

Roll No.

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ME) (2012 Onwards E-II) (Sem.-7,8)**  
**ENERGY CONSERVATION AND MANAGEMENT**  
Subject Code : DE/ME-1.4  
M.Code : 72000

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION 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) What is secondary energy source?
- b) Draw the layout of a steam power plant.
- c) Define "Equivalent Evaporation" in a boiler.
- d) What is micro wave heating?
- e) What is recuperates economizer?
- f) Explain the energy conservation principle.
- g) What is Green house effect?
- h) Explain the principle of electronic beam welding.
- i) What is the importance of Energy Audit?
- j) Explain the second law of thermodynamics.

### SECTION-B

2. List the various alternate energy sources.
3. Write short notes on the energy management.
4. State in brief advantages and disadvantages of dielectric & micro wave heating.
5. Layout general procedure in Energy Audit.
6. Discuss different methods used to improve the performance of Thermal Power Plants.

### SECTION-C

7. Name and explain the various sources of energy. Compare the various sources of energy.
8. Why energy storage is required? State the types of energy storage and explain any one.
9. Write short notes on the following :
  - a) Energy Management Information System
  - b) Economizer

**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.**