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10EE756

Seventh Semester B.E. Degree Examination, Dec.2014/Jan.2015
Testing & Commissioning of Electrical Equipment

Time: 3 hrs.

Max. Marks: 100

**Note: Answer FIVE full questions, selecting
at least TWO questions from each part.**

PART – A

- 1 a. What are the standard specifications of power transformers? (10 Marks)
b. Explain the procurement procedure of transformer. (10 Marks)
- 2 a. Discuss the procedure of filling the oil in a transformer tank. (06 Marks)
b. List out the various commissioning tests on a power transformer and explain any two of them.. (14 Marks)
- 3 a. What do you mean by cooling? Explain the different methods of cooling of turbogenerators. (10 Marks)
b. Enumerate the requirements of type tests and routine tests on synchronous machines. (06 Marks)
c. What is the essential difference between the sustained 3 phase short circuit test and sudden 3 phase short circuit test? (04 Marks)
- 4 a. Describe the procedure of low slip test and method of calculation of $x_{\alpha}x_q$ from the same. (10 Marks)
b. Describe the different methods of measuring DC winding resistance of synchronous machines. (10 Marks)

PART – B

- 5 a. Explain the foundation details used for induction motors. (08 Marks)
b. What modifications are necessary for an induction motor when it is used for hazardous location? (06 Marks)
c. Write a brief note on 'shaft alignment' of induction motor drive. (06 Marks)
- 6 a. Give the procedure of high voltage test setup for induction motor. (08 Marks)
b. What are the different methods of drying out of an induction motor? Explain in brief. (12 Marks)
- 7 a. How can you measure the slip of an induction motor? Write the various methods of measurement of slip. (10 Marks)
b. Briefly explain the methods of measuring temperature rise in an induction motor. (10 Marks)
- 8 a. List the different tests to be conducted on circuit breaker. (06 Marks)
b. Write a note on maintenance of circuit breaker. (08 Marks)
c. Explain briefly the commissioning tests on circuit breaker. (06 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.