**ISL77 – PARALLEL PROGRAMMING LAB**

**PART B – MPI PROGRAMS:**

1. Demonstration of MPI\_Send and MPI\_Recv
2. Demonstration of deadlock using point to point communication
3. Avoidance of deadlock by altering the call sequence
4. Avoidance of deadlock by non-blocking calls
5. Avoidance of deadlock by using MPI\_Sendrecv (Bandwidth also)
6. Demonstration of synchronization between the two phases of program
7. Demonstration of Broadcast operation
8. Demonstration of MPI\_Gather
9. Demonstration of MPI\_Scatter
10. Demonstration of MPI\_Scatter and MPI\_Gather
11. Demonstration of MPI\_Reduce (MPI\_MAX, MPI\_MIN, MPI\_SUM, MPI\_PROD)
12. Demonstration of MPI\_Allreduce (MPI\_MAX, MPI\_MIN, MPI\_SUM, MPI\_PROD)