

324833(24)

B. E. (Eighth Semester) Examination, 2020

APR-MAY

(New Scheme)

(Elect. Engg. Branch)

**INSTALLATION, MAINTENANCE & TESTING
of ELECTRICAL EQUIPMENTS**

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Part (a) of each question is compulsory and carries 2 marks. Attempt any two parts from (b), (c) and (d). Each of them carries 7 marks each.

Unit-I

1. (a) What do you mean by preventive and corrective maintenance?

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- (b) Explain types and scope of maintenance. 7
- (c) Discuss recommended safety precautions against electric shocks in LV and HV installation. 7
- (d) What do you mean by safety management? Write down various principles of safety management. 7

Unit-II

- 2. (a) What parameters information are given on the transformer's name plate? 2
- (b) Write maintenance schedule of transformer upto 10000 kVA. 7
- (c) Explain the filtering process and filtering plant for transformer oil filtration with schematic diagram. 7
- (d) Write important steps in maintenance of power transformer and causes of failure. 7

Unit-III

- 3. (a) Define Type test, routine test and commissioning tests. 2

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- (b) Explain trouble shooting of substation equipments. 7
- (c) Write maintenace procedure of SF₆ circuit breaker. 7
- (d) Discuss troubles, causes and remedial action for outdoor circuit breaker in brief. 7

Unit-IV

- 4. (a) Why the test for degree of protection is necessary? 2
- (b) State the various steps in the installation and commissioning of induction motors. 7
- (c) Write drying out procedure of rotating electrical equipments. 7
- (d) Explain the mechanical maintenance of motor. 7

Unit-V

- 5. (a) What do you mean by hot line maintenance? 2
- (b) Explain various types of hot line operation. 7
- (c) Write safety procedures during hot line maintenance. 7
- (d) Explain Dry powder type fire extinguisher. 7