

**LESSON PLAN-2023**  
**SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR**

Discipline- <b>ELECTRICAL</b>	Semester-4TH	Name of teaching faculty- ASHIS KU. PARIDA
SUBJECT- GENERATION ,TRANSMISSION & DISTRIBUTION	No of days/ per week class alloted-5	SEM From date-16.01.2024 No of weeks-
Week	Class day	Theory Topics
		<b>GENERATION OF ELECTRICITY</b>
4TH	16/01/2024	Elementary idea on generation of electricity from Thermal, Hydel, Nuclear power station
	17/01/2024	do
	19/01/2024	Introduction to Solar Power Plant (Photovoltaic cells)
	20/01/2024	do
	22/01/2024	Layout diagram of generating stations
	23/01/2024	do
	24/01/2024	Assignments and doubt clearing
	27/01/2024	<b>TRANSMISSION OF ELECTRIC POWER</b>
	29/01/2024	Layout of transmission and distribution scheme
1ST	30/01/2024	Voltage Regulation & efficiency of transmission.
	31/01/2024	State and explain Kelvin's law for economical size of conductor.
	2/02/2024	do
	3/02/2024	Corona and corona loss on transmission lines
2ND	5/02/2024	Assignments and doubt clearing
	6/02/2024	<b>OVER HEAD LINES</b>
	7/02/2024	Types of supports, size and spacing of conductor.
	8/02/2024	Types of conductor materials
	9/02/2024	State types of insulator and cross arms.
3RD	10/02/2024	Sag in overhead line with support at same level and different level.(approximate formula effect of wind, ice and temperature on sag)
	12/02/2024	DO
	13/02/2024	Assignments and doubt clearing

	15/02/2024	Simple problem on sag
	16/02/2024	<b>PERFORMANCE OF SHORT &amp; MEDIUM LINES</b>
	17/02/2024	Classification of transmission line
4TH	19/02/2024	voltage regulation of a transmission line
	20/02/2024	expression for short transmission line
	21/02/2024	phasor diagram
	23/02/2024	expression for medium transmission line for nominal pi network with phasor diagram
	24/02/2024	expression for medium transmission line for nominal T network with phasor diagram
	26/02/2024	<b>EHV TRANSMISSION</b>
5TH	27/02/2024	EHV AC transmission.
	28/02/2024	Reasons for adoption of EHV AC transmission
	1/03/2024	Problems involved in EHV transmission.
	2/03/2024	HV DC transmission
1ST	4/03/2024	do
	5/03/2024	Advantages and Limitations of HVDC transmission system
	6/03/2024	<b>DISTRIBUTION SYSTEMS</b>
	9/03/2024	Introduction to Distribution System.
	11/03/2024	Connection Schemes of Distribution System: (Radial, Ring Main and Interconnected system)
2ND	12/03/2024	DC distributions
	13/03/2024	Distributor fed at one End, Distributor fed at both the end, Ring distributor
	15/03/2024	AC distribution system.
	16/03/2024	do
	18/03/2024	Three phase four wire star connected system arrangement
3RD	19/03/2024	<b>UNDERGROUND CABLES</b>
	20/03/2024	Cable insulation
	22/03/2024	classification of cables
	23/03/2024	Types of L. T. & H.T. cables with constructional features
	25/03/2024	do

	27/03/2024	Methods of cable lying
	29/03/2024	Localization of cable faults: Murray and Varley loop test for short circuit fault /Earth fault
4TH	30/03/2024	<b>ECONOMIC ASPECTS</b>
	1/04/2024	Load curves.demandfactor,maximum demand
	2/04/2024	Load factor.diversityfactor,plant capacity factor
	3/04/2024	Peak load and Base load on power station
	6/04/2024	Assignments and doubt clearing
	8/04/2024	<b>TYPES OF TARIFF</b>
1ST	9/04/2024	Desirable characteristic of a tariff.
	10/04/2024	Explain fiat rate, block rate, two part and maximum demand tariff
	12/04/2024	problems.
	13/04/2023	<b>SUBSTATION</b>
	15/04/2024	Layout of LT substation
2ND	16/04/2024	Layout of HT substation
	17/04/2024	Layout of EHT substation
	19/04/2024	Earthing of Substation, transmission and distribution lines
	20/04/2024	DO
	22/04/2024	Assignments and doubt clearing

K. Annapadi  
HOD

H.O.D

DEAN ACADEMICS

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