

DEPARTMENT OF MECHANICAL ENGINEERING

Name of the Lab : Thermal Engineering Laboratory

OBJECTIVES:

- To study the value timing and port timing diagram and performance of IC Engines
- To Study the characteristics of fuels/Lubricates used in IC Engines
- To study the Performance of steam generator/ turbine
- To study the heat transfer phenomena predict the relevant coefficient using implementation
- To study the performance of refrigeration and air conditioning cycle/components

OUTCOMES:

Upon the completion of this course, the students will be able to

- CO1 conduct tests to evaluate the performance of IC Engines.
- CO2 conduct tests on heat conduction apparatus and evaluate thermal conductivity of material
- CO3 conduct tests on natural and forced convective heat transfer apparatus and evaluate heat transfer coefficient.
- CO4 conduct tests on radiation heat transfer apparatus and evaluate Stefan Boltzmann constant and emissivity.
- CO5 conduct tests to evaluate the performance of parallel/counter flow heat exchanger apparatus and reciprocating air compressor.
- CO6 conduct tests to evaluate the performance of refrigeration and air-conditioning test rigs.

Estd - 2001