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Sixth Semester B.E. Degree Examination, July/August 2005

Electrical & Electronics Engineering

Testing and Commissioning of Electrical Equipment

Time: 3 hrs.]

[Max.Marks : 100

Note: Answer any FIVE full questions.

1. (a) Explain the various steps in commissioning of power transformers. (10 Marks)
 (b) Write a note on testing of transformer oil. (5 Marks)
 (c) Explain impulse testing of power transformer. (5 Marks)
2. (a) Explain the various types of cooling of power transformer. (10 Marks)
 (b) Explain the maintenance schedule for power transformer of different capacities. (10 Marks)
3. (a) Explain mechanical tests for alignment and air gap symmetry. (10 Marks)
 (b) Write a detailed note on installation of induction motor. (10 Marks)
4. (a) Explain the procedure for drying out of induction motor. (10 Marks)
 (b) State different types of electrical tests done on induction motor. Explain any one test in detail. (10 Marks)
5. (a) State and explain the various abnormal conditions in synchronous generator and their effects. (10 Marks)
 (b) Write a detailed note on protection of rotating machine. (10 Marks)
6. (a) Explain the sudden three phase short circuit test on a synchronous machine. (10 Marks)
 (b) Write a note on ratings of low voltage circuit breaker. (10 Marks)
7. (a) State the various types of tests performed on high voltage A.C. circuit breaker. (10 Marks)
 (b) Explain the various steps in maintenance of circuit breakers. (10 Marks)
8. Write short notes on the following :
 - a) Buchholtz relay
 - b) Ratings of power transformers
 - c) Measurement of vibrations and balancing of rotating machines.
 - d) Measurement of insulation resistance and polarization index of synchronous machine

(4×5=20 Marks)