

## Faculty of Mechanical Engineering

### M.E. Thermal Engineering

(R 2017) Semester –I

### TE5111 Thermal Engineering Laboratory

(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Single cylinder / multi cylinder Automotive Engine with data acquisition system	1		
2.	Flue gas analyzer	1		
3.	Smoke meter	1		
4.	Single cylinder variable Compression ratio petrol engine	1		
5.	Single cylinder variable Compression ratio Diesel engine	1		
6.	Cooling tower test rig	1		
7.	Refrigeration cum Heat Pump test rig	1		
8.	100 LPD Solar flat plate water heater test rig	1		
9.	Pyranometer	1		
10.	Redwood / Saybolt viscometer	1		
11.	Bomb calorimeter apparatus	1		
12.	Gas colorimeter	1		
13.	Cloud & Pour point apparatus	1		
14.	Non-IBR Boiler test rig	1		
15.	Parallel flow / Counter flow Heat exchanger test rig	1		
16.	Fan test rig	1		

**Faculty of Mechanical Engineering**  
**M.E. Thermal Engineering**  
**(R 2017) Semester –II**  
**TE5261 – Thermal Systems Simulation Laboratory**  
**(Requirements for a batch of 25 students)**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Modeling software like ProE, Gambit, CATIA, etc, Analysis software like Ansys Fluent, CFX, Fluidyn, COMSOL, etc., Equation solving software like Matlab, Engineering equation solver	25		
2.	Computer with (Processor i5 or above )	25		