Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

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B.Tech (Ind. Engg. & Mgt.) (Spl. in TQM) (Sem.–7)

ENERGY MANAGEMENT

Subject Code : IEM-755

Paper ID : [71702]

Time : 3 Hrs. Max. Marks : 40

INSTRUCTIONS TO CANDIDATES :

1. Attempt All EIGHT questions from SECTION-A carrying TWO marks each.
2. Attempt any SIX out of EIGHT questions from SECTION-B carrying FOUR marks each.

SECTION-A

Q1. Answer briefly :

a. What is working principle of solar PV cell?

b. What do.you understand by energy management?

c. What is power factor?

d. How can energy be saved in HVAC system?

e. What are major problems related to use of hydrogen energy?

f. Write main problems related to biogas plant.

g. What is energy audit?

h. What is payback period analysis?

SECTION-B

Q2. Explain construction and working of a flat plate solar collector.

Q3. Explain methods of electrical 'load and demand' management.

Q4. Explain different methods of energy saving in thermal power plants.

Q5. Explain construction and working of a fuel cell.

Q6. Explain limitations of renewable energy systems.

Q7. Explain different methods to store energy.

Q8. Explain different types of HVAC system.

Q9. What is the need of energy audit? Explain its methodology for buildings and sites.