Heat Transfer Operations Lab

1.1 Course Number: CH231L

1.2 Contact Hours: 0-0-2   Credits: 02

1.3 Semester-offered: 2nd Year-even

2. **List of Experiments**:

S. No.	Experiments
1	To study the boiling and condensation phenomenon using Two Phase Heat Transfer and calculate the heat flux at different applied voltage
2	To determine the heat loss and overall heat transfer coefficient for the Plate Heat Exchanger system
3	To calculate rate of heat transfer, LMTD and overall heat transfer coefficient for both Parallel / Counter type of heat exchanger
4	To find the Logarithmic Mean Temperature Difference (LMTD) and the overall heat transfer coefficient of Shell and Tube type of heat exchanger
5	To determine and compare surface heat transfer coefficient for Drop-wise condensation and Film-wise condensation
6	To determine the thermal conductivity of a liquid
7	To validate Stefan-Boltzmann's law.
8	To Find out the Heat Transfer Coefficient of a vertical cylinder in natural convection
9	To determine total thermal resistance and thermal conductivity of composite wall
10	Study the variation of heat transfer coefficient at different air flow rate in forced convection
11	To determine overall heat transfer coefficient in Falling Film Evaporator
12	To determine the heat transfer coefficient in an agitated vessel under steady-state conditions as a function of agitator speed (R.P.M).