Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII • EXAMINATION – WINTER • 2014** 

<b>Subject Name: Commissioning Of Electrical Equipment</b>			Date: 04-12-2014	
			Total Marks: 70	
	2.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a	Explain with setup sketch, Impulse testing for power	er <b>07</b>	
	(b	transformer.  List out the various tests on transformer.  Explain temp. Rise test for same.	07	
Q.2	(a	Explain power frequency and impulse voltage withstand tes	st <b>07</b>	
	(b	<ul> <li>on three phase distribution transformer.</li> <li>Explain Dielectric strength measurement test on transforme oil.</li> </ul>	er <b>07</b>	
		OR		
	(b	<ul> <li>Explain the purification and filtration process of transforme oil.</li> </ul>	er <b>07</b>	
Q.3	(a	Oive causes, consequences and remedies for the following abnormal conditions of 3-phase induction motor.  1. Overheating 2. Stalling 3. Excessive speed.	g <b>07</b>	
	(b	) State the methods of measurement of slip of inductio motor. Also explain any one in detail.  OR	n <b>07</b>	
Q.3	(a			
	(b	) What is the necessity of drying of electrical equipment Explain polarization index of 3-phase induction motor.	? <b>07</b>	
Q.4	(a	What is diff. between system earthing and structure earthin ? Explain with diagram, measurement of earth resistance i substation.		
	(b	Explain short circuit testing on circuit breaker with plan layout.	nt <b>07</b>	
		OR		
<b>Q.4</b>	(a	<ul> <li>Explain Murray test for earth fault location in undergroun cable.</li> </ul>	d <b>07</b>	
	(b		of <b>07</b>	
		3. Insulation co-ordination in sub station		

Q.5	(a)	Explain the causes of various troubles with commutator and brush gear in d.c. machines. Give remedies for same.	07
	<b>(b)</b>	Explain commissioning steps for synchronous machines	07
		OR	
Q.5	(a)	Define Degree of Protection of Induction Motor.	07
		Explain I.P. and I.C. codes for same.	
	<b>(b)</b>	Explain the testing of Voltage Regulators and Excitation Circuit of Synchronous Generator.	07

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