

### **Assignment: 5 HEAT EXCHANGER**

1. How are the heat exchangers classified? Sketch the temperature variations in (i) parallel flow heat exchanger (ii) counter flow heat exchangers (iii) Boiler (iv) Condenser
2. What are fouling factors? Explain their effect in heat exchanger design.
3. Derive an expression for log mean temperature difference of parallel and counter flow heat exchanger.
4. Derive the expression for effectiveness of parallel and counter flow heat exchanger.

