

CBCS SCHEME

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15EE752

Seventh Semester B.E. Degree Examination, June/July 2019 Testing and Commissioning of Power System Apparatus

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Write the different types of tools and accessories are used in electrical installation work. (05 Marks)
- b. Explain the procedure for installation and location of the distribution transformers. (06 Marks)
- c. Write a note on Polarization Index. (05 Marks)

OR

- 2 a. Explain with neat sketch, dielectric strength testing of transformer oil. (08 Marks)
- b. Explain with neat circuit impulse test on transformer. (08 Marks)

Module-2

- 3 a. State the specifications of synchronous machine as per BIS standard. (05 Marks)
- b. Use of Hydrogen as a coolant in turbo generator is better. Justify. (05 Marks)
- c. Explain the procedure for measurement of armature winding and field winding resistances. (06 Marks)

OR

- 4 a. Explain with neat diagram of sudden short circuit test on synchronous machine and discuss the transient, sub transient and steady state reactances. (10 Marks)
- b. Sketch and explain insulation test of machine using megger. (06 Marks)

Module-3

- 5 a. Define drying out process. List the types of drying out and explain any one method of drying out process with neat sketch. (08 Marks)
- b. Describe that, shaft alignment is essential in rotating machine with neat sketches. (08 Marks)

OR

- 6 a. Discuss about the different temperature rise test methods on Induction Motors. (08 Marks)
- b. Write a note on vibrations and balancing of induction motor. (08 Marks)

Module-4

- 7 a. Explain the laying of power cables and control cables methods in substation and power station. (10 Marks)
- b. List the different types of tests carried out on underground cables. (06 Marks)

OR

- 8 a. Explain the location of faults using megger. (06 Marks)
- b. Explain the different methods of laying of underground cables. (06 Marks)
- c. List the types of Cable Joints. (04 Marks)

Module-5

- 9 a. Discuss the following tests in domestic wiring:
- (i) Open circuit test
 - (ii) Short circuit test
 - (iii) Continuity test
 - (iv) Earthing test. (08 Marks)
- b. Explain the steps involved in installation and commissioning of switch gear. (08 Marks)

OR

- 10 a. Explain the preventive and corrective maintenance as applied to circuit breaker. (08 Marks)
- b. List the different tests to be conducted on circuit breakers. (04 Marks)
- c. State the list of protective devices used in power systems. (04 Marks)

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