II Year II Semester	**L**	**T**	**P**	**C**
Code: 17CE412	**0**	**0**	**3**	**2**

FLUID MECHANICS AND HYDRAULIC MACHINERY LAB

Course Outcomes:

1. Determine the discharge of flow through venturimeter and orificemeter, loss of head due to sudden contraction and friction in pipe and verify bernoulli's equation
2. Determine Cd for a small orifice by constant Head method
3. Determine discharge of flow using V notch and Rectangular notch
4. Determine the force exerted by jet and study efficiency of Pelton wheel, francis turbine
5. Determine the efficiency of Centrifugal and reciprocating pumps

List of Experiments

1. Calibration of Venturimeter& Orifice meter
2. Determination of Coefficient of discharge for a small orifice by a constant head method.
3. Determination of Coefficient of discharge for an external mouth piece by variable head method.
4. Calibration of contracted Rectangular Notch and /or Triangular Notch
5. Determination of Coefficient of loss of head in a sudden contraction and friction factor.
6. Verification of Bernoulli's equation.
7. Impact of jet on vanes
8. Study of Hydraulic jump.
9. Performance test on Pelton wheel turbine
10. Performance test on Francis turbine.
11. Efficiency test on centrifugal pump.
12. Efficiency test on reciprocating pump.

List of Equipment:

1. Venturimeter setup.
2. Orifice meter setup.
3. Small orifice setup.
4. External mouthpiece setup.
5. Rectangular and Triangular notch setups.
6. Friction factor test setup.
7. Bernoulli's theorem setup.
8. Impact of jets.
9. Hydraulic jump test setup.
10. Pelton wheel and Francis turbines.
11. Centrifugal and Reciprocating pumps.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	3	-	-	-	-	-	-	-	-	-	1	3	-	2
CO2	3	2	3	-	-	-	-	-	-	-	-	3	3	-	2
CO3	3	2	-	-	-	-	-	-	-	-	-	1	3	-	2
CO4	3	2	3	-	-	-	-	-	-	-	-	1	3	-	2
CO5	3	2	3	-	-	-	-	-	-	-	-	1	3	-	2
CO6	3	2	3	-	-	-	-	-	-	-	-	1	3	-	2