USN

17EE752

Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 **Testing and Commissioning of Power System Apparatus**

Max. Marks: 100 Time: 3 hrs.

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

Mo	du	<u>le-1</u>	

(10 Marks) What is artificial respiration? Explain. 1 a. Explain the methods of measuring insulation resistance in case of a transformer. (10 Marks) b.

OR

List out different types of transformer tanks. Explain methods of testing transformer tanks. 2 (10 Marks)

Explain briefly the drying of transformers.

(10 Marks)

Module-2

List out different steps to be followed while installing an alternator. (10 Marks)

List out factory tests, commissioning tests and performance tests to be conducted on b. (10 Marks) alternators.

OR

(10 Marks) Explain line charging capacity test on alternators 4 a.

Write a note on drying out of synchronous machines. b.

(10 Marks)

Module-3

Explain different methods used to dry out the windings of an induction motor. (10 Marks) 5 a.

Mention various stages in the installation of an Induction Motor. b.

(10 Marks)

Write a note on balancing the rotor while installing an Induction Motor. (10 Marks) 6 a. (10 Marks)

Explain vibration tests carried out on an Induction Motor. b.

Module-4

Explain inspection, storage, handling and transportation of power cables. (10 Marks)

How is insulation strength of a cable measured? Explain.

(10 Marks)

OR

Explain various aspects to be considered while laying underground power cables. (10 Marks) (10 Marks)

Explain how cable faults are located using Megger.

Module-5

What are the various steps to be followed while installing a circuit breaker? (10 Marks) 9

Explain the maintenance schedule of SF₆ circuit breaker. b.

(10 Marks)

OR

How is the electrical insulation of a building tested before commissioning? (10 Marks) 10

Write a note on Testing of earthing continuity in a building wiring.

(10 Marks)

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