Roll No. Total No. of Pages : 02

Total No. of Questions: 07

B.Sc. (IT) (2019 Batch) (Sem.-1) COMPUTER SYSTEM ARCHITECTURE

Subject Code: UGCA-1908 M.Code: 76954

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS 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 have to attempt any FOUR questions.

SECTION-A

1. Write briefly:

- a. How NAND gate is used as Universal Gate?
- b. What is SOP form?
- c. What are Karnaugh Maps?
- d. Draw a 4*1 multiplexer.
- e. Write the truth table of D Flip Flop.
- f. Write a short note on decoder.
- g. Discuss Von Neumann Architecture.
- h. What is Latch?
- i. Give example of Instruction format.
- j. What is use of registers?

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SECTION-B

- 2. What are the applications of Logic Gates? Give some examples.
- 3. Design a combination circuits for a full adder and explain it in detail.
- 4. What is race condition in JK Flip Flop? How it can be removed?
- 5. Explain the differences between RISC and CISC architectures with examples?
- 6. Discuss the register transfer and micro operation in computer organization.
- 7. Give the introduction and operations of common Bus System in Computer organization.

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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