P4967

TE/In Sem. - 125

T.E. (Electrical)

ELECTRICAL INSTALLATION MAINTENANCE & TESTING

(2012 Course) (Semester -I)

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:

1) *Answer any three questions.*

2) *Neat diagrams must be drawn wherever necessary.*

3) *Figures to the right indicate full marks.*

4) *Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*

5) *Assume suitable data if necessary.*

Q1) a)   What are the advantages of maintenance.   **[2]**

   b)   What are the factors affecting preventive maintenance.   **[4]**

   c)   Explain the tools and techniques for condition monitoring.   **[4]**

OR

Q2) a)   What is the necessity of maintenance.   **[2]**

   b)   Explain: **[4]**

      i)   Polarisation Index

      ii)   Dielectric absorption ratio

   c)   Explain the properties of transformer oil.   **[4]**

Q3) a)   Describe various failure modes of transformer.   **[5]**

   b)   List different diagnostic techniques in case of on-load-tap-changer. Explain them.   **[5]**

OR

                                                                                                                         P.T.O.

Q4) a) Explain Dissolved Gas Analysis (DGA). **[5]**

b) Explain the working of off-line and on-line tap changer in transformer.**[5]**

Q5) a) Explain various effects of different parameters on the performance of Induction motor. **[6]**

b) What are the causes of failure of Induction motor. **[4]**

OR

Q6) a) What are different fault diagnostic methods in case of Induction motor. **[5]**

b) Write a short note on Motor Current Signature Analysis (MCSA). **[5]**

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