

- 1) Write a parallel program using OpenMP to perform vector addition, subtraction, multiplication. Demonstrate task level parallelism. Analyze the speedup and efficiency of the parallelized code.
- 2) Write a parallel program using OpenMP to find sum of N numbers using the following constructs/clauses.
  - a. Critical section
  - b. Atomic
  - c. Reduction
  - d. Master
  - e. Locks
- 3) Write a parallel program using OpenMP to find factorial of N numbers using the following constructs/clauses.
  - a. Critical section
  - b. Atomic
  - c. Reduction
  - d. Master
  - e. Locks