

1128
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 meant by Market Clearing Price (MCP)? How is it calculated for an electricity market? Hence give the significance of the MCP in framing bidding strategy of any utility. (10)
- II. What is Available Transfer Capability (ATC) of any transmission line? What are the factors that affect it? How is it calculated and discuss the ways to enhance the ATC. (10)
- III. Give the salient features of Electricity Act 2003. Discuss the important policies and provisions in EA 2003 with respect to the integration of Renewable Energy Sources. (10)
- IV. Discuss the term Transmission Open Access. How has it affected the working of the modern power system? Hence discuss the criteria used to decide the transmission pricing structure of the electrical power. (10)
- V. What are various pricing indices used? How are they decided? Hence explain how forward price curves are constructed? (10)
- VI. Discuss the role of ISO in bilateral market structure. Hence elaborate the operational planning activities of an ISO. (10)
- VII. Why is reactive power support considered as an ancillary service? Hence explain different types of ancillary services and give significance of the each? (10)
- VIII. Write short notes on any two of the following:-
 - a) Bidding and auction mechanisms
 - b) Impact of Congestion and how to manage congestion
 - c) Short Term Price Forecasting (5,5)

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