

Year & Sem: E2S1	Lab Code:CH2701	Lab Name: Heat Transfer Lab	No. of Credits: 2	L 0	T&PS 0	P 2
Experiment-I: Determination of total thermal resistance and thermal conductivity of composite wall. Major equipment - Composite wall Assembly Experiment-II: Determination of thermal conductivity of a metal rod. Major equipment - Thermal Conductivity apparatus Experiment-III: Determination of natural convective heat transfer coefficient for a vertical tube. Major equipment - Natural convection heat transfer apparatus Experiment-IV: Determination of critical heat flux point for pool boiling of water. Major equipment- Pool boiling apparatus Experiment-V: Determination of forced convective heat transfer coefficient for air flowing through a pipe Major equipment – Forced convection heat transfer apparatus Experiment-VI: Determination of overall heat transfer coefficient in double pipe heat exchanger. Major equipment - Double pipe heat exchanger apparatus Experiment-VII: Determination of heat transfer coefficient for a helical coil in an agitated vessel. Major equipment – Helical coil in a agitated vessel. Experiment-VIII: Study of the temperature distribution along the length of a pin-fin under natural and forced convection conditions Major equipment - Pin fin apparatus Experiment-IX: Estimation of un-steady state film heat transfer coefficient between the medium in which the body is cooled. Major equipment - Heat transfer coefficient determination apparatus Experiment-X: Determination of Stefan – Boltzmann constant. Major equipment - Stefan Boltzmann apparatus Experiment-XI: Determination of emissivity of a given plate at various temperatures. Major equipment - Emissivity determination apparatus References/ Books: 1. 2.						