

**M. TECH.-I (INFORMATION TECHNOLOGY) (CBCS – 2015  
COURSE) : SUMMER - 2018  
SUBJECT : PARALLEL PROGRAMMING & ALGORITHMS**

Day : **Monday**  
Date : **04/06/2018**

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

**S-2018-2981**

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.
- 4) Assume suitable data if necessary.

**SECTION – I**

**Q.1** Describe Handler's classification of parallel processing with suitable example. [10]

**OR**

With neat diagram, explain the architecture of associative memory processor.

**Q.2** Explain the various network topologies for MIMD systems. [10]

**OR**

Explain the IBM Power architecture with neat diagram.

**Q.3** With neat diagram, explain the CC-NUMA architecture. [10]

**OR**

Explain the concept of cluster computing in detail.

**SECTION – II**

**Q.4** With neat diagram, explain the dynamic dataflow architecture. [10]

**OR**

Describe the various characteristics features of Verilog language.

**Q.5** Explain the object-oriented parallel programming model in detail. [10]

**OR**

Comment on data dependency analysis for parallel programming.

**Q.6** Explain the characteristic features of C-Linda parallel programming language. [10]

**OR**

What are the different steps involved in developing a simple parallel program?

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