

**ADVANCED CERTIFICATE IN POWER
DISTRIBUTION MANAGEMENT**

**Term-End Examination
June, 2010**

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BEE-001 : POWER DISTRIBUTION SECTOR

Time : 3 hours

Maximum Marks : 100

Note : The question paper has four sections. Answer the questions as indicated in each section.

SECTION - A

Attempt all 10 questions in this section.

Fill in the blanks :

10x1=10

1. Contribution of thermal generation in percentage terms to the total Installed Capacity in India is _____.
2. Indian Government is importing Hydel Power from the following two countries :
_____ and _____
3. The Government of India is trying to improve distribution sector by employing _____ Scheme.
4. Unbundling becomes mandatory feature under the _____. (Name of the Act and the year)
5. To address the grievances _____ Tribunal is set under Electricity Act 2003.

6. Tariff of Transmission company is decided by the _____ commission.
7. _____ power stations are generally used to meet the base load of the country.
8. _____ ministry takes all project related to Renewable energy.
9. Environmental and technical clearance for the new Hydro Plants are given by _____ .
10. Name of the two meters used by the HT consumers.
 - (i) _____
 - (ii) _____

SECTION - B

Attempt *any ten* questions :

10x2=20

1. What factors contribute to T & D losses in rural areas ?
2. What are the acceptance levels of losses in the Transmission and Distribution systems in India ?
3. Distinguish between Current and Voltage Transformers.
4. Classify different types of Benchmarking.
5. Name the different Electricity Act since 1947.
6. Where does your utility stand in terms of T & D and AT & C losses ?
7. Define the Clean Development Mechanism (CDM).
8. What is load balancing ?
9. What are the activities involved in the distribution system planning ?
10. Explain APDRP Scheme for distribution reforms.
11. What are the advantages of Benchmarking ?
12. What is the importance of power quality ?

SECTION - C

Attempt *any ten* questions :

10x5=50

1. Give salient features of the Electricity Act 2003 pertaining to distribution sector.
2. Discuss the HVDS system of distribution system.
3. Compare radial, loop and cross-loop distribution system.
4. What are the parameters for evaluation of O & M strategy for distribution utility ?
5. What do you understand by Grid Management ?
6. Give reasons why underground cabling is being opted for in urban areas ? What are its advantages ?
7. Discuss measures to avoid DTR failure at the Operation and Maintenance level. Suggest ways to reduce DTR failure rate in your utility.
8. Explain briefly the methods of on-site testing.
9. Discuss the process of assessing the customer satisfaction.
10. What are the Voltage Quality Standards ?
11. How does the National Electricity Policy help in realizing the aims and objectives of Electricity Act, 2003 ?
12. Discuss the various measures policy taken by Government of India to improve Distribution sector.

SECTION - D

Attempt *any two* questions :

2x10=20

1. Explain the impact of Electricity Act 2003 on Generation, Transmission and Distribution.
 2. What is Performance Evaluation ? Discuss the various approaches to Performance benchmarking through the use of indicators.
 3. Discuss how the utilities can carry out revenue protection through use of innovative metering, billing and collection techniques.
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