

**ADVANCED CERTIFICATE IN POWER  
DISTRIBUTION MANAGEMENT**

**Term-End Examination**

**June, 2019**

00992

**BEE-002 : ENERGY MANAGEMENT AND ITS  
APPLICATIONS**

*Time : 3 hours*

*Maximum Marks : 100*

*Note : This 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 language only.*

**PART I**

1. Give full forms of the following abbreviations :

*10×1=10*

GPS, CIN, CDMA, IVRS, HVDS, SCADA, GSM,  
AMR, CRM, DSM

2. Attempt any *two* questions :

*2×5=10*

- What is the significance of EC Act, 2001 ?
- Define kilowatt hour (kWh) and its significance.
- What is load factor ? What is its significance ?

## PART II

Attempt any **five** questions.

5×10=50

3. What are the various applications of GIS in management of Power Distribution System ?
4. List five steps that you can take immediately for each of the following :
  - (a) Reduce your contribution to global warming.
  - (b) Improve energy efficiency at home and at work.
  - (c) Use energy in a sustainable manner.
5. Describe the features of a good interactive consumer website.
6. What are the techniques for meter reading ?
7. List the safety procedures you should take in each of the following cases :
  - (a) While replacing a fuse
  - (b) While handling a fuse
  - (c) When you are near an arc
  - (d) When you have live circuitry nearby
8. What are the tools used for customer analysis ? Outline their features. How do they benefit the utilities ?
9. What are the major problems and challenges faced by power utilities in implementing DSM on consumers ?

### **PART III**

*Attempt any two questions.*

*2×15=30*

- 10. Explain the structure of Disaster Management System with suitable block diagram.**
  - 11. What are infrastructure requirements for setting up an IT enabled customer care centre ?**
  - 12. What are the hardware and software requirements for an automatic meter reading system ?**
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