

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

Term-End Examination

December, 2017

00287

**BICS-025 : ADVANCED COMPUTER
ARCHITECTURE**

Time : 3 hours

Maximum Marks : 70

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

1. Explain array computers and multiprocessor systems. 10

2. Discuss the various types of array and associative processors. 10

3. (a) What is Virtual Memory ? State its mapping methods.

- (b) Explain the use of I/O interrupts for more efficient use of the CPU. 5+5=10

4. Explain SIMD and MIMD in datastreams. 10

5. Discuss loosely and tightly coupled microprocessors. 10
6. Briefly explain control flow and data flow computers. 10
7. (a) Explain the various classifications of computers based on memory mapping.
- (b) What is Auxiliary Memory ? Explain with the help of a suitable example. 5+5=10
8. Explain with example the use of reservation table to show how successive pipeline stages are utilized. 10
9. Explain the hardware implementation and flow chart for Booth's Algorithm. 10
10. Write short notes on the following : 5+5=10
- (a) Interrupt
- (b) Instruction Pipelines
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