Roll No. Total No. of Pages : 02

Total No. of Questions: 07

# BCA, DEP (Sem.-2) COMPUTER SYSTEM ARCHITECTURE

Subject Code: BSBC-204 M.Code: 10053 Date of Examination: 12-07-22

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTION TO CANDIDATES:**

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

## **SECTION-A**

# 1) Answer briefly:

- a) What is Register?
- b) Write two pros of Layers Approach of Computer Architecture.
- c) What do you understand by Instruction Cycle?
- d) What is the main difference between Memory stack and Register stack?
- e) Differentiate between Logical and Physical addresses.
- f) Give the significance of page replacement algorithms.
- g) Differentiate between Synchronous and Asynchronous modes of data transfer.
- h) Give one example each for zero address, one address and two address and three address instructions.
- i) Define Seek time and Latency time.
- j) Define handshaking mode.

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### **SECTION-B**

- 2) Explain instruction set Architecture? Give examples.
- 3) What are the various types of buses? Discuss in detail about 16-bit common bus system architecture.
- 4) Define an addressing mode. Discuss the various addressing modes by taking suitable examples for each.
- 5) What is Cache memory? Differentiate between Direct Mapping and Associative Mapping by taking suitable example.
- 6) What do you mean by initialization of DMA controller? How DMA Controller works? Explain with suitable block diagram.
- 7) Differentiate between Hardwired and Micro programmed control Unit.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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