

Course code	Course Name	L-T-P-Credits	Year of Introduction
ME233	Mechanical Engineering Lab	0-0-3-1	2016

Prerequisite : Nil

Course Objective

- To develop engineering related skills of fluid mechanics and prime movers
- To provide necessary practical knowledge related to the theory of fluid mechanics and energy conversion systems.
- To familiarize with various apparatus and machines in fluid mechanics and IC engines and conduct experiments.

List of Experiments

1. Determination of coefficient of discharge and calibration of rectangular notch
2. Determination of coefficient of discharge and calibration of triangular notch.
3. Determination of coefficient of discharge and calibration of venturI meter
4. Determination of coefficient of discharge and calibration of orifice meter.
5. Determination of hydraulics coefficient using orifice apparatus.
6. Determination of meta-centric height and radius of gyration of floating body.
7. Pipe friction apparatus to find Darcy's frictional coefficient and Chezy's constant.
8. Performance test on positive displacement pump
9. Performance test on centrifugal pump
10. Performance test on impulse turbine.
11. Performance test on reaction turbine.
12. Performance test on hydraulic ram
13. Performance test on two stroke diesel engine.
14. Performance test on four stroke diesel engine.
15. Performance test on four stroke petrol engines
16. Performance test on two stroke petrol engines
17. Calibration of pressure gauge

Note: It is mandatory to conduct at least 12 experiments.