

00442

**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

Term-End Examination

December, 2011

**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 the questions as per indicated in each part.

PART-I

1. Question number 1 is compulsory : 16x1=16

Fill in the blanks.

- (a) The primary function of _____ and _____ equipment is to transfer power economically and reliably from one location to another.
- (b) UNIT of Energy is _____.
- (c) _____ is one of the most important tool for energy conservation and for achieving energy efficiency.
- (d) ERS stand for _____.

- (e) _____ is the ratio between the average demand and the peak demand over that given time.
- (f) _____ Means the state or condition of freedom from danger or risk.
- (g) _____ is a term encompassing all forms of technology used to generate, collect, transmit, process, analyse, store and present information to help users in taking well informed decisions.
- (h) SCADA stand for _____.
- (i) Monthly meter reading for billing purposes using _____ are carried out.
- (j) _____ allows programmer to access the services provided by the operating system.
- (k) IVRS means _____.
- (l) Power utilities have established _____ to ensure round the clock interaction with the customer.
- (m) GIS means _____.
- (n) AT and C loss means _____.
- (o) DSM stand for _____.
- (p) CAT means _____.

PART-II

Answer *any six* questions.

6x7=42

2. What is global warming ? Explain how is our energy influencing it ?
3. What are the benefits of energy auditing for a power distribution utility ? Explain it.
4. Discuss the benefits of demand side management for power utilities, consumers and the society.
5. What accident reporting and investigation procedures are followed in your utility ?
6. What is ERP ? Discuss the benefits of using ERP in power distribution utility.
7. What IT infrastructure is required in customer care centre ? Explain it.
8. Explain the software requirement of Automated Meter Reading (AMR).
9. Describe the process of using the simputer/spot billing machine.

PART-III

Answer *any three* questions.

3x14=42

10. What is energy audit ? And explain the types of energy audit with suitable examples.
 11. How does the IT enabled customer care centre work for customer care ?
 12. Explain the need for a Disaster Management Plan for your power utility. Also discuss its objectives and the scope of activities.
 13. Explain how data is collected in a GIS. In what form is data represented in the GIS ?
 14. Explain the revenue realisation monitoring system and describe its importance for a utility.
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