

Total No. of Questions : 06]

SEAT No. :

P20

[Total No. of Pages : 2

Oct.-16/TE/Insem. - 19

T.E. (Electrical)

Electrical Installation, Maintenance & Testing

(2012 Pattern) (Semester - I)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data wherever necessary.

UNIT - I

- Q1)** a) Define condition based maintenance with its advantages. [4]
b) State the steps followed in the preventive maintenance of transformer [6]

OR

- Q2)** a) Define the term Polarization Index and Dielectric Absorption Ratio related to the Insulation Resistance measurement [4]
b) Explain any one modern technique used for the condition monitoring of electrical machines. [6]

UNIT - II

- Q3)** a) How degree of polymerization is useful for condition monitoring of Transformers? [4]
b) With suitable block diagram explain reconditioning process of transformer oil. [6]

OR

- Q4)** a) State and explain the common on load tap changer problems that should be condition monitored? [4]
b) State and explain the failure modes of transformers? [6]

P.T.O.

UNIT - III

- Q5)** a) What are the basic fault parameters that affect the performance of the induction motors? [4]
- b) Explain with a labeled diagram how to diagnose the short circuited coils in the induction motors. [6]

OR

- Q6)** a) State and explain any two fault monitoring methods of the induction motors. [4]
- b) State and explain signature analysis and its use in condition monitoring of induction motors. [6]

