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ADVANCED CERTIFICATE IN POWER DISTRIBUTION MANAGEMENT (ACPDM)

Term-End Examination

June, 2023

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 full forms of the following abbreviations: $10 \times 1=10$
 - (a) WAN

- (b) WWW
- (c) RTU
- (d) SLD
- (e) MIS
- (f) ATM
- (g) GDP
- (h) ERP
- (i) ABT
- (j) MRI

Part—II

- 2. Attempt any **ten** of the following questions: $10 \times 7 = 70$
 - (a) Explain the need for a DisasterManagement Plan for a power utility.Outline its objectives.
 - (b) Discuss the measures taken for preventing and handling cases of electric shock.
 - (c) State the objectives of Energy Conservation in Building Codes Program.

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- (d) Explain the ESCO route to DSM.
- (e) What are various actions recommended for reducing technical losses under energy audit program?
- (f) Differentiate between Step potential and Touch potential.
- (g) What are the barriers to DSM?
- (h) Explain how IT can help in reducing AT and C losses and improving the efficiency of power distribution. Give some examples.
- (i) What are the problems encountered in energy accounting?
- (j) Explain the need for zoning for natural disasters. What zoning schemes are in practice for earthquakes?
- (k) What does energy audit report contain?

Part-III

- 3. Attempt any two of the following questions: $2\times10=20$
 - (a) Explain the major causes for fire outbreaks in a power utility. What techniques can be used for handling and preventing such fire causes.

- (b) What IT applications can be used by the utilities for consumer satisfaction? Explain by giving suitable examples.
- (c) What do you understand by software based distribution network planning and analysis? What are the advantages of integrating it with GIS?