

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.

\*\*\*\*\*