

**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

Term-End Examination

February, 2021

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

Time : 3 hours

Maximum Marks : 100

Note : *This question paper has **two** parts : Part I and II.
Answer the questions as indicated in each part.*

PART I

*Attempt any **ten** questions.*

10×3=30

1. What is enhanced greenhouse effect ?
2. What strategies can be used to meet the future challenges related to our energy security ?
3. Briefly explain the need for energy accounting in a power distribution utility.
4. List the various types of energy audits.
5. Write some important features of Demand Side Management.

- 6.** What do you understand by Energy Conservation Building Codes ?
- 7.** Discuss electrical safety procedure for working with high voltage equipment.
- 8.** What are the three factors that can cause fires ?
- 9.** Why is Information Technology (IT) needed in the power distribution sector ?
- 10.** What is SCADA ?
- 11.** Mention various benefits of GIS.
- 12.** What kinds of data can be acquired through AMR ?

PART II

Attempt any **ten** questions.

10×7=70

13. Mention the strategies that can be adopted for environment management in the power sector.
14. Discuss the options available for ensuring energy security in the area catered to by your utility.
15. List five steps that you can take immediately to improve energy efficiency at home and at work.
16. What is an energy balance ? How is it prepared for energy accounting ?
17. On the basis of energy audit, mention certain actions that can be recommended to reduce technical losses.
18. List the measures the utility catering to your area can take for DSM in the industrial sector.
19. State the Indian Electricity Rules related to the Minimum Clearances (Vertical and Horizontal) of various voltage lines from buildings and from each other.
20. Describe the safety precautions related to the earthing of various electrical installations.

- 21.** Describe the first aid measures to help the victims of (a) burns, and (b) heat stroke.
 - 22.** What are the objectives and scope of the Disaster Management Plan ?
 - 23.** Describe the role of IT in Project Management, CRM and improving the operations of a power distribution.
 - 24.** List the possible GIS applications in your utility.
 - 25.** What IT applications can be used by the utilities to provide for customer satisfaction ?
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