

Total No. of Questions : 6]

SEAT No. :

P4967

[Total No. of Pages :2

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]



www.sppuonline.com