Seat	No.:		

Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE- SEMESTER- 1st / 2nd EXAMINATION - SUMMER 2016

Subject Code: ENG005		Date:31/05/2016	
•	2:30	me: LINEAR ELECTRICAL NETWORKS PM to 5:00 PM T	Cotal Marks: 70
1. 2. 3.	Ma	empt any five questions. ke suitable assumptions wherever necessary. ures to the right indicate full marks.	
Q.1	(a) (b)	Explain Kirchhoff's Laws. Explain delta to star transformation.	07 07
Q.2	(a) (b)	Explain Thevenin's Theorem. Explain the Superposition Theorem with example.	07 07
Q.3	(a) (b)	Explain Duality. State and prove Convolution Integral	07 07
Q.4	(a) (b)	Explain initial conditions in circuit which contain resistor and induc Explain Necessary Conditions for Driving Point Impedance.	otor. 07
Q.5	(a) (b)	Explain resonance in series R-L-C circuit. What is Laplace Transform? Explain importance and applicate Laplace Transform.	of 07 ations of 07
Q.6	(a) (b)	Derive equation of resonant frequency for parallel resonance condit Explain z-parameter in terms of h-parameter.	ion. 07 07
Q. 7	(a)	Explain maximum power transfer theorem. Compare series resonance with parallel resonance.	07 07