

Total No. of Questions : 4]

SEAT No. :

PD-265

[Total No. of Pages : 2

[6411]-40

**B.E. (Computer Engineering) (Insem.)
HIGH PERFORMANCE COMPUTING
(2019 Pattern) (Semester - VIII) (410250)**

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) *Answer Q. 1 or Q. 2, Q. 3 or Q. 4*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

Q1) a) What are types of dataflow execution models? [6]

b) Explain SIMD, MIMD and SIMT architectures. [5]

c) Write a short note on Level of Parallelism. [4]

OR

Q2) a) Explain N-wide Superscalar Architectures. [6]

b) Explain Cache coherence in multiprocessor system. [5]

c) What are the application of parallel computing? [4]

Q3) a) Explain any three-decomposition technique with example. [6]

b) Explain classification of Dynamic mapping techniques. [5]

c) What are characteristics of task and interaction? [4]

OR

P.T.O.

- Q4)** a) Explain with example (any two): [6]
- i) Recursive decomposition
 - ii) Data decomposition
 - iii) Exploratory decomposition
- b) Explain different schemes for Static Mapping. [5]
- c) Give the characteristics of task. [4]

