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

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ME) (E-I 2011 Onwards) (Sem.–6)

ENERGY CONSERVATION AND MANAGEMENT

Subject Code : DE/ME-1.4

M.Code : 71246

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a. How can we save energy?

b. What do you understand by the term waste heat?

c. Explain the operating principle of a regenerator.

d. What are the waste heat recovery areas?

e. Why we need to implement 'Good Housekeeping"?

f. Why is Energy Conservation so important?

g. What is thermal storage?

h. What is energy resource management?

i. Define economizer.

j. What is electron beam welding?

SECTION-B

2. What steps should be taken for good housekeeping?

3. Explain the energy conservation case study in air conditioning.

4. Explain energy usage patterns in textile and oil refineries.

5. Write a note on optimum use of primary movers for power generation in diesel and gas engines.

6. Write a note on fluidized bed technology.

SECTION-C

7. Explain the dielectric and micro wave heating. Give advantages, disadvantages and applications.

8. Explain the regenerators and heat boiler waste heat recovery options and technologies. Give their advantages and applications.

9. What is the need for energy conservation? Also give its potentials and fiscal incentives.

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.