B.Sc. DEGREE EXAMINATION,APRIL 2020
III Year V Semester
Microprocessor Architecture and Programming

Time : 3 Hours **Max.marks :60**

Section A $(10 \times 1 = 10)$ Marks

Answer any **TEN** questions

1. What is the maximum number of bits required to represent a hexadecimal number in binary?
2. Convert the binary equivalent of 10101 to its decimal equivalent.
3. Write down the control and status signals.
4. Why data bus is bi-directional?
5. Give the instructions that perform logical operations.
6. What is data transfer instructions?
7. Define the types of branching operations.
8. What are the various registers in 8085?
9. Compare CALL and PUSH instruction.
10. What is an Assembler?
11. Define ROM.
12. What is address bus?

Section B $(5 \times 4 = 20)$ Marks

Answer any **FIVE** questions

13. Write the advantages and disadvantages of binary coded decimal system.
14. Mention the various functional blocks of 8085 microprocessor.
15. Write the differences between shift and rotate.
16. Define stack and stack pointer.
17. Write the differences between machine language programming and assembly language programming.
18. What an instruction consists of?
19. List the four operations commonly performed by microprocessor unit.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Describe the salient features of 8085.
21. Specify the complete bit configuration of 8085 flag register.
22. Explain the instructions to perform compare operation in 8085 microprocessor.
23. Explain all the addressing mode of the 8085 with the help of an example.
24. Write an assembly language program to add two 16 bit numbers.

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