

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]

