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Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem.-2nd)

**COMPUTER SYSTEM ARCHITECTURE**

Subject Code : BSBC-204 (2011& 2012 Batch)

Paper ID : [B1116]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students has to attempt any FOUR questions.

**SECTION-A**

**I. Write briefly :**

es of architectures of Flynn classification.

- b) Differentiate between Data bus and Address bus.
- c) What is meant by Indirect Address Instruction?
- d) How relation addressing mode is used?
- e) Define the term "Hit ratio".
- f) What is the role of associative memory?
- g) Discuss the term handshaking.
- h) How cache memory is different from RAM?
- i) List the different types of logic operators.
- j) What is the role of I/O Interface? Explain.

## **SECTION-B**

2. What is meant by Von Numann Architecture? Discuss the SIMD and MIMD based architecture.
3. Discuss the use of arithmetic and shift micro operations with the help of examples.
4. Describe the design issues of control unit. How hardwired control unit is designed? Explain.
5. Explain the following data transfer techniques :
  - a) Programmed I/O
  - b) Interrupt initiated I/O
6. What is Input-output processor? How it communicates with CPU? Explain.

following :

- a) Memory Hierarchy
- b) LRU page replacement algorithm