

II B. Tech – II Semester

(20ME4104) FLUID MECHANICS & HYDRAULIC MACHINERY LAB

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
15	35	50	-	-	3	1.5

Pre-Requisites: Fluid mechanics

Course Objective:

- To impart practical exposure on the performance evaluation methods of various flow measuring equipment.
- To impart practical knowledge on the evaluation of hydraulic turbines and pumps.

Note: Any 10 Experiments from the below

1. Impact of jets on Vanes.
2. Performance Test on Pelton Wheel.
3. Performance Test on Francis Turbine.
4. Performance Test on Kaplan Turbine.
5. Performance Test on Single Stage Centrifugal Pump.
6. Performance Test on Multi Stage Centrifugal Pump.
7. Performance Test on Reciprocating Pump.
8. Calibration of Venturi meter.
9. Calibration of Orifice meter.
10. Determination of friction factor for a given pipe line.
11. Determination of loss of head due to sudden contraction in a pipeline.
12. Turbine flow meter.

Course Outcomes:

A student who successfully fulfills this course requirement will be able to:

S. No	Course Outcome	BTL
CO1	Calibrate flow measuring devices such as Venturimeter and orifice meter	L4
CO2	Determine friction factor in pipes	L4
CO3	Determine minor losses in the pipes.	L4
CO4	Understand the performance of hydraulic turbine and pumps under different working conditions.	L4

Correlation of Cos with POs & PSOs:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	0	1	1	1	1	0	0	2	2	3	2	2
CO2	2	2	0	1	1	1	1	0	0	2	2	3	2	2
CO3	2	2	0	1	1	1	1	0	0	2	2	3	3	2
CO4	2	2	0	1	1	1	1	0	0	2	2	3	3	2