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Total No. of Questions: 07 Total No. of Pages: 02

## BCA (Sem.-3rd)

#### **COMPUTER SYSTEM ARCHITECTURE**

Subject Code: BC-403

**Paper ID** : [B0226]

Time: 3 Hrs. Max. Marks: 60

# **INSTRUCTION TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY.
- 2. Attempt any FOUR questions from SECTION-B.

### **SECTION-A** $(10 \times 2 = 20 \text{ Marks})$

- 1. Write a short note on:
  - (a) What is meant by operation code?
  - (b) Discuss the use of general purpose register.
  - (c) List the different addressing modes.
  - (d) What is meant by instruction format?
  - (e) What is the role of I/O ports?
  - (f) Discuss the memory reference instruction.
  - (g) What is need of cache memory?
  - (h) How memory mapping is carried out?
  - (i) What is meant by 8 bit microprocessor?
  - (j) How timing and control is useful?

#### **SECTION-B** $(4 \times 10 = 40 \text{ Marks})$

2. What are the different types of computer registers? Discuss their functions.

- 3. Discuss the following types of CPU organization:
  - (a) Stack Organization
  - (b) I/O organization
- 4. How transfer of information between CPU and I/O devices is carried out? Explain.
- 5. What is meant by memory hierarchy? Discuss the role of different types of memories.
- 6. Discuss the different types of instructions format with examples.
- 7. Write short notes on the following:
  - (a) Instruction Cycle
  - (b) I/O Architecture