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SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: Mechanical.	Semester: 6th	Name of the Teaching Faculty: Syed Imran Hasan.
Subject: Power Plant Engg	No of Days/per week class allotted:	Semester from Date: 16.01.24 to Date: 20.4.24 No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Introduction, Source of Energy.
	2nd	Central and captive Power Station
	3rd	Type of Power Plants.
	4th	Electrical Power, Importance,
	5th	
2nd	1st	Overview of Electrical Power Generation.
	2nd	Introduction to Steam Power Plant.
	3rd	Layout of Steam Power Station.
	4th	Steam Power cycle,
	5th	⊙
3rd	1st	Carnot Vapour Power cycle, P-V, T-S
	2nd	Thermal Efficiency, Derivation
	3rd	Rankine cycle, P-V, T-S diagram
	4th	Thermal efficiency, work done
	5th	
4th	1st	Specific steam consumption, Problem
	2nd	Problem solving.
	3rd	List of Thermal Power Station.
	4th	Boiler Accessories, Air Preheater
	5th	
5th	1st	Economiser, Electrostatic Precipitator
	2nd	Super heater, Boiler Mounting, operation
	3rd	Draught system, Natural Draught.
	4th	Forced draught, Balanced Draught
	5th	-

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HOD

*Imran Hasan*  
16/1/24

Principal

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Discipline:	Semester:	Name of the Teaching Faculty:
Subject:	No of Days/per week class allotted: 4.	Semester from Date: to Date: No of Weeks:
Week	Class Day	Theory/Practical Topics
1st h	1st	Steam Prime Mover, Advantage, steam turbine
	2nd	steam condenser - function, types,
	3rd	Condenser extraction pump, Air Extraction Pump
	4th	Cooling Tower - Function of cooling tower, spray
	5th	
2nd h	1st	Selection for site for thermal power station
	2nd	NUCLEAR Power Plant, Introduction
	3rd	Fission and fission Reaction
	4th	working of Nuclear Power Plant,
	5th	
3rd	1st	Block diagram Nuclear Power Plant
	2nd	Nuclear Reactor, working construction.
	3rd	Comparison Nuclear and thermal plant.
	4th	Disposal of Nuclear Waste
	5th	
4th	1st	Selection of site for Nuclear Power Station
	2nd	List of Nuclear Power Station.
	3rd	class - Test -
	4th	Diesel Electric Power station - Intro
	5th	
10 5th	1st	Advantage and Disadvantage of Diesel P.P
	2nd	Different system of diesel Electric Power
	3rd	Fuel storage, supply,
	4th	Fuel Injection system.
	5th	

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Subject:	No of Days/per week class allotted:	Semester from Date: to Date: No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Air supply system, Exhaust system.
	2nd	cooling system, Lubrication system.
	3rd	starting system, governing system.
	4th	selection of site for diesel P.P.
	5th	
2nd	1st	Performance and thermal efficiency of P.P
	2nd	Hydel Power Plant → Introduction
	3rd	Advantage and Disadvantage.
	4th	Type of general arrangement storage
	5th	
3rd	1st	Operation of storage
	2nd	selection of site of hydel Power Plant.
	3rd	List of hydro Power station
	4th	Capacity and Number of units
	5th	
4th	1st	Types of Turbines
	2nd	Types of generation
	3rd	Problem Solving.
	4th	Class Test -
	5th	
5th	1st	Gas Turbine Power station, Intro.
	2nd	Selection of site, gas turbine station
	3rd	Fuel for gas turbine.
	4th	Element of simple gas turbine P.P.
	5th	Advantage, Disadvantage, Application of gas turbine.

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Principal