

**M. TECH.-I (INFORMATION TECHNOLOGY) (CBCS – 2015
COURSE) : WINTER - 2017
SUBJECT : PARALLEL PROGRAMMING AND ALGORITHMS**

Day : **Monday**
Date : **22/01/2018**

Time : **11.00 AM TO 02.00 PM**
Max. Marks : 60

W-2017-2787

N.B.

- 1) All Questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written **SEPARATE** answer book.

SECTION – I

Q.1 With suitable examples, explain the Feng's classification of multiprocessor organization. **(10)**

OR

Discuss in detail how the performance of pipeline is measured.

Q.2 With neat diagram, describe the closely coupled architecture of multiprocessing system. **(10)**

OR

. Describe the network topologies of MIMD system with neat diagrams.

Q.3 With neat diagram explain the supercomputer architecture. **(10)**

OR

Explain the CC-NUMA shared memory architecture with neat diagram.

SECTION – II

Q.4 Explain the significant features of Verilog language in detail. **(10)**

OR

Explain the MPP architecture in detail with suitable diagram.

Q.5 Explain the message passing parallel programming model in detail. **(10)**

OR

Explain the issue of data dependency analysis with suitable examples.

Q.6 Describe the features of C-Linda, parallel programming language. **(10)**

OR

Explain the features of CUDA, parallel programming model.

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