

Faculty of Mechanical Engineering

M.E. Energy Engineering

(R 2017) Semester – I
EY5111 Energy Laboratory

(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	100 LPD Solar flat plate water heater test rig	1		
2.	SPV Educational Kit	1		
3.	Biogas plant (fixed dome or floating drum)	1		
4.	Bomb calorimeter	1		
5.	Junker's gas calorimeter	1		
6.	Viscometer	1		
7.	Hydrometer	1		
8.	Flash and fire point apparatus	1		
9.	Proximate analyser (Muffle furnace and micro weigh balance)	1		
10.	Pyranometer / Solarimeter	1		
11.	Non-IBR boiler	1		
12.	5 HP motor efficiency test rig	1		
13.	Pump test rig	1		
14.	Fan test rig	1		
15.	Heat Exchangers (plate, pipe-in-pipe, shell and tube)	1		
16.	Vapour Compression Refrigeration Test Rig	1		

Faculty of Mechanical Engineering
M.E. Energy Engineering
(R 2017) Semester – II
TE5261 THERMAL SYSTEMS SIMULATION LABORATORY
(Requirements for a batch of 25 students)

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
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		