

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**M.Tech. Winter 2019 - 20 Examination**

**Semester: 1****Subject Code: 203207134****Subject Name: Electrical power distribution system****Date: 19/12/2019****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 Load Forecasting also explain Short-term & Long-term load forecasting. (05)  
B) Discuss advantages of Distribution Automation. (05)  
C) Explain Demand side management. (05)
- Q.2 Answer the following questions. (Attempt any three) (Each five mark) (15)**  
A) Discuss Bellman's Optimality Principle.  
B) Give Advantages of Distribution Automation through SCADA.  
C) Explain significance of load curve in power system.  
D) Draw and explain Radial & Parallel Feeder System.
- Q.3** A) Discuss about SCADA system with suitable block diagram. How SCADA is beneficial for Distribution system? (07)  
B) What is Automatic Meter Reading (AMR) system? Explain Components of AMR system. (08)
- OR**
- B) Explain any one Artificial intelligence techniques applied to Distribution Automation. (08)
- Q.4** A) Explain communication methods used for meter reading. What is Remote Terminal Units (RTU)? (07)
- OR**
- A) Give Advantages of Power factor Improvement in power system. Also explain any one method Of Power Factor Correction. (07)  
B) Give the Definition, Basic Architectures and Implementation Strategies for Distribution Automation. (08)