**20-02-2024**

**EXP 6:**

1. Derive the expression of critical radius of insulation for cylinder, explain the terms. (2 m)

2. There is no concept of critical radius in case of a plane wall, why? (1 m)

3.Plot q Vs r. Explain the graph (2 m)

**Exp 11:**

1.Draw the side view the cylinder (a circle) and show the locations of the thermococuples by dots. TC 1 will be at 12 – o clock position, TC 2 at 3-o clock position, TC – 3 at 6-o clock position and TC-4 at 9-o clock position.

The flow is from left to right. Arrange the thermocouples in decreasing order of temperature (theoretically). Give reasons for your answer (2)

2. What non dimensional numbers in the forced convection experiment? Explain the physical significance of the same. (2 m)

3. What do you understand by flow separation? (1 m)