PVP 12

Code: **EEPC1T3**

I M.Tech-I Semester-Regular Examinations-February 2016

POWER SYSTEM OPERATION AND CONTROL
(POWER SYSTEM CONTROL AND AUTOMATION)

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. Explain with example solution of unit commitment problem by priority list scheme method. 14 M

2. Explain about unit commitment via forward dynamic Programming. 14 M

3. Explain with neat sketch the load frequency control of single area system. 14 M

4. Explain with neat sketch steady state response and dynamic response of an isolated power system. 14 M

5. a) Explain load frequency control in a two area system with neat block diagrams. 7 M

b) Derive the expression for tie-line power in a two area system. 7 M

6. a) Explain optimal load flow problem using steady state representation. 7 M

b) Explain significance of optimal parameter adjustment. 7 M

7. a) Explain about hard limits and slack variables. 7 M

b) Explain about Take-Or-Pay fuel supply contract. 7 M

8. Explain with example economic interchange between inter-connected utilities. 14 M