

Code: 13A03806

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2018

ENERGY MANAGEMENT

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- Name the different elements of costs.
- Explain law of supply.
- List the causes of depreciation.
- What is BEP?
- Name the methods of investment appraisal.
- Name the functions of energy manager.
- What is energy auditing?
- Name any four objectives of energy auditing.
- What is time value of money?
- Name any four Indian energy policies.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- What are the objectives of engineering economics?
 - What do you understand by present worth by the "72 rule"?

OR

- List and explain the conditions for present worth comparisons.

UNIT – II

- Define depreciation. Explain any four methods of depreciation.

OR

- Explain with sketch break even analysis and break even chart.
 - Write the difference between estimation and costing.

UNIT – III

- Indicate the limitations of present worth and internal rate of return methods.
 - What are the steps to be considered in setting up an energy management program?

OR

- Explain the organizational chart for energy management.
 - What is the role of energy management in process industry? Discuss.

UNIT – IV

- State with reasons for the need of energy audit in any industry.

OR

- Explain briefly:

- Energy index.
- Cost index.

UNIT – V

- Discuss Indian energy scenario.

OR

- Write short notes on:

- Domestic energy production.
- Transmission and distribution of power.