PRN:		Course Code :	UEV404

Second Year **B. Tech** End Semester Examination Winter 2024

Power Transmission and Distribution

Day and Date: Fri 29 NOV 2024 Max Marks: **100** 006236

Time : 02:00PM To 05:00PM Duration: **03** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Explain single line diagram of electrical supply system in detail.	08	L2	CO1
	b)	Explain the following terms. 1] Load curve. 2] Load duration curve. 3] Load factor 4] Demand factor. 5] Diversity factor. 6] Plant capacity factor	08	L2	CO1
		OR			
	b)	Explain difference between direct current transmission and alternating current transmission.	08	L3	CO1
Q.2		**Attempt the following**			
	a)	Explain the term 'Sag' in case of overhead transmission lines.	08	L3	CO1
	b)	Explain the following. 1] Types of Conductors. 2] Types of Insulators.	08	L2	CO1
		OR			
	b)	Explain string efficiency and methods of improvement string efficiency.	08	L3	CO2
Q.3		**Attempt any two from the following**			
	a)	Explain corona effect and methods of reducing corona effect.	08	L2	CO2
	b)	Explain the following terms. 1] Transmission line constants. 2] Skin effect. 3] Proximity effect.	08	L2	CO2
	c)	Explain transposition of conductors and its necessary.	08	L3	CO2
Q.4		**Attempt any two from the following**			
	a)	Explain thermal electric power generation in detail.	08	L4	CO2
	b)	Explain cable and its classification.	08	L2	CO3
	c)	Explain nuclear electric power generation in detail.	08	L2	CO3
Q.5		**Attempt any Two of the following**			
	a)	Explain different methods of laying of cables in detail.	09	L2	CO3
	b)	Explain earthing and types of earthing.	09	L2	CO3
	c)	Explain power factor and various causes of low power factor.	09	L3	CO4
Q.6		**Attempt any Two of the following**			
	a)	Explain methods of power factor improvement and advantages of power factor improvement.	09	L3	CO4
	b)	Explain concept of photovoltaic power generation in detail.	09	L3	CO4
	c)	Explain different site selection factors for wind power plant.	09	L2	CO4

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