# ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)

## II SEMESTER BCA EXAMINATIONS - APRIL 2019

# MICROPROCESSORS

**Duration: 2.5 Hours**                                              **Max. Marks: 70**

## SECTION - A

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

1. What is a microprocessor?
2. Write an 8086 program to add two 16-bit numbers and store the result in location 0500H.
3. What are the different flags is 8086? Write the functions of them.
4. Write any two arithmetic instructions & logical instructions with their functions. Give the syntax with one example each.
5. What is a program status word?
6. Mention the different types of instructions responsible for data transfer.
7. Mention the characteristics of the cmp instructions.
8. What is TRAP, RST 6.5, RST 7.5?

## SECTION - B

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

9. Explain the registers of 8086.
10. Explain the differences between CALL and JMP instruction of 8086 microprocessor with program examples.
11. Write an ALP in 8086 to find sum of numbers in array.
12. Draw the pin diagram of 8086.
13. Describe the action taken by 8086 when NMI interrupt pin is activated.
14. Explain why we need interfacing.

## SECTION - C

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

15. Explain the addressing modes of 8086 with the help of examples.
16. Draw and explain the architecture of 8086.
17. Draw the Block diagram of 8257 and explain the functions of each block.