



GOKARAJU RANGARAJU
INSTITUTE OF ENGINEERING AND TECHNOLOGY

HYDRAULICS AND HYDRAULIC MACHINERY LAB

Course Code: GR15A2017
II Year II Semester

L:0 T:0 P:2 C:2

Prerequisites

- Knowledge of Fluid Mechanics and Hydraulics Machinery

Course Objectives

- To provide the student strong background in the different types of flows in open channels.
- To train the students to have the solid foundation in the mathematical and technical concept required to design the engineering problems.
- To prepare the students to excel in post graduate program and to succeed in industry.

Course Outcomes

- An ability to express the principle properties different types of flows in open channel flows.
- An ability to find the role of fluid flows in open Channels and identifying the critical and subcritical, super critical flows by that require simple and complex applications can handle.
- Articulate importance of extensive research in Hydraulics and Hydraulics Machinery.

Contents

1. Impact of jet on vanes.
2. Study of Hydraulic jump.
3. Performance test on Pelton wheel turbine .
4. Performance test on Francis turbine.
5. Efficiency test on Single Stage Centrifugal Pump.
6. Efficiency test on Multi Stage Centrifugal Pump.
7. Efficiency test on Single acting Reciprocating Pump.
8. Efficiency test on Double acting Reciprocating Pump.