

# Question Paper Code : 6500

M.C.A. (Semester-II) Examination, 2018

## COMP. ORGANIZATION & ARCHITECTURE

[ First Paper ]

Time : Three Hours]

[Maximum Marks : 70

**Note :** Attempt **five** questions in **all**. Question **No. 1** is **compulsory**. In addition attempt **one** question from each Unit.

1. Answer the following questions in brief : [3x10=30]
- (a) What do you mean by Primary memory ?
  - (b) Briefly define Magnetic tape.
  - (c) Draw labelled block diagram of Computer system.
  - (d) Differentiate between Volatile and Non-volatile memory.
  - (e) Describe basic laws of Boolean algebra.
  - (f) Explain 1's compliment and 2's compliment.
  - (g) Convert  $(11001011.01110)_2$  into decimal.

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[P.T.O.]

- (h) Describe role of Arithmetic logic unit.
- (i) What do you mean by Addressing modes ?
- (j) What do you mean by Instruction format ?

#### **UNIT-I**

- 2. Describe in detail Direct memory access and its use.  
[10]
- 3. Briefly describe interconnection structure and bus interconnection.  
[10]

#### **UNIT-II**

- 4. What do you mean by RAID ? Explain RAID levels in detail with suitable diagram.  
[10]
- 5. Briefly describe Memory hierarchy used in Computer system.  
[10]

#### **UNIT-III**

- 6. Briefly describe instruction set along with their characteristics and functions.  
[10]
- 7. Briefly describe various types of Operands and Operations.  
[10]

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#### **UNIT-IV**

- 8. Explain RISC and CISC architecture in detail. [10]
- 9. What do you mean by Instruction cycle ? Describe instruction pipelining in detail. [10]

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