

ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)
II SEMESTER BCA EXAMINATIONS - APRIL 2018

MICROPROCESSOR

Duration: 2.5 Hours

Max. Marks: 70

SECTION - A

I) Answer any SIX of the following questions. (6x3=18)

1. What is a bus? Why the data bus is bidirectional?
2. What is a microprocessor? What is the difference between microprocessor and CPU?
3. What is the difference between INR and INX instructions?
4. Explain in detail the following instructions:-
(i) ADC (ii) LHLD (iii) RLC.
5. Explain the concept of Direct Memory Access.
6. Define interrupts.
7. What is meant by Maskable and Non-Maskable interrupts?
8. What are the functions performed by 8259?

SECTION - B

II) Answer any FOUR of the following questions. (4x8=32)

9. What is a flag? Explain various flags of 8086.
10. Explain the pin configuration of 8086 with suitable diagram.
11. Explain different types of branching instructions.
12. Write an assembly level language program for the following:
a) To find the 2's complement of a given 8 bit number (8085).
b) To display smallest of n numbers (8085).
13. Discuss various steps for read data from memory and write data into the memory.
14. Draw the block diagram of 8255 and explain its working.

SECTION - C

III) Answer any TWO of the following questions. (2x10=20)

15. Draw the architecture block diagram of 8086 and explain.
16. Explain different addressing modes of 8086 with suitable examples.
17. Draw a block diagram of DMA controller and explain its operations.