Total No. of Questions : 5]

SEAT No. :

P3906

[Total No. of Pages : 1

[5462] - 620
M.E. (Electrical Power Systems)
POWER SECTOR ECONOMICS AND MANAGEMENT
(2017 Course) (Semester - I)

Time : 3 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***Neat diagrams must be drawn wherever necessary.***
2) ***Figures to the right indicate full marks.***
3) ***Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.***
4) ***Assume suitable data, if necessary.***

Q1) Attempt any three of the following : **[18]**

a) Give salient features of Electricity Act 2003.

b) Explain rate of return regulation and performance based regulation.

c) Explain provisions of penalties and rebates in tariff. Also explain tariff linked to quality of supply.

d) Calculate net present value for a financial proposal having initial investment of Rs. 750000. The revenue generation from this project for six year are Rs.125000, Rs.135000, Rs.150000, Rs.175000, Rs. 200000 and Rs. 200000. Take discount rate of 11% and judge economic feasibility of the project.

e) Explain wholesale and retail competition model.

f) What are non-price issues in regulations?

Q2) a) What is electricity and demand elasticity? Explain the effect of these on market operation. **[8]**

b) What is market clearing price? Explain market settlement process. **[8]**

OR

Q3) a) Explain Option contract and contracts for differences. **[8]**

b) Explain dynamic spot pricing. Also explain day ahead market. **[8]**

[8]

Q4) a) Why power system is congested? How congestion can be avoided? **[8]**

b) Explain transmission pricing model in India. **[8]**

OR

Q5) a) Explain transmission cost allocation method. **[8]**

b) Explain security constraint unit commitment. Explain in brief power purchase agreement. **[8]**

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