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| **RAMAIAH INSTITUTE OF TECHNOLOGY, BENGALURU – 560054**  *(Autonomous Institution Affiliated to VTU, Belgaum)*  **Department of Information Science & Engineering**  DISTRIBUTED COMPUTING LAB- ISL75 | | | |
| **CIE Marks (Lab) : 50** | | **LIST OF PROGRAMS** | **SEE Marks (Lab) : 50** |
| **Part-A** | | | |
| 1 | Write parallel program using OpenMP to sort n element using merge sort. | | |
| 2 | Write a program to Multiply a matrix by a vector and get the result of the operation. | | |
| 3 | Write an OpenMP program which demonstrates how to "multitask", implement two separate task, one to generate prime table and other to generate sine table for a given input using OpenMP for parallel execution. Justify the inference. | | |
| 4 | Write a program to show how first private clause works. (Factorial program) | | |
| 5 | Write an OpenMP parallel program for Points Classification. Prove the correctness of sequential program with that of parallel. | | |
| 6 | Write an OpenMP program to convert a color image to black and white image. Demonstrate the performance of different scheduling techniques for varying chunk values | | |
| **Part-B** | | | |
| 7 | Write a program for communication among two processes. | | |
| 8 | Write MPI program to compute dot product of two vectors using block-striped partitioning with uniform data distribution. | | |
| 9 | Write MPI program that computes the value of PI using Monto-Carlo Algorithm. | | |
| 10 | C program which creates new communicators involving a subset of initial set of MPI processes in the default communicator MPI\_COMM\_WORLD | | |
| 11. | Write MPI program to compute Matrix-Matrix Multiplication using self-scheduling algorithm. | | |
| 12. | C program which searches integers between A and B for a value J such that F(J) = C, using the MPI parallel programming environment | | |

Faculty in charge: Head of Department

( SK,PB,DJS) (Dr.Vijaya Kumar B.P)