

**Exam. Code : 206701**  
**Subject Code : 5030**

**M.Sc. Computer Science 1<sup>st</sup> Semester**  
**ADVANCED COMPUTER ARCHITECTURE**  
**Paper—MCS-102**

Time Allowed—3 Hours] [Maximum Marks—100

**Note :—**Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The **fifth** question can be attempted from any section. All questions carry equal marks.

**SECTION—A**

1. (a) Explain Parallel Computing. 3  
 (b) Explain Vector processor and Systolic processor. 9  
 (c) Explain and differentiate between SIMD and MIMD parallel computer. 8
2. Explain Asynchronous Hardware Taxonomy and Software Taxonomy with examples. 20

**SECTION—B**

3. Describe different Parallel Computing Models and explain the working of at least two of them in detail. 20
4. Explain trends towards Parallel Processing and Parallel Processing Mechanism with examples. 20

**SECTION—C**

5. Explain :  
 (a) Pipeline Computers 10  
 (b) Array Computers. 10
6. (a) Differentiate between Serial Processing and Parallel Processing. 10  
 (b) Explain multiplicity of Instruction-Data Streams. 10

**SECTION—D**

7. Explain classification of Pipeline Processing with help of suitable example. 20
8. Reservation table in Linear Pipelining can be used to solve various pipeline problems. Discuss in detail. 20

https://www.gnduonline.com

Whatsapp @ 9300930012

Send your old paper & get 10/-

अपने पुराने पेपर्स भेजें और 10 रुपये पायें,

Paytm or Google Pay से