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Seventh Semester B.E. Degree Examination, Dec.2016/Jan.2017
Testing and Commissioning of Electrical Equipment

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions, selecting
atleast TWO questions from each part.**

PART – A

- 1 a. With neat sketch name the various accessories and fitments on transformer and briefly explain the function of each accessories. (10 Marks)
- b. Which are the four phasor groups adopted for standard connection of transformers? Explain any one with phasor diagram and winding connection. (10 Marks)
- 2 a. Explain the step by step procedure for drying out of a power transformer. (10 Marks)
- b. What is impulse testing? Explain the test set up used for impulse testing of transformers. (10 Marks)
- 3 a. Explain the function and principle of brush less excitation system. (10 Marks)
- b. State the various types of enclosures for rotating electrical machines and the types of cooling adopted in them. (10 Marks)
- 4 a. State and explain the procedure of various tests on synchronous machine and their significance. (10 Marks)
- b. Explain the procedure of low slip test and method of calculation of X_q from the same. (10 Marks)

PART – B

- 5 a. Give an example of rating plate of an induction motor. (05 Marks)
- b. Explain the procedure of foundation of electric machines. (10 Marks)
- c. Explain the procedure of shaft alignment of electrical machines. (05 Marks)
- 6 a. Explain the procedure of assembly of bearing on a shaft and state the various troubles with bearings and their remedies. (12 Marks)
- b. State the various categories of tests on 3-phase induction motor. (08 Marks)
- 7 a. Explain no-load test and locked rotor test on a 3 – phase induction motor. What data does such a test provide? (10 Marks)
- b. Explain the different methods of measurement of slip of a induction motor. (10 Marks)
- 8 a. What are the important rated quantities of low voltage AC circuit breakers? (10 Marks)
- b. Explain the procedure of installation of circuit breakers and metal clad switch gears. (10 Marks)

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