

**B.Tech Sem – VIII (2007 Course) (Electrical Engg.) : WINTER
- 2017**

SUBJECT : ELECTIVE – II : POWER SYSTEM RESTRUCTURING

Day : **Wednesday**
Date : **22/11/2017**

Time : **02.30 PM TO 05.30 PM**
Max. Marks : 80

W-2017-2670

N.B.:

- 1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.
- 4) Assume suitable data if necessary.

SECTION – I

- Q.1** a) Explain the functions and duties of Ministry of Power. [05]
b) Explain the Benchmark and yardstick regulation. [05]
c) Explain the challenges before Indian power sector. [04]
- Q.2** a) Explain with numerical, Net Present Value [NPV], to assess the financial feasibility of any project. [07]
b) Explain Performance based regulation. [06]
- Q.3** a) Write short note on **ANY THREE** of the following: [07]
i) Factors affecting tariff structure
ii) Operational advantages of restructuring of power sector
iii) Operation and maintenance cost
iv) Fixed and variable cost
b) Explain the effects of subsidy and cross-subsidy. [06]
- Q.4** a) Explain the incentive regulation. [06]
b) Explain various non-price issues in regulation. [07]

SECTION – II

- Q.5** a) Discuss in brief about California energy crisis. [05]
b) Write a short note on wheeling trading model. [05]
c) Discuss the incentive and penalty features applicable under ABT. [04]
- Q.6** a) What are the models based on industry structure? Explain any two. [07]
b) Explain international experience with electricity reform of Nordic Pool and UK. [06]
- Q.7** a) Compare the following models of trading arrangements: [06]
i) Integrated trading
ii) Decentralized trading
b) Explain in brief about retail access framework. Also explain the metering as well accounting issues regarding retail competitive market. [07]
- Q.8** a) State and explain various methods of transmission pricing. [07]
b) Discuss in brief about the transmission congestion issues. Explain any one method of management of transmission congestion. [06]

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