

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
PDDC - SEMESTER-VIII • EXAMINATION – SUMMER • 2015

Subject Code: X 80901

Date: 07 /05/2015

Subject Name: Commissioning of Electrical Equipments

Time: 10:30 am - 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) What is the Polarization Index? Explain the significance of PI. 07
(b) Explain the suitability for parallel operation of transformer connection Yd1 & Dy11. 07
- Q.2 (a) What is the Drying out process? How Drying out process is carried out on electrical equipment. 07
(b) Explain how to measure the insulation resistance of 3-phase induction motor. 07
- OR**
- (b) How to locate a shorted stator coil in 3-phase induction motor? 07
- Q.3 (a) Explain the different methods of slip measurement of Induction Motor. 07
(b) State fault, causes and remedies with squirrel case induction motor. 07
- OR**
- Q.3 (a) How to measure the earth resistance & soil resistivity? Explain the experiment method for it. 07
(b) Explain the charging current making & breaking test for isolator. 07
- Q.4 (a) Explain Mechanical Endurance and Impulse testing of Circuit breakers. 07
(b) Explain troubleshooting and maintenance of circuit breakers. 07
- OR**
- Q.4 (a) How to carry out the bar to bar test on D.C. machine? Explain with circuit diagram. 07
(b) Explain the commissioning steps and tests for D.C. machines. 07
- Q.5 (a) List out the necessary conditions of Synchronization. Explain the circuit diagram of synchronization of alternator with grid. 07
(b) Explain commissioning steps and tests for synchronous machine. 07
- OR**
- Q.5 (a) Explain Murray loop test for fault detection in underground cables. 07
(b) What is the commissioning of electrical equipment? Explain the classification of different testing. 07
