


Name:			
Enrolment No:			
<div><div>UPES</div><div>End Semester Examination, May 2025</div><div>Course: Power Transmission and Distribution</div><div>Program: MBA Power Management</div><div>Course Code: PIPM7003</div></div> <div>Semester: 2nd Time : 03 hrs. Max. Marks: 100</div>			
Instructions:			
<div>SECTION A</div> <div>10Qx2M=20Marks</div>			
S. No.		Marks	CO
Q 1	Except for Power Generation, every other activity in the power sector is licensed. (True/False)	2	CO1
Q2	A & Co Limited, Chhattisgarh entered into a power sale transaction with B & Co Limited, Uttar Pradesh for supply of 50 MW power. Identify the Nodal RLDC in this regard.	2	CO2
Q3	What is understood by Merit Order Despatch?	2	CO2
Q4	In case, the grid frequency is 49.90 Hz, what are the options available with the Discom if the Current Demand is 1498 MW and Current Schedule is 1510 MW?	2	CO1
Q5	What are AT&C Losses? How can these losses be reduced?	2	CO2
Q6	What is the difference between Subsidy and Cross Subsidy?	2	CO2
Q7	What is the need and importance of Aggregate Revenue Requirement?	2	CO1
Q8	What is the primary challenge of the Distribution companies?	2	CO1
Q9	In the case of inter-state operations, SLDC is considered to be the supreme authority. Comment on the correctness of the statement.	2	CO1
Q10	What is the primary difference between Point of Connection and Postal Stamp Transmission Pricing Method.	2	CO1
<div>SECTION B</div> <div>4Qx5M= 20 Marks</div>			
Q11	As per the EA 2003, what are the various functions of the Regional Load Despatch Centre	5	CO2
Q12	As per the EA 2003, discuss the functions of the Central Transmission Utility.	5	CO2
Q13	Briefly discuss the procedure for booking of Transmission Corridor under Open Access.	5	CO3
Q14	Discuss the role of the various utilities involved in the Transmission of Power	5	CO3

SECTION-C 3Qx10M=30 Marks			
Q15	<p>While calculating the Levelized Cost of Transmission, discuss the importance of the following components:</p> <ul style="list-style-type: none"> a) Energy Throughput b) Depreciation c) Discounting Factor d) Operations and Maintenance Expenses 	10	CO3
Q16	The technical and commercial losses in a Discom's network are at 23%, much higher than the regulatory target of 15%. Identify three operational steps you would take immediately to reduce losses.	10	CO4
Q17	In a rural distribution network, frequent faults are reported, but the exact location of the fault is difficult to identify due to long feeder lines and poor records. Design a practical operational strategy to improve fault detection and restoration time.	10	CO3
SECTION-D 2Qx15M= 30 Marks			
Q18	<p>A power distribution company (Discom) serves a city with a peak load of 500 MW. Recently, due to rapid urbanisation, the company observed frequent overloading of its 33/11 kV substations, leading to outages and customer complaints.</p> <p>As an operations in charge, you are tasked to:</p> <p>18(a) - Propose immediate measures to ensure a reliable power supply without building new substations.</p> <p>18(b) - Suggest long-term operational improvements to sustainably manage growing demand.</p> <p>18(c) - Identify two key KPIs (Key Performance Indicators) you would monitor to measure the success of your initiatives.</p> <p>Support your answer with reasons.</p>	30	CO4