

Total No. of Questions : 10]

SEAT No. :

P2594

[5153]-570

[Total No. of Pages : 2

T.E. (Electrical)

ENERGY AUDIT AND MANAGEMENT

(2012 Pattern) (Semester - II) (End Semester) (303150)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8 and Q9 or Q10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Use of Calculator is allowed.*
- 5) *Assume Suitable data if necessary.*

- Q1)** a) With suitable examples classify various energy resources. [6]
b) What are the objectives of Kyoto Protocol? [4]

OR

- Q2)** a) Explain concept of Green Building. [4]
b) Explain Indian and Global Energy scenario? [6]

- Q3)** a) Explain force field analysis in Energy Management. [6]
b) Discuss principles of successful energy management. [4]

OR

- Q4)** a) Explain DSM through power factor penalties. [6]
b) Explain role of renewable energy sources in energy management. [4]

- Q5)** a) Explain various steps in short term and long term energy audit. [10]
b) Explain Energy audit case study in steel industries. [8]

OR

P.T.O.

- Q6)** a) Explain various instruments used in energy audit. [10]
b) Explain procedure involved in energy audit report writing. [8]

- Q7)** a) Explain energy conservation techniques in ventilation systems. [8]
b) Explain energy conservation techniques in Diesel Generators. [8]

OR

- Q8)** a) Explain energy conservation potential in electric motor and drive system. [8]
b) Explain energy conservation techniques in Utility industries. [8]

- Q9)** a) Explain various financial appraisal method used in economic analysis of energy conservation project. [8]
b) Explain energy audit case study in I. T. sector. [8]

OR

- Q10)** a) Explain various costing techniques. [8]
b) Explain energy audit case study in municipal corporations. [8]