## II Year – II SEMESTER

T P C 0 3 2

## THERMAL ENGINEERING LAB

Objective: To impart practical exposure to the student on the performance evaluation methods of various types of internal combustion engines and compressors.

- 1. I.C. Engines valve / port timing diagrams.
- 2. I.C. Engines performance test (4 -stroke diesel engines)
- 3. I.C. Engines performance test on 2-stroke petrol.
- 4. Evaluation of engine friction by conducting morse test on 4-stroke multi cylinder petrol engine.
- Determination of FHP by retardation and motoring test on IC engine.
- 6. I.C. Engines heat balance.
- 7. Economical speed test of an IC engine.
- 8. Performance test on variable compression ratio engines.
- 9. Performance test on reciprocating air compressor unit.
- 10. Study of boilers
- 11. Dis-assembly / assembly of Engines.

## Outcomes:

The student will be able to calculate the various efficiencies, various horse powers and energy balance for several types of Internal Combustions Engines and compressors.