: 1 tructio	0.30 am - 01.00 pm Total Marks: 70	
	1. 2.	Attempt all questions.	
Q.1	(a)	Prepare an application of fast recovery diode. Draw the circuit diagram and explain.	07
	(b)	Prepare an application of Schottky diode. Draw the circuit diagram and explain.	07
Q.2	(a) (b)	Draw and compare the characteristics of general purpose diode and MOS diode. Draw any application of MOSFET. Can a BJT replace the MOSFET? Why?	07 07
	(b)	OR Explain the construction and characteristic of LASCR.	07
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Q.3	(a)	Explain the application of GTO. Differentiate SCS and MCT in detail.	07 07
	(b)	OR	U/
Q.3	(a) (b)	Draw and explain construction, working and characteristics of BENISTOR Which of the turn on method you will use for your application? (Use any application of your choice) Why?	07 07
Q.4	(a)	Draw and explain the UJT characteristics. Which portion of it is used for SCR turn on off?	07
	(b)	Prepare application of SBS. Explain its working. OR	07
Q.4	(a)	Which type of the commutation circuit is batter? Explain why?	07
	(b)	What is the need of gate protection? Explain. Draw the circuit required for it.	07
Q.5	(a)	Prepare half wave rectifier with R-L load. Explain its working.	07
	(b)	Prepare half wave controlled rectifier with R-L load. Explain its working. OR	07
Q.5	(a)	Prepare six phase half wave controlled rectifier. Explain its working.	07
	(b)	Prepare three phase fully controlled bridge rectifier. Explain its working.	07
