ME | CMPN | I CBGS
2015/14.
PC.

QP Code : BB-11486

(3 Hours) **[Total Marks : 80**

N.B : 1) Q.1 is compulsory .

2) Attempt Any 3 out of remaining .

3) Assume suitable data wherever required .

Q.1 a) Discuss in detail classification of parallel computers? (10)

b) Describe different types of parallel algorithm models with examples (10)

Q.2 a) What is Massage passing programming? Explain in details blocking & Non blocking Message Passing operation? (10)

b) Explain row wise 1-D & 2-D partitioning parallel algorithm for Matrix-Vector Multiplication.(10)

Q.3 a) Discuss in detail parallel Quick sort algorithm with suitable example . (10)

b) Describe the Characteristics of tasks & interaction which can be used in the process of mapping. (10)

Q.4 a) Define parallel algorithm ? Explain the design process of Parallel Algorithms. (10)

b) Explain different methods for minimizing the interaction overhead. (10)

Q.5 a) Explain general model of shared memory programming . (10)

b) Explain synchronous and asynchronous message passing models. (10)

Q.6 Write short notes on(Any 4) (20)

a) issues in parallel sorting.

b) parallel programming models.

c) performance metrics for parallel systems

d) Cluster Computing.

e) systolic architecture.

f) PVM .
