

Total No. of Questions : 6]

SEAT No. :

P5031

[Total No. of Pages : 2

T.E. / Insem. - 529

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

ELECTRICAL INSTALLATION, MAINTENANCE AND TESTING

(2012 Pattern)

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, if necessary.*

- Q1)** a) What are different maintenance strategies? Explain condition based monitoring in detail. [5]
- b) What are different insulation stressing factors? Explain them in brief.[5]

OR

- Q2)** a) Define and explain polarization Index and Dielectric Absorption Ratio.(DAR). [5]
- b) State and explain the advanced tools and techniques of condition monitoring. [5]
- Q3)** a) Explain the process of filtration/reconditioning of insulating oil. [6]
- b) Explain process of condition monitoring of an On Load Tap Changer (OLTC) used in power transformer. [4]

OR

- Q4)** a) Describe various failure modes of transformer. [5]
- b) What is dissolved gas analysis (DGA)? How it is used for condition monitoring of transformer. [5]
- Q5)** a) Explain various fault diagnostic methods for induction motor. [5]
- b) Write a note on Motor Current Signature Analysis(MCSA). [5]

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OR

- Q6)** a) Explain various effects of different parameters on the performance of induction motor. [5]
- b) What are various abnormal operating conditions in induction motor and their causes? [5]

