Total No. of Questions: 8

SEAT No.:	
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B.E. (Electrical)

RESTRUCTURING AND DEREGULATION

(2012 Pattern) (Elective - II) (Semester - I) (403144) *Time* : 2½ *Hours*] [Max. Marks:70 Instructions to the candidates: 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8. 2) Figures to the right side indicate full marks. Assume suitable data, if necessary. Explain the objectives of "Electricity Act 2003" with reference to *Q1*) a) Generation, Transmission and Distribution. Also explain the guidelines under this act. [6] What are various challenges before Indian Power Sector. [6] b) Explain following types of regulations: c) [8] Rate of return regulation. i) ii) Performance based regulation. OR Explain the working of Indian Energy Exchange (IEX) for day ahead *Q2*) a) market. [8] Describe the desirable characteristics of tariff of electricity. b) [6] Explain role of regulation and evolution of regulatory commission. [6] c) Write short note on following models based on industry structure and *Q3*) a) contractual arrangements: [8] i) Wholesale Competition. ii) Retail Competition. Compare between 'competition for the market' and 'competition in the b) market'. [8] OR

- **Q4)** a) Explain the important changes occurred in Indian power sector after electricity reform. [8]
 - b) Explain various ISO (Independent System Operator) Models. [8]
- **Q5)** a) State and explain various methods of transmission pricing. [8]
 - b) Specify pecularities of electricity as a commodity. Explain rules that govern the electricity markets. [8]

OR

- **Q6)** a) Compare integrated trading model and decentralized trading model. [8]
 - b) Explain Power Exchanges in India. Also explain the concept of market clearing price. [8]
- **Q7)** a) Explain in detail congestion issue and management. [9]
 - b) State the key features of indian Grid code. Also explain transmission congestion issues. [9]

OR

- **Q8)** a) What is the importance of transmission pricing under open access condition? State and explain major components of transmission costs. [9]
 - b) Explain three parts of Availability Based Tariff. Also explain how with implementation of ABT, the grid operation is improved in Indian power sector. [9]

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