UG	Department: **Chemical Engineering**
Course Code: **CHP214**	Course Name: **Heat Transfer Lab.**
Credit: **2**	L-T-P: **0-0-3**
Version: **1**	Approved on:
Prerequisite Course: **Nil**	

Any Eight Experiments need to be done from the followings:

1. Study of Heat transfer by conduction in a metal bar.
2. Study of Heat transfer by conduction in a Composite metal wall.
3. Study of unsteady state heat transfer.
4. Determination of Thermal conductivity of Insulated Powder.
5. Study of Heat transfer by Natural convection.
6. Study of Heat transfer by Forced convection.
7. Study of Heat transfer in Agitated Vessel.
8. Determination of Emissivity of given material.
9. Study of Heat transfer in double pipe heat exchanger.
10. Study of Heat transfer in Shell and Tube heat exchanger.
11. Determination of heat transfer coefficient in boiling phenomenon.
12. Determination of heat transfer coefficient for Drop wise Condensation.
13. Determination of heat transfer coefficient for Film wise Condensation

Text/Reference Books

1. Dutta, B. K. "Heat transfer: Principles and Applications", PHI, New Delhi, 2001.
2. Holman, J. P., "Heat Transfer", McGraw Hill, New York.
3. Chapman, A. J., "Heat Transfer", Maxwell Macmillan, 1984.
4. Kern, D. Q., "Process Heat Transfer", Tata- McGraw Hill, 1950.
5. Hewitt, G. F. Sires, G. L. and Bott, T. R. "Process heat transfer", CRC Press 1994.