

GUJARAT TECHNOLOGICAL UNIVERSITY
PDDC - SEMESTER-VIII EXAMINATION – SUMMER 2016

Subject Code: X80901**Date: 10/05/2016****Subject Name: 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) Explain working of ELCB. What are the different tests performed on it? **07**
 (b) Explain variation of voltage and frequency on performance of Induction motor. **07**
- Q.2** (a) Explain the different methods of earth resistance measurement. **07**
 (b) Explain Vibration and Noise measurement of synchronous machines. **07**
- OR**
- (b) Explain the properties of Transformer oil. Explain Dielectric test of transformer oil. **07**
- Q.3** (a) Explain the significance of Polarization Index Number. Explain drying out procedure of Power Transformer. **07**
 (b) Explain steps for commissioning of a transformer. **07**
- OR**
- Q.3** (a) Explain different methods to measure the slip of induction motor. **07**
 (b) What is induction generator? State its commissioning procedure. **07**
- Q.4** (a) State the causes for vibration in motors and generators. Explain the harmful effects of vibration. How are the vibrations measured? **07**
 (b) Describe insulation resistance measurement test on a synchronous machine. **07**
- OR**
- Q.4** (a) What is the significance of polarity in case of C.T.? How can we test the polarity of Current transformer? **07**
 (b) Explain with the help of necessary diagrams the various types of tests performed on high voltage circuit breaker. **07**
- Q.5** (a) Explain the points of testing and commissioning of a substation. **07**
 (b) Give comparison between different types of neutral grounding. **07**
- OR**
- Q.5** (a) Explain steps for troubleshooting of a transformer. **07**
 (b) Explain the insulation resistance testing of a transformer. **07**
