


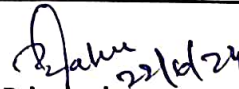
SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: Mechanical	Semester: 5th	Name of the Teaching Faculty: S. I. Hasan.
Subject: HMIIP	No of Days/per week class allotted: 4	Semester from Date: 1.7.24 to Date: 18.11.24 No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Introduction to hydraulic Turbines
	2nd	Classification of Hydraulic Turbines.
	3rd	Construction and working of Impulse Turbine
	4th	Velocity diagram of Moving blades
	5th	
2nd	1st	Workdone and Efficiency of Turbine.
	2nd	Problem solving Impulse Turbine.
	3rd	Problem solving Impulse Turbine.
	4th	Velocity diagram of moving blades
	5th	Francis Turbine.
3rd	1st	Francis turbine - Work done, Efficiency.
	2nd	Problem Solving
	3rd	Problem Solving.
	4th	Problem Solving.
	5th	
4th	1st	Kaplan Turbine - Workdone, Efficiency.
	2nd	Kaplan Turbine - Velocity diagram
	3rd	Problem Solving.
	4th	Problem Solving.
	5th	
5th	1st	Reaction Turbine and Impulse Turbine.
	2nd	Centrifugal Pump - Introduction.
	3rd	Construction and working of Pump
	4th	Work done and efficiency.
	5th	


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 Principal

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:	Semester: 5th	Name of the Teaching Faculty: S. I. Hasan
Subject: HMFP	No of Days/per week class allotted:	Semester from Date: 1.7.24 to Date: 18.11.24
Week	Class Day	No of Weeks:
6th	1st	Problem on Centrifugal Pump
	2nd	Problem on Centrifugal Pump
	3rd	Problem on Centrifugal Pump.
	4th	Reciprocating Pump - definition, diagram
	5th	
7th	1st	Single Acting Reciprocating Pump - working
	2nd	Double Acting Reciprocating Pump - working
	3rd	Power Required Drive Pumps Formula
	4th	Slip of pumps - definition, diagram
	5th	
8th	1st	Problem on Single Acting R.P.
	2nd	Problem on Single Acting R.P.
	3rd	Problem on Double Acting R.P.
	4th	Problem on Double Acting R.P.
	5th	
9th	1st	Pneumatic Control - definition, construction
	2nd	Element of Pneumatic control - Filter-Lubricator
	3rd	Types of Pressure Control Valves, Relief Valve
	4th	Pressure Regulation valves.
	5th	
10th	1st	Direction Control valves - definition - Diagram.
	2nd	3/2 D.C.V., 5/2 D.C.V., 5/3 D.C.V.
	3rd	Flow control valves.
	4th	Throttle valves.
	5th	

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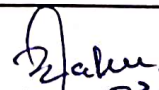
SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:	Semester: <u>8th</u>	Name of the Teaching Faculty: <u>S. I. Man</u>
Subject: <u>HMIFP</u>	No of Days/per week class allotted:	Semester from Date: <u>1.7.24</u> to Date: <u>18.11.24</u> No of Weeks:
Week	Class Day	Theory/Practical Topics
⑪ 1st	1st	ISO Symbol of Pneumatic Components
	2nd	Pneumatic Circuits of Sing acting Cylinder.
	3rd	Double Acting Cylinder Direct control
	4th	Metering-In, Metering-out, double acting cylinder.
	5th	
2nd	1st	Hydraulic Control System - Advantage, disadvantage.
	2nd	Hydraulic Accumulators.
	3rd	Pressure control valves.
	4th	Pressure Relief valve.
	5th	
3rd	1st	Pressure Regulation Valves.
	2nd	Direction control valve - Definition - Symbols.
	3rd	3/2 DCV, 5/2 DCV, 5/3 DCV.
	4th	Flow control valves.
	5th	
4th	1st	Throttle valves.
	2nd	Fluid Power Pumps - Vane Pump.
	3rd	External Gear Pumps.
	4th	Radial Piston Pump.
	5th	
5th	1st	ISO Symbol of Hydraulic Component.
	2nd	Actuator
	3rd	Hydraulic Circuit - Direct control of single cylinder.
	4th	Double acting cylinder - Metering-out
	5th	


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SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:		Semester:	Name of the Teaching Faculty:
Subject: HMIPP		No of Days/per week class allotted:	Semester from Date: _____ to Date: _____ No of Weeks:
Week	Class Day	Theory/Practical Topics	
(16) 1st	1st	Comparison of hydraulic/pneumatic system.	
	2nd	Semester Q and Ans. over.	
	3rd	Semester Q and Ans.	
	4th	Semester Q and Ans.	
	5th		
2nd	1st		
	2nd		
	3rd		
	4th		
	5th		
3rd	1st		
	2nd		
	3rd		
	4th		
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4th	1st		
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	3rd		
	4th		
	5th		
5th	1st		
	2nd		
	3rd		
	4th		
	5th		


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