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K23U 3541

Reg. No. : .....

Name : .....

## III Semester B.C.A. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2023 (2019 to 2022 Admissions) Core Course 3B06BCA : INTRODUCTION TO MICROPROCESSORS

Time: 3 Hours

Max. Marks: 40

# PART – A (Short Answer)

Answer all questions.

1. What do you mean by microprocessor ?

2. Mention various flags in 8085 microprocessor.

3. Mention two functional units of 8086 microprocessor.

4. What is the use of ISR register in 8259A ?

5. What is the use of TRAP pin signal ?

6. What is the purpose of JNZ instruction ?

# PART – B (Short Essay)

Answer any 6 questions.

- 7. Write advantages of microprocessor.
- 8. Write note on string instructions.

9. What do you mean by maskable interrupts ?

10. Write any two shift instructions in 8086.

(6×2=12)

(6×1=6)

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- 11. What do you mean by interrupts ?
- 12. Compare 8085 and 8086 microprocessor. (Mention any 2 properties each)
- 13. Short note on various operation modes of 8255 peripheral interface.
- 14. Write note on minimum and maximum mode of 8086 microprocessor.

## PART – C (Essay)

Answer any 4 questions.

- 15. Write an assembly language program to add two 16 bit numbers.
- 16. Explain any 6 registers of 8085 microprocessor.
- 17. Explain any 6 arithmetic instructions of 8086.
- 18. Short note on stack structure of 8086.
- 19. Compare programmed I/O and interrupt driven I/O.
- 20. Write note on DMA.

### PART – D Long Essay)

### Answer any 2 questions.

- 21. Explain with a neat diagram architecture of 8085 microprocessor.
- 22. Explain various data transfer instruction in 8085 microprocessor.
- 23. Explain interrupts and ISR of 8086 microprocessor.
- 24. Explain register organisation of 8086 microprocessor.

 $(2 \times 5 = 10)$ 

 $(4 \times 3 = 12)$