

**Name of Lab: - Fluid Mechanics & Machinery Lab**

**Name of Lab In charge: - Prof. Shingare R.P.**

**Name of Lab Assistant: - Mr. Kadam.U.S.**

Knowledge of fluid properties, fluid flow and fluid machinery is essential in all fields of engineering. Hydraulic machines have an important role in water supply, irrigation, power generation and also in most of the engineering segments. This lab is intended to develop the skills to estimate loss in pipes, efficiency of hydraulic machines like turbine, pumps etc., head on a pump and select a pump for a particular application, diagnose and rectify the faults in pumps and turbines, replace pressure gauges and other accessories on hydraulic machines turbines, and apply their knowledge in hydraulics to select appropriate devices like pressure gauges, valves, flow devices, pipes etc for different field applications.

### **Maharashtra State Board of Technical Education**

#### **Equipment List**

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Particulars: Specifications of Major/essential Equipment required for conduction of practical as per curriculum

<b>Sr. No.</b>	<b>Particulars</b>	<b>No of Available</b>	<b>Cost</b>
1	Bernouli's Pressure Gauge Setup	1	32000
2	Centrifugal Pump Test Rig	1	26000
3	Dead Weight Pressure Gauge	1	26000
4	Flow Through Pipe Frictional Losses Major	1	34200

5	Hydraulics Trainer Kit	1	117600
6	Minor Losses In Flow Through Pipe	1	31500
7	Orifice Meter Test Rig	1	32500
8	Pelton Wheel Test Rig	1	80100
9	Piezometer	1	1500
10	Pipe Friction Apparatus	1	34200
11	Pneumatic Trainer Kit	1	46200
12	Reciprocating Pump Test Rig	1	52500
13	Reynolds Apparatus	1	29500
14	Tilting Flume Apparatus	1	31500
15	Triangular V Notch Apparatus	1	35100
16	U Tube Differential Manometer	1	3500
17	U Tube Manometer	1	8350
18	Venturimeter Test Rig	1	22350
<b>Total Cost</b>			<b>644600</b>

**Lab In charge**

**HOD**