Badriprasad Institute of Technology, Sambalpur

Lesson plan for Theory -4,Generation Transmission & Distribution

Semester & Branch : 4th Sem , Electrical Engineering **Total Periods-60**

Name of the faculty : Rohit Meher **No of periods /week-4**

WEEK	CLASS DAY	THEORY
1ST	1ST	elementary idea on generation of electricity from thermal,hydel,nuclear power station
	2ND	introduction to solar power plant
	3RD	layout diagram of generating station
	4TH	layout of transmission and distribution scheme
2ND	1ST	voltage regulation and efficiency of transmission
	2ND	state and explain kelvin's law
	3RD	corona and corona loss
	4TH	types of support,size and spacing of conductor.
3RD	1ST	types of conductor materials.
	2ND	types of insulator and cross arm
	3RD	sag in overhead line
	4TH	simple problem in sag
4TH	1ST	calculations of regulation and efficiency
	2ND	simple problem in regulation and efficiency
	3RD	simple problem in regulation and efficiency
	4TH	simple problem in regulation and efficiency
5TH	1ST	simple problem in regulation and efficiency
	2ND	EHV AC transmission.
	3RD	reason for adoption of ac transmission
	4TH	problems involved in EHV transmission
6TH	1ST	HVDC transmission
	2ND	advantage in limitation of HVDC transmission
	3RD	introduction to distribution system.
	4TH	scheme of distribution system
7TH	1ST	radial connected system
	2ND	ring main connected system
	3RD	interconnected distribution system
	4TH	DC distribution
8TH	1ST	distributor fed at one end
	2ND	distributor fed at both end
	3RD	ring distributor
	4TH	AC DISTRIBUTION SYSTEM
9TH	1ST	methods of solving ac distribution problem
	2ND	3 phase four wire star connected system arrangement
	3RD	underground cable.
	4TH	cable insulation
10TH	1ST	classification of cable
	2ND	types of LT and HT cables
	3RD	methods of cable lying
	4TH	localisation of cable fault

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11TH	1ST	murray loop test
	2ND	economic aspect
	3RD	causes of low power factor
	4TH	method of improvement of power factor
12TH	1ST	power effecting the economic of generation
	2ND	load curve
	3RD	demand factor
	4TH	maximum demand
13TH	1ST	load factor
	2ND	diversity factor
	3RD	plant capacity factor
	4TH	peak and base load on power station
14TH	1ST	types of tariff
	2ND	desirable characteristic of tariff
	3RD	explaination of flat rate,block rate
	4TH	two part and maximum demand tariff
15TH	1ST	solved example related to tariff
	2ND	solved example related to tariff
	3RD	layout of LT,HT and EHT substation.
	4TH	Earthing of Substation,Distribution and transmission line.

(SIGNATURE OF FACULTY) **(SIGNATURE OF HOD**