

Total No. of Questions : 6]

SEAT No. :

P3687

[Total No. of Pages :2

**Engg. - 25**

**T.E (Electrical) (Semester - I)**

**Electrical Installation Maintenance & Testing (In Sem.)**

**(2012 Pattern)**

*Time :1 Hour]*

*[Max. Marks :30*

*Instructions to the candidates :*

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary*

**UNIT-I**

- Q1)** a) What is maintenance? Explain the necessity of maintenance? [2]
- b) Explain planned & preventive maintenance of transformer. [4]
- c) Explain planned & preventive maintenance of alternator. [4]

**OR**

- Q2)** a) Explain various insulation stressing factors in detail. [3]
- b) Explain planned & preventive maintenance of induction motor. [3]
- c) Describe polarization index & dielectric absorption ratio. [4]

**UNIT-II**

- Q3)** a) Describe the concept of condition monitoring. [2]
- b) Write a note of maintenance of insulating oil as per IS. [2]
- c) Explain the failure modes transformer. Explain condition monitoring of transformer. [6]

**OR**

**P.T.O.**

- Q4)** a) Which IS standard is used for testing of oil. Explain the procedure to test the oil. [3]
- b) Write a note on dissolved gas analysis [4]
- c) How the health of insulating oil can be improved by filtering/reconditioning of oil. [3]

### UNIT-III

- Q5)** a) Explain the various fault monitoring methods for Induction motor [6]
- b) Write a note on motor current signature analysis. [4]

**OR**

- Q6)** a) Explain the various fault diagnostic methods for Induction motor. [6]
- b) Write a trouble shooting chart for induction motor. [4]

