Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III • EXAMINATION – SUMMER 2015

Subject Code: 133402			Date: 29/05/2015	
Ti	-	Attempt all questions. Make suitable assumptions wherever necessary.	70	
Q.1	(a) (b)	What is an electrical drive? Draw the block diagram of electrical drives and explain it. Also disscus it's advantages? Explain classification of electric drives and also explain factors affecting the selection of drive.	07	
Q.2	(a) (b)	Draw and explain various characteristic of DC shunt motor. Explain Characteristics of DC series motor and explain why series motor is never started on NO-load condition. OR	07 07	
	(b)	Explain Torque-slip characteristics for 3-Phase Induction motor.	07	
Q.3	(a) (b)	With a neat sketch, explain the four-point dc starter? Explain Capacitor Start Induction motor. OR	07 07	
Q.3	(a) (b)	Explain the necessity of starter for three-phase induction motors. Explain split phase induction motor with neat diagram.	07 07	
Q.4	(a) (b)	Explain speed control methods of DC shunt motor. With a neat sketch, explain the rotor resistance starting of slip ring motor. OR	07 07	
Q.4	(a) (b)	Compare chopper and Controlled rectifiers. Explain Electric braking of DC shunt motor.	07 07	
Q.5	(a)	Explain the single phase half-controlled rectifier for control of DC separately excited motor? Explain voltage/frequency speed control method for induction motor.	07	
	(b)	Explain voltage/frequency speed control method for induction motor. OR	07	
Q.5	(a) (b)	Explain the solid-state speed control of A.C.drives using inverters? Explain Half bridge inverter with inductive load.	07 07	
