

## **UNIT I MULTI-CORE PROCESSORS**

### **16MARKS**

1. Define Vector Instruction.
2. Compare between symmetric memory Architecture and distributed Memory Architecture
3. Generalize are the factors to increasing the operating frequency of the processor?
4. Discuss the issues available in handling the performance?
5. Define SIMD System
6. Define MIMD System
7. Express NUMA with neat sketch
8. 9. Draw Toroidal mesh with neat diagram
10. Give definition of latency and bandwidth.
11. Show the neat diagram for structural model of centralized shared memory multiprocessor
12. Define Cache Coherence protocol with its types
13. Define Directory based.
14. Define Snooping.
15. Give the characteristic of the performance due to write update and write invalidate protocol?
16. disadvantage of Symmetric shared memory architecture?
17. Define Agglomeration or aggregation.
18. Compare single and multi core CPU
19. Define false sharing.
20. Show a mathematical formula for speedup and efficiency of parallel program speed up.