

## LESSON PLAN-(SUMMER-2023) SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR

Discipline-		
MECHANICAL	Semester-4TH	Name of teaching faculty- Er. Soumya Ranjan Kar
	alloted/ per	SEM From date- 10.3.2022 TO 10.6.2022
Subject- FM	week -4	No of weeks- 15
Week	Class day	Theory Topics
week-1	13.02.2023	Defination & unit of fluid pressure, pressure intensity & pressure head
	14.02.2023	Concept of atm. Pre, gauge pre, vacuum pre & absolute pre
	15.02.2023	Related problem solved
	17.02.2023	Study of simple Manometer with problem solved
week-2	20.02.2023	Study of differential Manometer with problem solved
	21.02.2023	Study of bourden tube pressure gauge
	22.02.2023	Related problem solved
	24.02.2023	Solved problem
week-3	27.02.2023	ASSIGNMENTS
	28.02.2023	Archimedis' principle, concept of buoyancy, Metacentre & Metacentric Height.
	2.03.2023	Problem solved
	3.03.2023	Laminar & turbulent flow
	6.03.2023	Compressible& incompressible flow
week-4	9.03.2023	Rotational and Irrotational flow Laminar & turbulent flow
	10.03.2023	Compressible& incompressible flow
	20.03.2023	Rotational and Irrotational flow
	21.03.2023	Statement and proof
week-5	23.03.2023	Relationship bet cc cv & cd
week-3	27.03.2023	Statement and proof for one dimensional flow
	28.03.2023	Problem solved
week-6	29.03.2023	Define A Pipe
	31. 03.2023	State Laws Of Fluid Friction
	3.04.2023	The Equation Of Loss Of head Through Pipe Due To Friction
		(DARCY'S)
	5.04.2023	PROBLEM SOLVED
	6.04.2023	The Equation Of Loss Of head Through Pipe Due To Friction (CHEZY'S)
week-7	11.04.2023	Hydraulic Gradient & Total Energy Line
	12.04.2023	PROBLEM SOLVED
	13.04.2023	ASSIGNMENTS
	17.04.2023	Introduction
		Force exerted by the jet on a stationary vertical plate work done,
	19.04.2023	efficiency.
week-8	20.04.2023	Force exerted by the jet on a moving vertical plate & work done,
		efficiency
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	24.04.2023	Force exerted by a jet of water on an unsymmetrical moving curved
		plate when
week-9	25. 04.2023	Efficiency of jet
	26.04.2023	ASSIGNMENTS
	27.04.2023	Layout and feature of hyd-electric power plant
week-10	28.04.2023	Classification of turbines
	01.05.2023	Construction and working
	02.05.2023	Work done, efficiency
	03.05.2023	Discharge over a triangular notch or weir
	04.05.2023	Construction and working
week-11	08.05.2023	Loss of energy in pipes
	10.05.2023	Head loss due to friction: Darcy's and Chezy's formula
	11.05.2023	Problem solved
	12.05.2023	ASSIGNMENTS
week-12	15.05.2023	Construction and working
	16.05.2023	Velocity diagram of a single impeller, workdone efficiency
	17.05.2023	Problem solved
	18.05.2023	Hydraulic gradient and total gradient line
week-13	19.05.2023	Derivation of work done on series of vanes and condition for maximum
	22.05.2023	efficiency.
	23.05.2023	Impact of jet on moving curved vanes, illustration using velocity
		triangles,
HOD SIGN.		DEAN (Academic) SIGN. PRINCIPAL SIGN.