

# THERMAL ENGINEERING LABORATORY

The primary purpose of the laboratory 'THERMAL ENGINEERING' is to show students the experimental methods on thermal energies on various engines and demonstrate their operational procedures. These values can be further used to determine other fuel properties. In order that students have a fairly good understanding of the theory underlying the experiments, the entire course is designed such that classroom lectures precede lab work.



## S.No. NAME OF THE EXPERIMENT

- 1 I.C. ENGINE VALVE TIMING DIAGRAM
- 2 I.C. ENGINE PORT TIMING DIAGRAM
- 3 I.C. ENGINE PERFORMANCE TEST ON SINGLE CYLINDER 4 STROKE DIESEL ENGINE
- 4 PERFORMANCE TEST ON SINGLE CYLINDER 2 – STROKE PETROL ENGINE
- 5 MORSE TEST ON 4 - CYLINDER 4 - STROKE PETROL ENGINE
- 6 EVALUATION OF ENGINE FRICTION BY CONDUCTING MOTORING/RETARDATION TEST ON SINGLE CYLINDER 4 STROKE DIESEL ENGINE
- 7 HEAT BALANCE TEST ON SINGLE CYLINDER 4 STROKE DIESEL ENGINE
- 8 DETERMINATION OF AIR/FUEL RATIO AND VOLUMETRIC EFFICIENCY ON 4-STROKE DIESEL ENGINE
- 9 DIS-ASSEMBLY/ASSEMBLY OF I.C. ENGINE
- 10 PERFORMANCE TEST ON RECIPROCATING AIR COMPRESSOR
- 11 STUDY OF BABCOCK-WILCOX BOILER