

Code: **EEPC2T6B**

I M.Tech - II Semester-Regular Examinations – AUGUST 2016

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

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. Explain the need for deregulation and also explain what are the objectives of deregulation in developing countries?

14 M

2.

a) Explain what “services unbundling” means in the electricity supply industry, why it is necessary to carry it out to introduce competition in a monopoly, and list some of its characteristics.

7 M

b) What is the major difference between retail competition model and wholesale competition model?

7 M

3.

a) Compare pool and bilateral trading in open electrical energy markets.

7 M

b) Explain consumer’s Perspective participating in market electrical energy.

7 M

4.

a) Define physical transmission rights and explain how these are used. 7 M

b) What are the conditions for perfect competition? How can a company in an imperfect competition environment influence the market price? What is the relationship between the marginal cost of generation and market price in perfectly and imperfectly competitive markets? 7 M

5.

a) Discuss different transmission cost allocation methods. 7 M

b) Explain security-constrained unit commitment. 7 M

6.

a) Explain the effect of congestion on Locational Marginal Prices (LMP). 7 M

b) Discuss the outline of transmission pricing scheme. 7 M

7.

a) Explain about balancing issues, network issues and system orientation of ancillary services. 7 M

b) What are the drawbacks of obtaining ancillary services using mandatory means? 7 M

8.

a) Explain different functions of ancillary services.

7 M

b) Explain about AS management in various markets. 7 M