Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (OLD) - EXAMINATION - SUMMER 2017

U			Date: 01/05/2017
Subject Name: Electrical & Electronic Measurement Time: 10:30 AM to 01:00 PM Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		Total Marks: 70	
Q.1	(a) (b)	Explain Hay's Bridge for measurement of self-inductance. Give classification of errors in detail.	07 07
Q.2	(a)(b)	Describe working of low voltage Schering bridge. Derive equal Capacitance and dissipation factor. Kelvin's double bridge, explain its working with diagram.	07 07
	(b)	OR Explain following terms 1. Accuracy 2. Precision 3. Sensitivity 4. Resolution	07
Q.3	(a) (b)	Explain construction and working of a Megger. Discuss Difficulties observed in measurement of high resistance OR	e. 07
Q.3	(a) (b)	Explain Anderson's bridge with vector diagram. Derive equation for ratio and phase angle error of a current transport of the contract of the	97 osformer. 07
Q.4	(a) (b)	Explain Murray loop test to determine the location of cable fault. Explain construction and working of flux meter. OR	07 07
Q.4	(a) (b)	Derive equation for ratio and phase angle error of a potential transformer. Explain comparison method of testing of current transformer.	ansformer 07 07
Q.5	(a) (b)	Explain Varley loop test for localization of short circuit fault. Short note on determination of B-H Curve. OR	07 07
Q.5	(a) (b)	Explain frequency selective wave analyzer with block diagram Explain harmonic distortion analyzer.	. 07 07
