

Exam.Code:1019
Sub. Code: 7792

1129

M.E. Electrical Engineering (Power System)
Third Semester

EE-8301 (a): Power System Deregulation

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt any five questions.

x-x-x

- I. What is the importance of deregulated power system? Why it is preferred over conventional power system? What are its objectives? (10)
- II. What are independent power producers (IPP) and how they play a major role in deregulated power system? Discuss various models for IPP. (10)
- III. What are two type of market structure? Explain the role of ISO in anyone market structure? (10)
- IV. For a given system, find the optimum interchange schedule of power through joint dispatch

Utility	a (Rs/MWh)	b (Rs/MWh)	c (Rs/MWh)	Pmax (MW)	Pmin (MW)	PD (MW)
1	1.8	10.5	0.5	150	20	120
2	2.8	24.5	0.7	250	30	200
3	3	15.6	0.4	230	40	180
4	1.5	20.1	0.6	125	25	75

- V. What are the different methods of ATC determination and how is it useful in restructured power system? Explain using sensitivity factor method in detail. (10)
- VI. a) Explain the MW-mile method of transmission pricing with suitable example.
b) Discuss short run marginal cost pricing method. (5,5)
- VII. a) How is congestion management is done is restructured power system?
b) Explain the different auction mechanism employed in competitive electricity markets? (5,5)
- VIII. a) Compare and contrast inter and intra Zonal Congestion?
b) By using the structure arrangement, Explain the trading of power pool with the bilateral contracts? (5,5)

x-x-x