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Roll No

CS/IT-402 (GS)
B.E. IV Semester
Examination, November 2019
Grading System (GS)
Computer System Organization

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.
ii) All questions carry equal marks.

1. State True or False:

- a) 8085 has 8 bit data lines (T/F)
- b) RAM is faster than Cache memory. (T/F)
- c) Complement of complement restores the original number. (T/F)
- d) 16 symbols are used to represent numbers in Hexa decimal system. (T/F)
- e) Hard disc is an optical memory. (T/F)
- f) 2's complement of 01001010 is 10110101. (T/F)
- g) 10's complement of 2557 is 7443. (T/F)

2. a) What are different types of addressing modes supported by 8085 microprocessor? Explain each with example.
b) Draw and explain the bus structure for the data transfer between various registers and the common bus?

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3. a) What is the function of control unit? Differentiate hardwired and microprogrammed control units.
b) Take suitable examples and explain 1's and 2's complement of binary numbers.

4. Write short notes:

- a) Vector Processing
- b) Array Processors
- c) Inter process communication

5. Explain Paging? Explain how paging can be implemented in CPU to access virtual memory.

6. What do you understand by micro-operation? List types of micro-operations and explain them.

OR

Write and explain various addressing modes of basic computer.

7. What are the different categories of 8085 instruction set. Give suitable examples for each class.

OR

With the help of suitable diagrams explain simplex, half duplex and full duplex transmission.

8. Write short notes on any two of the followings:

- a) Pipeline
- b) Speed up Ratio
- c) Virtual memory
- d) Page replacement algorithms

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