# ADVANCED CERTIFICATE IN POWER DISTRIBUTION MANAGEMENT (ACPDM)

## Term-End Examination June, 2024

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

Time: 3 Hours Maximum Marks: 100

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

#### Part—I

- 1. Give the full forms of the following abbreviations:  $10 \times 1=10$ 
  - (a) AMR
  - (b) GIS

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- (c) HVDS
- (d) IVRS
- (e) MIS
- (f) MRI
- (g) TOD
- (h) SATCOM
- (i) WAN
- (j) RTU

#### Part—II

**Note:** Attempt any **ten** of the following questions.  $10 \times 7 = 70$ 

- 2. What is Energy Efficiency? What are the benefits of improved energy efficiency?
- 3. Discuss the measures taken for preventing and handling cases of electric shock.
- 4. What is ERP? Discuss the benefits of using ERP in a power distribution utility.
- 5. What does Energy Audit Report contain?
- 6. Discuss the benefits of DSM for power utilities, consumers and the society.
- 7. Explain the natural and enhanced Greenhouse effect.
- 8. What problems will your utility encounter if it resorts to energy accounting? How can these be managed?

- 9. What do you understand by business process re-engineering?
- 10. Explain how can IT help in reducing AT & C losses and improving the efficiency of power distribution. Give examples.
- 11. What is ERS? State its usefulness.
- 12. State the benefits of AMR and outline the hardware requirement for it.

#### Part—III

- **Note:** Attempt any **two** of the following questions.  $2 \times 10 = 20$
- 13. What is SCADA? Discuss its wellness for improving the operation of a power distribution utility.
- 14. List 5 steps each that you can take immediately to:
  - (a) Reduce your contribution to global warming.
  - (b) Curtail air, water and land pollution due to your energy usage.
  - (c) What are the facilities required to tackle any disaster?
- 15. What are the facilities required to tackle any disaster?

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