

**DECCAN COLLEGE OF ENGINEERING & TECHNOLOGY**  
DAR-US-SALAM, NAMPALLY, HYDERABAD – 1

**DEPARTMENT OF MECHANICAL & PRODUCTION ENGINEERING**

**HEAT TRANSFER LAB**

**LIST OF EQUIPMENTS:**

1. STEPHEN BOLTZMAN'S APPARATUS
2. PIN-FIN APPARATUS
3. HEAT EXCHANGER
4. THERMAL CONDUCTIVITY OF METAL BAR APPARATUS
5. THERMAL CONDUCTIVITY OF COMPOSITE WALL APPARATUS
6. EMISSIVITY APPARATUS

**LIST OF EXPERIMENTS:**

1. To Determine Stephen Boltzman's constant.
2. To Determine Heat transfer Coefficient for Natural Convection.
3. To Determine Heat Transfer Coefficient for Forced Convection.
4. To Determine effectiveness and LMTD for Parallel Flow heat exchanger.
5. To Determine effectiveness and LMTD for Counter Flow heat exchanger
6. To Determine Thermal Conductivity of Metal Bar.
7. To Determine Thermal Conductivity of Composite Wall.
8. To Determine Emissivity of a Non Black Test Plate.