

Roll No.

23455

**M.Tech 3rd Semester (Electrical
Engineering) Spec. (Electrical
Power System) Examination–
May, 2014**

DEMAND SIDE ENERGY MANAGEMENT

Paper MTEPS-302(iii)

Time : 3 hours

Max. Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt any **five** questions.

1. What do you mean by Energy Index ?

Explain cost index and Sankey diagrams.

20

2. What do you mean by depreciation ?

Differentiate between sinking fund

depreciation and reducing balance
depreciation. 20

3. Explain the term energy conservation. How the energy conservation is achieved in utilities by improving the load factor ? 20
4. Explain the advantages of the energy efficient motors. What is efficiency factor or efficiency evolution factor. 20
5. Explain the building analysis required for the electric lighting. Also explain the lighting levels. 20
6. Explain the characteristics of lamps-lamp substitution in existing system. Explain some other method which can improve the efficiency of the system. 20

7. What do you mean by space heating ?

Explain the energy conservation methods to be used in space heating. 20

8. What do you mean by the cogeneration and storage. Differentiate between compressed air energy storage and superconducting magnetic energy storage. 20
