Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-1st / 2nd (SPFU) EXAMINATION- WINTER 2015

St T	ubjec ime: (structi	t Name: Electrical Technology 02:30pm to 05:00pm	Date:28/12/2015 Fotal Marks: 70	
	2	2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks		
Q.1	(a) (b)	Compare 3-phase AC supply system with 1-phase AC supply What is power factor? Explain the methods of power factor in	•	07 07
Q.2	(a) (b)	Explain electromechanical energy conversion. Explain construction and working principle of d.c. generator.		0′. 0′.
Q.3	(a) (b)	Explain methods of speed control of d.c. motors. Explain construction and working principle of 3-phase inductions.	ion motor.	0′2 0′2
Q.4	(a) (b)	Why starter is use to start 3-phase induction motor? Explain s Explain construction and working principle of synchronous m		07 07
Q.5	(a) (b)	What is the mean of drive? Discuss the classification of electric Compare electric drive with mechanical drive. Discussion disadvantages of electric drive.		07 07
Q.6	(a) (b)	Explain AND gate, OR gate, NOR gate and NAND gate with Explain R-S and J-K flip flop.	truth table.	0′. 0′.
Q.7	(a) (b)	Why starter is use for d.c. motor? Explain three point drawbacks of three point starter. Explain types of d.c. motor with diagram.	starter. Also write	07
