

FLUID MECHANICS & HYDRAULIC MACHINERY LAB

The Fluid Mechanics & Hydraulic Machinery Laboratory is one of the important laboratories of the Department of Mechanical Engineering; the main purpose of this lab is to create awareness and enhance the Understanding of the fundamentals of Fluid Mechanics to apply the concepts on Hydraulic Machines.



The experiments are designed in such a way that it will demonstrate the basics idea of fluid mechanics principles and make the students to learn the various application of the hydraulic machines. The laboratory has a mission to offer the potentials for Practical Works and demonstrations to make the students to understand the practical. By the introductions as well as providing the Research facilities in the lab, this Laboratory caters to the needs of Mechanical and Electrical Engineering Students for the subject of Fluid Mechanics and Hydraulic Machinery. The Laboratory is equipped with a large number of equipment and experimental Setups in order to study the fundamental and applied aspects of Hydraulics machineries.

LIST OF EXPERIMENTS:

S/NO.	Name of Experiment
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 Venturimeter
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	Verification of Bernoulli's Theorem

LIST OF EQUIPMENTS:

S/NO.	Name of Experiment
1	Impact of jets on Vanes apparatus
2	Pelton Wheel apparatus
3	Francis Turbine apparatus
4	Kaplan Turbine apparatus
5	Single Stage Centrifugal Pump apparatus
6	Multi Stage Centrifugal Pump apparatus
7	Reciprocating Pump apparatus
8	Venturimeter apparatus
9	Orifice meter apparatus
10	friction factor for a given pipe line apparatus
11	Loss of head due to sudden contraction in a pipeline apparatus
12	Bernoulli's Theorem apparatus