Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 08

M.Tech. (EE) (2013 Batch E-IV)   (Sem.–3)

LOAD AND ENERGY MANAGEMENT

Subject Code : MTEE-302C

M.Code : 74861

Time : 3 Hrs.   **Max. Marks : 100**

INSTRUCTION TO CANDIDATES :
1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carries TWENTY marks.**

1. a) Justify the statement- electrification is an ongoing process. How demand forecast and energy forecast are different from each other? Give a broad classification of loads along with their generation characteristics. Also mention load factor, demand factor and diversity factor for each load along with typical load curve.

    b) What is importance of load forecasting in power systems? Discuss different load forecasting methodologies.

2. Write a note on :

    a) Total forecast

    b) Impacts of load management

3. How static and dynamic analysis of energy demand is being carried out? What are the elements of energy demand forecasting?

4. After the oil crisis in 1973, energy management emerged as main subject. Discuss different strategies dealing with energy management. Also elaborate the significance of energy management by taking case study related to industrial energy forecasting.

5. Write a note on :

    a) Applications of state estimation to load forecasting

    b) Techno- economic approach in energy demand forecasting

6. Write a note on :

    a) Tariff structure and load management

    b) Energy pricing strategies

7. What are the elements of energy demand forecasting? Discuss different methodologies and models for energy demand forecasting? Support your answer with the help of diagrams.

8. Write a note on :

    a) Methodologies and models for energy forecasting

    b) Symbiotic relation among information, energy models and decision making

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.