Heat Transfer Lab

Objective:
Determination of rate of Heat Transfer through Conduction, Convection, Radiation, Heat exchanger.

Sections Handled: III-A,III-B

Major Equipment Details:

Sl. No	Equipment Name	Qty
1.	Composite Slab Apparatus	1
2.	Lagged Pipe Apparatus	1
3.	Insulating Powder Apparatus	1
4.	Thermal Conductivity of Metal Rod	1
5.	Heat Transfer coefficient in forced convection	1
6.	Effectiveness of Heat Exchanger	1
7.	Emissivity of a given surface	1
8.	Stefan Boltzmann Apparatus	1
9.	Drop wise & Film wise Condensation Apparatus	1
10.	Critical Heat Flux Apparatus	1
11.	Pin Fin Apparatus	1
12.	Transient heat conduction	1

Lab In charge with qualification : K.B.V.Satya Prakash , M.Tech
Faculty In charge with qualification : D.Bala Nagesh, M.Tech(Sec-B),
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Lab Technical name with qualification: S.Venkata Rao-D.M.E

Experiment list as per curriculum:

1. Determination of overall heat transfer coefficient of a composite slab.
2. Determination of heat transfer rate through a lagged pipe.
3. Determination of heat transfer rate through a concentric sphere.
4. Determination of thermal conductivity of metal rod.
5. Determination of efficiency of a pin-fin.
6. Determination of heat transfer coefficient in forced convection.
7. Determination of heat transfer coefficient in natural convection.
8. Determination of effectiveness of parallel and counter flow heat exchanger
9. Determination of emissivity of a given surface.
10. Determination of Stefan Boltzmann constant
11. Determination of heat transfer rate in drop and film wise condensation.
12. Determination of critical heat flux.

Experiment list beyond the curriculum

1.Transient Heat Conduction Apparatus