No. of Printed Pages : 4

**BEE-001** 

# ADVANCED CERTIFICATE IN POWER DISTRIBUTION MANAGEMENT (ACPDM)

# **Term-End Examination**

# December, 2023

**BEE-001 : POWER DISTRIBUTION SECTOR** 

Time : 3 Hours

Maximum Marks : 100

Note: The paper has three Sections. Attempt all

Sections.

## Section-A

*Note* : Attempt *all* questions.

1. Fill in the blanks from the choices given below :

 $10 \times 1 = 10$ 

[Coalfired; Bee; Energy Conservation Act (2001); National Tariff Policy; Padestal; biomass, electricity; Demand; unbalanced, Open access]

- (a) As per the Electricity Act, 2003 .....
  has notified the regulation on meters of electricity in the year 2006.
- (b) Most of the power generation in the country comes from ..... power stations.
- (c) Bureau of Energy Efficiency (BEE) has been set up under the Act ......
- (d) .....ensure availability of electricity to consumers at reasonable and competitive rates.
- (e) The post insulators in use at substation are ...... types.
- (f) ..... can be promoted as alternative fuel for power generation.
- (g) Prepaid metering is a system whereby consumers purchase ..... through smart meters.
- (h) If load on each phase of the transformer is not equal, it is called ..... loading of transformer.
- (i) ..... in a transmission means freedom to license to procure power from any source.
- (j) ..... meters measure kVA which combine reactive and active power.

### Section-B

Note : Attempt any <i>ten</i> questions.	$10 \times 7 = 70$
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- 2. What do you understand by aggregate technical and commercial losses ?
- 3. Suggest ways in which your utility could embark on energy conservation efforts within the organisation.
- 4. Write the goals of the Electricity Act, 2003.
- 5. State the primary responsibilities of the Central Regulatory Commission.
- 6. Make the list of substation equipment.
- 7. What is the significance of the Grid Management?
- 8. Distinguish between current and voltage transformers.
- 9. Explain different types of benchmarking.
- 10. Discuss the various approaches to the performance benchmarking through indictors.
- 11. Discuss the role of field level staff in containing AT & C losses.
- 12. Distinguish between T & D losses and AT & C losses.

- 13. Describe the various measures that can be taken for reducing commercial losses.
- 14. List the reasons for using underground cables. State the selection criteria and sizing of underground cable.

#### Section-C

**Note** : Attempt any *two* questions. 10×2=20

- 15. Discuss the various technological options, available for energy meters.
- 16. Discuss the role of Electricity Regulatory Commission on the policy of electricity power business.
- 17. Write the overall scenario of the power sector in our country, include all three segments generation, transmission and distribution.