

Code: EEPC2T6B

I M.Tech - II Semester - Regular Examinations - December 2013

**POWER SYSTEM DEREGULATION
(POWER SYSTEM CONTROL & AUTOMATION)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. a) Compare between Older techniques vs. Latest Techniques in Power system Operation. 7 M

b) Explain about the types of market and their settlements? 7 M

2. Write short note on following models based on industry structure and contractual arrangements.
 - a) Wholesale Competition.
 - b) Retail Competition.
 - c) Pool and bilateral trade.
 - d) Multi-lateral trade. 14 M

3. a) Explain the concept of open access. Also explain the concept of transmission rights and transmission pricing. 7 M

b) Explain transmission congestion issues. 7 M

4. Explain the Security constrained Unit Commitment problem formulation with the help of example? 14 M
5. Explain the methods for the analysis of bilateral and pool markets. Explain the working of Independent System Operator (ISO) and Load Dispatch Center (LDC). 14 M
6. Explain briefly about
 - a) Market Splitting
 - b) Counter Trading
 - c) Transmission pricing scheme14 M
7. What are ancillary services? Explain classifications and Definitions of Ancillary services? 14 M
8. Explain following methods of regulations:
 - a) Rate of return regulation.
 - b) Performance based regulation.
 - c) Incentive regulation.
 - d) Benchmarking or Yardstick regulation.14 M