

ME - 801(A) B.E. VIII Semester Examination, June 2015

Energy Management and Audit (Elective-III)

Time: Three Hours      Maximum Marks: 70

Note: Attempt any five questions.

All questions carry equal marks.

Draw neat diagrams wherever required.

1. Discuss important tips for energy conservation in the following sectors :

- a)      HVAC                      b)      Industrial sector

OR

2. a) Define Energy management and Energy conservation. State about energy demand and supply.

b) Discuss duties and responsibilities of energy managers.

3. a) State importance of energy audit. Discuss types of energy audit.

b) Explain about fuel and energy substitution.

OR

4. a) Discuss various types of energy audit instruments.

b) Write technical note on Energy Conservation Act 2001.

5. a) Discuss force field analysis related to energy planning,

b) Explain key elements in Energy Action Planning.

OR

6. a) Discuss process flow and energy balance diagram.

b) Define energy planning and energy policy. Discuss energy policy in respect of purpose, perspective, content formulation and rectification.

7. a) Explain energy conservation techniques in electrical pumps and fan system.

b) Define monitoring and targeting. Discuss data and information analysis.

OR

8. a) Explain the important characteristics of energy efficient motors.

b) Explain energy conservation techniques in electrical motors.

9. a) How energy can be conserved in boilers? Discuss briefly, b) Write short note on Building energy management.

OR

10. Write short note on following (Any two):

- a) Thermal Insulation    b) Applications of FBC    c) Heat exchangers and heat pumps