Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER • 2014

Subject Code: 162003		Code: 162003 Date: 23-05-2	Date: 23-05-2014	
•	: 10	Name: Control of Electrical Drives 0:30 am - 01:00 pm Total Marks	: 70	
msu u	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)		07 07	
Q.2	(a) (b)	List and explain three operating modes of electric drive. Explain that the steady state stability of a drive depends on relative characteristics of the motor and load and not just on motor or load characteristics. Support your answer with different cases of stable and unstable operating points.	07 07	
	(b)	OR Explain different transients produced when a DC shunt motor is started with no load.	07	
Q.3	(a)	•	07	
	(b)		07	
Q.3	(a)	1	07	
	(b)	and demerits of field control in dc motor. Explain how starting current of dc motor is controlled between two limits of Imax and Imin using starting resistors.	07	
Q.4	(a)	<u> </u>	07	
	(b)	waveforms with RLE load. Explain single phase dual converter. OR	07	
Q.4	(a) (b)	Explain separately excited DC drive controlled by chopper.	07 07	
Q.5	(a)	• • • • • •	07	
	(b)		07	
Q.5	(a)	OR List different control strategies in single phase Induction motors. How stator voltage is controlled using semiconductor controllers in single phase Induction motors?	07	
	(b)	•	07	
