

FLUID MECHANICS LAB

Name of Lab In-charge: Mr. Ashutosh Gupta

Name of technical assistant: Mr. Janeshwar

Course Outcomes:

Code	Outcomes
1	Understand the knowledge about the basic terminologies and will be able to find out various conditions related to stability of floating bodies.
2	Understand the knowledge about the fluid motion and will be able to distinguish between them based on Reynolds no.
3	Apply Bernoulli's equation in flow measuring devices together with their calibration
4	Understand sources of major and minor losses and in practical conditions.

List of Equipment:

1. Reynolds no. apparatus
2. Bernoulli's Theorem
3. Minor Losses apparatus.
4. Major losses apparatus
5. Notch apparatus
6. Venturimeter & orifice meter apparatus.
7. Metacentric height

List of Experiments:

Sr. No.	As per AKTU	Performed/ Not performed
1	To determine the coefficient of impact for vanes.	YES
2	To determine coefficient of discharge of an orifice meter.	YES
3	To determine the coefficient of discharge of Notch (V and Rectangular types).	YES
4	To determine the friction factor for the pipes.	YES
5	To determine the coefficient of discharge of venturi meter.	YES
6	To determine the coefficient of discharge, contraction & velocity of an orifice.	YES
7	To verify the Bernoulli's Theorem.	YES
8	To find critical Reynolds number for a pipe flow.	YES
9	To determine the meta-centric height of a floating body.	YES

10	To determine the minor losses due to sudden enlargement, sudden contraction and bends.	YES
11	To show the velocity and pressure variation with radius in a forced vortex flow.	

Pictures of Labs: