

**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

Term-End Examination

June, 2018

00203

BEE-001 : POWER DISTRIBUTION SECTOR

Time : 3 hours

Maximum Marks : 100

*Note : The paper has three sections. Attempt **all** sections.
Answer the questions in English language only.*

SECTION A

*Attempt **all** questions.*

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

10×1=10

(voltage regulation, insulator, transformer, switching, load despatch centre, cooling, tariffs, earthing, data collection, grid commercial losses, CRM, benchmarking)

- (a) Transformer oil serves the dual purpose of insulation and _____ .
- (b) The National Tariff Policy sets broad guidelines for the regulators for fixing _____ for generation, transmission and distribution.

- (c) Regional Load Despatch Centre is responsible for real time operation of the regional grids, in consultation with all the players involved in _____ operation.
- (d) Load forecasting process involves _____ .
- (e) The real time operation of the grid is managed by _____ .
- (f) An operational strategic framework is more relevant to apply _____ in Indian power/electricity business systems.
- (g) Circuit breaker is a _____ device.
- (h) _____ not only improves the performance but also brings the value addition.
- (i) Accurate metering, efficient billing and prompt collection can reduce the _____ .
- (j) High voltage test is performed on _____ .

SECTION B

Attempt *all* questions.

10×3=30

2. What do you mean by wheeling charges ?
3. Briefly explain, energy accounting and energy audit.
4. What is reactive power control ?
5. What is load balancing ?
6. What is a potential transformer ?
7. What are the voltage quality standards ?
8. What is the role of data mining in CRM network ?
9. How can we reduce DTR failure rate in the utility ?
10. What factors contribute to technical losses ?
11. What is HVDS system ?

SECTION C

Attempt any **ten** questions.

10×6=60

12. Discuss the salient features of The Electricity Act 2003.
13. Why is underground cabling being opted for in urban areas ? What are its advantages ?
14. What is the role of CERC ?
15. What are the measures that can be taken to reduce technical losses ?
16. How can we improve billing and collection efficiency ?
17. Explain the impact of LT/HT ratio on losses and voltage.
18. Explain seven quality tools (7QC tools) for power sector business improvement.
19. What is Energy Conservation Building Code ?
20. What are the functions of State Electricity Regulatory Commission ?
21. Describe the role of Critical Success Factors (CSF) in performance benchmarking.
22. What are the parameters for evaluation of OSM strategy ?
23. What are the objectives of grid management ?
24. Distinguish between CT and PT.