

**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

Term-End Examination

December, 2021

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

Time : 3 hours

Maximum Marks : 100

Note : *The question paper has **three** parts : Part I, Part II and Part III. Answer the questions as indicated in each part. All questions should be answered in English only.*

PART I

1. Give full forms of the following abbreviations :

10×1=10

- (a) ABT
- (b) CDMA
- (c) MIS
- (d) ERP
- (e) HTML
- (f) PLC
- (g) SaaS
- (h) WWW
- (i) SMS
- (j) AT&C

PART II

Attempt any **ten** of the following questions : 10×7=70

2. What is global warming ? How is our energy usage influencing it ?
3. What is energy efficiency ? What are the benefits of improved energy efficiency ?
4. Describe the main features of LEAP.
5. Explain the need for energy auditing with the help of suitable example from your own experience in power distribution utility.
6. Explain the terms Real-time Pricing, Time-of-Use rates and Strategic Load Conservation.
7. State the objectives of Energy Conservation in Building Codes programme.
8. Discuss the measures to address the problems faced in the implementation of DSM in the agriculture sector.
9. Explain the earthing requirements in a substation.
10. Discuss the measures taken for preventing and handling cases of electric shock.
11. Explain the need for a Disaster Management plan for a power utility. Outline its objectives.
12. What are the major key areas of IT interventions in the Distribution Business ?

PART III

Attempt any **two** of the following questions : $2 \times 10 = 20$

13. Describe the benefits of the Geographic Information System (GIS) for managing the power distribution system.
 14. Explain two types of spot billing technology. What are their relative advantages and disadvantages ?
 15. Discuss the immediate, medium and long-term strategies adopted for meeting the goal of clean energy for all.
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