BICS-025

B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination

June, 2015

00119

BICS-025 : ADVANCED COMPUTER ARCHITECTURE

Time : 3 hours　　　　　　　　*Maximum Marks : 70*

Note : *Answer any **seven** questions. All questions carry equal marks.*

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1. Explain the various types of array and associative processors.　　*10*

2. (a) Explain the bus arbitration methods briefly.　　*5*

    (b) What is interrupt ? Discuss their types and uses.　　*5*

3. Explain parallel processing and pipelining.　　*10*

4. (a) Explain about the various classifications of computers based on memory mapping.　　*5*

    (b) Explain auxiliary memory with examples.　　*5*

5. Explain SISD and MISD in data streams.　　*10*

6. (a) What is virtual memory ? State its mapping methods. 5

(b) Explain the use of I/O interrupts for more efficient use of the CPU. 5

7. Briefly explain control flow and data flow computers. 10

8. Explain the arithmetic pipelines, with suitable example. 10

9. Explain SIMD Matrix Multiplication. 10

10. Write short notes on the following : 5+5=10

(a) Cross-bar Switch

(b) Multi-port Memories

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