

**B. Tech. Sem - VIII (Computer Engg.) (2014 COURSE) (CBCS) :
SUMMER - 2019**

SUBJECT-ELECTIVE-IV PARALLEL & DISTRIBUTED COMPUTING

Day: Tuesday
Date: 28/05/2019

S-2019-2890

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

Q.1 a) Which are the different computational models? Explain message passing in detail. **(05)**

b) Give the characteristics of parallel algorithms. **(05)**

OR

Q.1 a) Explain partitioning algorithm in detail. **(05)**

b) Write a short note on client server computational model. **(05)**

Q.2 a) Write a short note on Cost Vs Performance evaluation. **(05)**

b) Explain in detail promises and challenges of parallel & distributed systems. **(05)**

OR

Q.2 a) How does the processor failure in synchronous system is handled? **(05)**

b) Explain wait-free implementation of shared objects. **(05)**

Q.3 a) Write short note on RISC architecture. **(05)**

b) Explain user level memory model. **(05)**

OR

Q.3 a) Explain with the help of diagram Superscalar Processor. **(05)**

b) Write short note on Memory Consistency models. **(05)**

Q.4 a) What is impact of data distribution in parallel programming? **(05)**

b) Explain Parallel Reduction Operation in detail. **(05)**

OR

Q.4 a) What are the different data structures available in parallel programming? **(05)**

b) Write a short note on Parallel Computational Geometry. **(05)**

Q.5 a) What is distributed shared memory model? **(05)**

b) Write a short note on Directory Based Cache Coherence. **(05)**

OR

Q.5 a) Draw & Explain CORBA architectural model. **(05)**

b) Write a short note on Parallel Virtual Machine. **(05)**

Q.6 a) What is clustering? Give the distinct uses of clusters. **(05)**

b) Write a short note on Generic And Protein Sequence data. **(05)**

OR

Q.6 a) Explain in detail Performance Monitoring & Bench Marking tools. **(05)**

b) Write a short note on Parallelizing Compilers & Preprocessors. **(05)**