



CBCS SCHEME

17EE752

Seventh Semester B.E. Degree Examination, Jan./Feb. 2023 Testing and Commissioning of Power System Apparatus

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain use of tools, accessories and instruments required for installation and maintenance work. (10 Marks)
b. Why drying of transformer is needed? Explain different methods of drying the same. (10 Marks)

OR

- 2 a. Explain the causes and prevention of accidents. (10 Marks)
b. Describe the test setup for impulse testing of power transformer. (10 Marks)

Module-2

- 3 a. Explain the different methods of measuring armature and field resistance of synchronous machines. (10 Marks)
b. What do you mean by cooling? Explain the different methods of cooling of turbo generator. (10 Marks)

OR

- 4 a. What do you mean by excitation system? Explain the different types with respect to synchronous machines. (10 Marks)
b. Describe the procedure of low slip test and method of calculation of X_a X_q from the same. (10 Marks)

Module-3

- 5 a. What are the standard specifications of induction motor? (10 Marks)
b. Write briefly on shimming work and shaft alignment during installation of induction motor. (10 Marks)

OR

- 6 a. What is static and dynamic balancing of shaft of induction motor? (10 Marks)
b. What are the various reasons for vibrations in induction motor? How are the vibration measured and what are the permissible vibration limits. (10 Marks)

Module-4

- 7 a. Explain various aspects to be considered in laying underground cables. (10 Marks)
b. What are the precautions necessary in cable jointing. (10 Marks)

OR

- 8 a. List the various test conducted on power cables at work and at site. (10 Marks)
b. State the factor to be considered while selecting a cable. (10 Marks)

Module-5

- 9 a. Explain in detail about maintenance of circuit breaker. (10 Marks)
b. Explain protective device in residential electrical installation. (10 Marks)

OR

- 10 a. Briefly explain the commissioning test on circuit breaker. (10 Marks)
b. Describe typical low voltage 3 phase 4 wire and single phase AC supply system for residential building. (10 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.