

**ADVANCED CERTIFICATE IN POWER  
DISTRIBUTION MANAGEMENT****Term-End Examination****December, 2015****BEE-002 : ENERGY MANAGEMENT AND ITS  
APPLICATIONS***Time : 3 hours**Maximum Marks : 100*

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**Note :** *The question paper has three parts : Part I, II and III. Answer the questions as indicated in each part. Question no. 1 is compulsory. All questions should be answered in English only. Marks are shown against each question.*

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**PART I**

1. Give full forms of the following : 10×1=10
- (a) ATSC
  - (b) DSM
  - (c) HVDS
  - (d) PSTN
  - (e) IVRs
  - (f) CDMA
  - (g) CIN
  - (h) AMR
  - (i) CRM
  - (j) GPS

2. Attempt any *two* of the following questions :  $2 \times 5 = 10$

- (a) How can you measure Technical and Commercial losses ?
- (b) What is Load factor and Diversity factor ?
- (c) Explain the terms Real-time pricing and Time of use rates.

## PART II

*Attempt any five of the following questions :*                       $5 \times 10 = 50$

3. Describe the objectives and functions of energy accounting. 10
4. Describe the role of ERC in helping the implementation of DSM through power utilities. 10
5. How can IT help in reducing ATSC losses and improving the efficiency? 10
6. Describe the benefits of using ERP in power distribution. 10
7. How is GIS used to map the electrical distribution network? 10
8. Describe the features of an interactive website for utility customers. 10
9. Discuss the measures that should be taken for preventing and handling the cases of electric shock. 10

### PART III

*Attempt any two of the following questions :* *2×15=30*

10. What immediate, medium and long term strategies can be adopted for meeting the goal of clean energy for all ? 15
  
  11. Explain the need of energy auditing, by giving examples. 15
  
  12. Explain how GIS can be applied for load forecasting and load management. 15
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