**Date: 6/feb/2024**

**EXP 4:**

1.Starting from Fourier law , obtain heat transfer equation for flow through a hollow sphere. (2 m)

2. If powder becomes finer what happens to thermal conductivity measured? Is the value measured higher or lower? Why? (1 m)

3. In radial systems, heat transfer rate \_\_\_\_\_\_\_\_\_\_\_\_\_ with radius. (remains same/increases/decreases). Give reasons. (1.5 m)

**Exp 5;**

1.Relate the overall heat transfer coefficient for the heat exchangers - Parallel + counter flow H.X. This needs to be done systematically and logically (3 m)

2. What is overall HT coefficient? Explain its physical significance. (2 m)

3. What happens to Δ𝑇𝐿𝑀𝑇𝐷 when specific heat capacity rate are same? (0.5 m)