

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2018 – 19 Examination

Semester: 1
Subject Code: 203207134
Subject Name: Electrical Power Distribution System

Date: 13/12/2018
Time: 10:30 am to 1:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) Discuss the advantages and disadvantages of radial and loop type primary feeders. (05)
B) Discuss the load shedding and how does load shedding works? (05)
C) Write in detail about commercial and agricultural loads and their respective characteristics. (05)
- Q.2 Answer the following questions.** (Attempt any three) (Each five mark) (15)
- A) Discuss the classification of loads and their characteristics.
B) Explain the load forecasting also discuss the power system loading and unloading.
C) Give the Definition, Basic Architectures and Implementation Strategies for Distribution Automation.
D) What is Distribution Management System? Give the advantages of Distribution Management System.
- Q.3** A) Discuss about SCADA system with suitable block diagram. How SCADA is beneficial for distribution system? (07)
B) Explain functions of SCADA. Also explain requirements and feasibility of SCADA to Distribution Automation. (08)

OR

- B) What is Automatic Meter Reading (AMR) system? Explain Components of AMR system. (08)
- Q.4** A) Explain communication methods used for meter reading. What is Remote Terminal Units (RTU)? (07)
- OR**
- A) Discuss the calculation of optimum number of Switches placement in Radial Distribution Systems. (07)
B) Discuss Energy efficiency in Electrical Distribution & Monitoring. Also explain any one method of Power Factor Correction. (08)