Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) - EXAMINATION – SUMMER 2017

Date: 02/05/201'

Subject Name: Testing and Commissioning of Electrical Equipments

Time: 10:30 AM to 01:00 PM	Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a) (b)	What is Earthing? Describe factor affecting Earth Resistance. Discuss the factor on which intensity of Electric shock depends.	07 07
Q.2	(a)	Explain procedure of Inspection of an Electrical Machine prior to its installation.	07
	(b)	Write short notes on alignment of Electrical Machines OR	07
	(b)	Explain test methods for Temperature rise of Transformer as per IS 2026.	07
Q.3	(a)	Explain Vector group of Transformer.	07
	(b)	What is Polarization Index? Its significance with respect to Power Transformer.	07
		OR	
Q.3	(a) (b)	Discuss causes of troubles and failure of Transformers and their remedy. Explain rating of industrial rotating electric Machine and Estimation of rating of a Motor.	07 07
Q.4	(a)	State the various types of enclosures for rotating Electrical Machines and the type of cooling adopted in them.	07
	(b)	Explain different methods of Drying out of Rotating Machine. OR	07
Q.4	(a) (b)	Explain phase sequence test of synchronous Machines as per IS 7132: 1973. Describe the following tests to be conducted on 3-phase induction motor as per IS 4029: 2010 with suitable circuit diagrams. (1) High voltage, (2) Resistance Measurement	07 07
Q.5	(a)	Explain Varley loop test for finding cable fault.	07
	(b)	Explain construction, advantages and application of GIS.	07
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Q.5	(a)	Explain working of Lightning Arrester and location of it with reason.	07
	(D)	Explain possible trouble, causes and remedy of circuit breaker.	07
