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B. E. (Seventh Semester) Examination,**April-May 2016****(New Scheme)****(Elect. Engg. Branch)****ENERGY AUDITING and MANAGEMENT***Time Allowed : Three hours**Maximum Marks : 80**Minimum Pass Marks : 28**Note : Part (a) from each question is compulsory.**Attempt any two parts from (b), (c) and (d).***Unit-I**

1. (a) Define Demand Side Management. 2
- (b) Explain energy forecasting techniques used in energy management. 7

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- (c) What is energy management and how is it different from load management. 7
- (d) Write down difference between renewable and non-renewable sources of energy. 7

Unit-II

2. (a) What is firewood crisis? 2
- (b) Briefly describe about wind driven Induction generator. 7
- (c) Define wave energy. Explain the use of ocean thermal energy conservation (OTEC) in energy auditing. 7
- (d) Explain the super conductors and also enlist them used in power systems. 7

Unit-III

3. (a) Define energy auditing. 2
- (b) What is electricity tariff and what are its types. 7
- (c) Explain capacity utilisation and also describe technology upgradation. 7
- (d) Define the characteristics of preventive maintenance and process modification. 7

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Unit-IV



- 4. (a) Define fine tuning. 2
- (b) Explain concept of methods of energy conservation. 7
- (c) Write and explain elements of energy auditing and metering methodologies. 7
- (d) What is power factors and explain the methods for improving it. 7

Unit-V

- 5. (a) Define time of day pricing. 2
- (b) Write and explain multiutility exchange model. 7
- (c) Give brief description of demand side management (DSM), benefits and techniques. 7
- (d) Write short notes on : 7
 - (i) Peak clipping
 - (ii) Peak shifting
 - (iii) Valley filling
 - (iv) Load priority techniques