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**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

Term-End Examination

June, 2012

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

Time : 3 Hours

Maximum Marks : 100

*Note : The question paper has three parts. Part I, II and III.
Answer questions as indicated in each part.*

PART-I

Question number 1 is compulsory

1. Fill in the blanks.

16x1=16

- (a) _____ pollution can affect the natural balance of ecosystems in the water body.
- (b) LEAP stand for _____.
- (c) _____ is simply the highest level of electricity demand in a given time-span usually in one day or one year.
- (d) DSM means _____.
- (e) Accidents occur due to both _____ of work force and _____.

- (f) _____ is a natural or man - made event, which brings sudden great misfortune and disruption in normal life including that of the power supply.
- (g) _____ to ,make the process suitable for electronic work flow.
- (h) _____ is a computer system capable of assembling, storing, manipulating and displaying geographically referenced information by integrating data bases, optimizing data layering and timely data updates.
- (i) AMR means _____.
- (j) CSI means _____.
- (k) _____ Recorder is a hand held terminal for meter reading.
- (l) Utilities are systems of _____ to generateto bills and online payment for collection of revenue
- (m) RRMS means _____.
- (n) EMT means _____.
- (o) CSR stand for _____ .
- (p) CRM stand for _____ .

PART - II

Answer *any six* questions :

6x7=42

2. Explain the natural and enhanced green house effect.
3. What are the standards and labelling programme? Explain how it can help in effective demand side management?
4. What are the types of the disasters and describe the impact of cyclones.
5. Discuss the IT applications in metering and data acquisition.
6. What is GIS? Explain how exactly can it be applied for distribution system management?
7. What is SCADA? Discuss its usefulness for improving the operations of a power distribution utility.
8. Discuss how utilities can use customer care centres and call centres to enhance customer satisfaction?
9. Discuss the various steps in the process of meter reading by hand held devices.

PART - III

Answer *any three* questions.

3×14=42

- 10 Explain how the energy auditing exercise can benefit from the use of information technology with suitable examples ?

 11. Explain the major causes for fire outbreaks in a power utility . What techniques can be used for handling and preventing such fires ?

 12. Explain the structure of Disaster Management System with suitable block diagram.

 13. What are the infrastructure requirements for setting up an IT enabled customer care centre ?

 14. What are the hardware and software requirements for an , Automatic meter reading system ?
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