(DEE 421)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

ELECTRICALS AND ELECTRONICS ENGINEERING

Paper - I : Electrical Power Distribution System Engineering

Time : 3 Hours **Maximum Marks : 75**

Answer question No. 1 compulsory ***(15)***

Answer any ONE question from each unit ***(4 x 15 = 60)***

1) a) What is the future role of computers in distribution system planning?

b) Define tariff.

c) What is meant by load growth?

d) What are the types of distribution transformers?

e) What is meant by regulation and efficiency?

f) What are the applications of network flow techniques?

g) Write about description and comparison schemes?

h) What are the types of feeders?

i) How to improve existing system?

j) What is meant by distribution protection system?

k) What is meant by automatic line sectionalizers?

l) What is meant by voltage drop?

m) What is meant by over current protection?

n) What is meant by line drop compensation?

o) How to control the voltage?

Unit - I

2) a) Explain about present and future role of computers in distribution system planning.

b) What are the objectives of distribution system planning?

OR

3) a) Explain about the planning and forecast techniques.

b) Explain about the load growth, tariffs and diversified demand method.

Unit - II

4) Briefly explain about design of sub transmission lines and distribution substations.

OR

5) a) Explain about the use of monograms for obtaining efficiency in distribution transformers.

b) Explain about applications of network flow techniques in rural distribution networks.

Unit - III

6) a) Explain about feeders with uniformly distributed load and non-uniformly distributed loads.

b) Explain about automatic circuit reclosuers and fuse to fuse co-ordination.

OR

7) a) Explain about secondary banking and radial type feeders.

b) Explain about the objectives of distribution system protection and reclosuers to circuit breaker co-ordination.

Unit - IV

8) a) Explain about voltage drop and power loss calculations.

b) Explain about the effect of series and shunt capacitors.

OR

9) a) Explain about the loss reduction and voltage improvement in rural distribution networks.

b) Explain about the distribution system voltage regulation.

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