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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Electrical &amp; Electronics Engg.) (E1 2013 Onwards) (Sem.-6)

**DEREGULATION OF POWER SYSTEM**

Subject Code : BTEEE-603F

M.Code : 72847

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A****1. Answer briefly :**

- a) Define transmission congestion.
- b) Name five countries involved in the deregulation process of electric power systems.
- c) What is transmission open access?
- d) What are ancillary services and their need?
- e) Explain the functions of an ISO in electricity markets.
- f) What is market power? How is it used to influence the market price?
- g) Compare the features of electricity with other commodities in restructured environment.
- h) What is the effect of loop power flow in contract path method based transmission pricing?
- i) Explain what is availability based tariff in India?
- j) List different reforms in Indian power sector.

### SECTION-B

2. Explain restructuring and the advantages of competitive power systems.
3. Describe various market instruments which are traded in electricity markets. What is the difference between day ahead and hour ahead market operation?
4. Explain separation of ownership and operation.
5. Discuss about the role of various entities involved in a deregulated power system.
6. Explain experience of California regarding deregulation of electricity supply industry.

### SECTION-C

7. What is market clearing price? How is it determined? Explain the difference between pool market, bilateral contract and multilateral contract.
8. Explain nodal pricing of electricity and various methods of nodal pricing.
9. Compare the experience of China and India in the context of deregulation of electricity supply industry.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**