SUDDHANANDA ENGONEERING RESEARCH CENTER, BBSR || Lesson Plan			
Discipline : MECHANICAL ENGG.		**Semester: 6th Sem**	**Name of the Teaching Faculty : H.K. Panda**
Subject : PSE		**No. of Days / per week class allotted : 04**	
MONTH	**Week**	**Day**	**Topics**
FEBRUARY	3rd	2nd	Describe sources of energy
		3rd	Explain concept of Central and Captive powerstation
		4th	Explain concept of Central and Captive powerstation
	4th	1st	Classify power plants.
		2nd	Importance of electrical power in day to day life.
		4th	Importance of electrical power in day to day life.
		5th	Overview of method of electrical power generation
	5th	1st	Layout of steam powerstations.
		2nd	Steam powercycle
MARCH	1st	4th	Explain Carnot vapour power cycle with P-V,T-s diagram and determine thermal efficiency.
		5th	Explain Rankine cycle with P-V,T-S&H-s diagram
	2nd	1st	Determine thermal efficiency,Workdone,workratio, and specific steam Consumption.
		4th	solve simple problems.
		5th	solve simple problems.
	3rd	1st	Revision
		2nd	list of the thermal power station in the state with their capacities
		4th	Operation of air pre heater
		5th	Operation of economiser,eletrostatic precipitator
	4th	1st	Operation of super heater,need of boiler mountings
		2nd	operation of boiler
		4th	Draught systems(Naturaldraught,Forceddraught & balanceddraught)
		5th	Advantages & disadvantges of Draught systems
	5th	1st	Advantages & disadvantages of steam turbine
		2nd	Discuss about the elements of steam turbine
		5th	Governing and Performance of steam turbine.
APRIL	2nd	1st	Explain Thermal efficiency,Stage efficiency and Gross efficiency.
		2nd	Function of condenser and classification of condenser
		4th	Function of condenser auxiliaries such as hot well,condenser extraction pump,air extraction pump and
	3rd	1st	Function and type of cooling tower and sprayponds
		2nd	Selection of site for thermal powerstations
		4th	Classify nuclear fuel(Fissile&fertilematerial)
	4th	1st	Explain fusion and fission reaction.Explain working of nuclear powerplants with blockdiagram
		2nd	Explain the working and construction of nuclear reactor.Compare the nuclear and thermalplants
		4th	Explain the disposal of nuclear waste.Selection of site for nuclear powerstations.List of nuclear powerstations.
		5th	State the advantages and disadvantages of diesel electric power stations.
		1st	Explain briefly different systems of diesel electric power stations.
		2nd	Explain Fuel storage and fuel supply system, Fuel injection system,Air supply system in diesel electric power station

	5th	4th	Exhaust system,cooling system,Lubrication system,starting system,governing system of diesel electric power station
		5th	Selection of site for diesel electric powerstations.Performance and thermal efficiency of diesel electric powerstations.
MAY	1ST	1st	State advantages and disadvantages of hydro electric powerplant.
		2nd	Classify and explain the general arrangement of storage type hydro electric project and explain its operation.
		4th	Selection of site of hydel powerplant.
	2nd	1st	List of hydro power stations with their capacities and number of units in the state.Types of turbines and generation used.
		2nd	Simple problems
		4th	Selection of site for gas turbine stations.
		5th	Fuels for gas turbine.
	3rd	1st	Elements of simple gas turbine power plants
		2nd	Merits,demerits and application of gas turbine power plants.
		4th	Revision
	4th	1st	Revision
		2nd	Question Discussion