

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code: 2180901

Date: 02/05/2017

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) What is Earthing? Describe factor affecting Earth Resistance. **07**
(b) Discuss the factor on which intensity of Electric shock depends. **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 **07**
- OR**
- (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) Discuss causes of troubles and failure of Transformers and their remedy. **07**
(b) Explain rating of industrial rotating electric Machine and Estimation of rating of a Motor. **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. **07**
- OR**
- Q.4** (a) Explain phase sequence test of synchronous Machines as per IS 7132: 1973. **07**
(b) Describe the following tests to be conducted on 3-phase induction motor as per IS 4029: 2010 with suitable circuit diagrams. **07**
(1) High voltage, (2) Resistance Measurement
- Q.5** (a) Explain Varley loop test for finding cable fault. **07**
(b) Explain construction, advantages and application of GIS. **07**
- OR**
- Q.5** (a) Explain working of Lightning Arrester and location of it with reason. **07**
(b) Explain possible trouble, causes and remedy of circuit breaker. **07**
