

Total No. of Questions :12]

SEAT No. :

P821

[Total No. of Pages :2

[4659] - 72

B.E. (Electrical)

RESTRUCTURING & DEREGULATION

(2008 Pattern) (Elective-II) (Semester - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answer Q.1 or Q.2 & Q.3 or Q.4 & Q.5 or Q.6 questions from Section I and Q.7 or Q.8 & Q.9 or Q.10 & Q.11 or Q.12 questions from Section II.
- 2) Answers to the two sections should be written in separate books.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Figures to the right indicate full marks.
- 5) Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.
- 6) Assume suitable data, if necessary.

SECTION-I

- Q1)** a) Explain the objectives of “Electricity Act 2003”. Also explain the guidelines under this act. [8]
b) Explain the structure and working of Indian Energy Exchange (IEX). [8]

OR

- Q2)** a) Explain the functions of following institutions: [8]
i) PFC
ii) Ministry of Power
b) Why the reformation has taken place in electrical power system. [8]

- Q3)** a) Explain different methods to assess the financial feasibility of any project. [8]
b) Explain average, marginal and avoided cost. [8]

OR

- Q4)** a) Explain following basic concepts of power sector economics: [12]
i) Life cycle cost.
ii) Net present Value.
iii) Variable cost.
iv) Profitability Indices.
b) Explain O and M expenses [4]

P.T.O.

- Q5)** a) Explain role of regulation and evolution of regulatory commissions in India. [10]
b) What are the regulation externalities. [8]

OR

- Q6)** With respect to the regulatory process in India explain: [18]
a) Composition of R.C.
b) Authority.
c) Decision Making Process.

SECTION-II

- Q7)** a) Explain electricity reforms in Latin America and China. [8]
b) Write a short note on the following trading models based on industrial structure. [8]
i) Pool and bilateral trades.
ii) Multi lateral trades.

OR

- Q8)** Explain in brief following structural models. [16]
a) Monopoly.
b) Single Buyer.
c) Wholesale competition
d) Retail competition

- Q9)** Write a short note of following models of trading. [18]
a) Integrated
b) Wheeling
c) Decentralized

OR

- Q10)** a) What are the impact of market reform on regulation and externalities. [8]
b) Explain in detail Retail competition. [10]

- Q11)** a) Explain how with the implementation of Availability based tariff the grid operation is improved in Indian power sector. [8]
b) Explain the key features of Indian Grid Code and also explain transmission congestion issues. [8]

OR

- Q12)** a) Explain the necessity of transmission planning with reference to market structure. [8]
b) Explain the working of Independent System Operator {ISO} and Load Dispatch Center (LDC). [8]

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