

**ADVANCED CERTIFICATE IN POWER  
DISTRIBUTION MANAGEMENT**

**Term-End Examination**

01441

**June, 2015**

**BEE-001 : POWER DISTRIBUTION SECTOR**

*Time : 3 hours*

*Maximum Marks : 100*

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

**SECTION A**

*Attempt **all** questions.*

**1. Fill in the blanks.**

*10×1=10*

- (a) Transformer oil serves the dual purpose of \_\_\_\_\_ and cooling.
- (b) \_\_\_\_\_ is the most widely used conductor.
- (c) The bus bar should be able to carry expected maximum load current without exceeding \_\_\_\_\_ limit.
- (d) Any distributor can become a \_\_\_\_\_ .

- (e) Regulatory Commission receives \_\_\_\_\_ for fixation of tariff.
- (f) Meters in service need to keep to the prescribed \_\_\_\_\_ range.
- (g) \_\_\_\_\_ cannot engage in trading.
- (h) \_\_\_\_\_ is same at all points of a grid operating in synchronous condition.
- (i) Development of \_\_\_\_\_ energy is required for overcoming power shortage.
- (j) \_\_\_\_\_ compliant meters are known as SEMs.

## SECTION B

*Attempt all questions.*

$10 \times 3 = 30$

2. How is earthing arrangement made in a substation ?
3. What do you understand by 'black start' ?
4. Define 'Diversity Factor'.
5. What do you mean by capacity building ?
6. What do you understand by Cross-Subsidy in electricity tariff ?
7. What do you mean by wheeling charges ?
8. What are the aspects covered in Energy Audit report ?
9. What do you mean by 'franchisee' as per Electricity Act, 2003 ?
10. Why are TOD meters used ?
11. For what purpose is auxiliary supply transformer required in a substation ?

## SECTION C

*Attempt any ten questions.*

*10×6=60*

12. What are the functions of load despatch centres ?
13. Explain hot line maintenance techniques and tools.
14. Discuss the salient features of Electricity Act, 2003.
15. What factors contribute to high commercial losses ?
16. What are the main reasons of transformer failure ?
17. What may be the KPIs for consumer service in a distribution utility ?
18. What do you understand by Instrument Transformer ?
19. What are the reasons of poor financial health of distribution utilities ?
20. What is the role of CERC ?
21. Write short notes on "Standard and Labelling".
22. Explain in brief about Availability based Tariff.
23. What are the advantages of Benchmarking ?
24. What do you mean by ARR ?
25. Distinguish between Power cable and Control cable.