

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017

ENERGY AUDITING & DEMAND SIDE MANAGEMENT

(Electrical and Electronics Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define energy conservation.
 - (b) What is walkthrough energy audit?
 - (c) Define power factor.
 - (d) What is an energy efficient motor?
 - (e) What is PLC? Where can it be used?
 - (f) What are the parameters you can measure with a Tong tester?
 - (g) What is DSM?
 - (h) Define peak clipping.
 - (i) Explain payback.
 - (j) Define depreciation.

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

UNIT – I

- 2 Explain energy situation in world and India elaborately.

OR

- 3 Define pie-chart, Sankey diagrams and Load profiles.

UNIT – II

- 4 Discuss construction details and characteristics of energy efficient motors.

OR

- 5 Explain any two methods to improve power factor.

UNIT – III

- 6 Discuss in detail about good lighting system design and practice.

OR

- 7 Explain light energy audit and energy instruments required for the audit.

UNIT – IV

- 8 Discuss in detail DSM and its benefits.

OR

- 9 Discuss management and organization of energy conservation awareness program.

UNIT – V

- 10 Explain in detail about participant cost test.

OR

- 11 Elucidate rate impact measure test in detail.
