II YEAR II SEM

15AME15-FLUID MECHANICS AND HYDRAULIC MACHINERY LAB

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Objective: The object of the course to make the students understand the fluid flow concepts and get familiarity with flow measuring devices.

Syllabus:

- 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. Turbine Flow meter.

Course outcomes:-

Students who successfully complete this course will have demonstrated an ability to:

- Identify, name, and characterize flow patterns and regimes.
- Understand basic units of measurement, convert units, and appreciate their magnitudes.
- Utilize basic measurement techniques of fluid mechanics.
- Discuss the differences among measurement techniques,

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