

THERMAL ENGINEERING LAB

OBJECTIVES:

- To analyze the performance and exhaust emissions of an IC engine by conducting the performance test on IC Engines through Port/Valve timing diagrams.
- To evaluate the Friction test and Economical speed test of 4 stroke diesel engine and petrol engine.
- To evaluate the performance of the Vapor compression and Air conditioning units.
- To determine the Speed test and cooling water temperature on IC engines.

LIST OF EXPERIMENTS:

1. IC engine valve & port timing diagram
2. IC engine performance test (4 stroke diesel engine)
3. IC engine performance test on 2 stroke petrol engine.
4. Evaluation of engine friction by conducting Morse test on 4 stroke multi cylinder petrol engine.
5. Heat balance sheet on IC engine.
6. Evaluation of engine friction by conducting motoring and retardation test on 4 stroke diesel engine
7. Determination of air fuel ratio and volumetric efficiency on IC engines
8. Determination of economical speed test for fixed load on 4 stroke engine
9. Determination of optimum cooling water temperature on IC engine

