K20U 1936



III Semester B.C.A. Degree CBCSS (QBE) – Regular Examination, November 2020 (2019 Admission Only)

Core Course

3B06BCA: INTRODUCTION TO MICROPROCESSORS

Time: 3 Hours Max. Marks: 40

PART - A

(Short Answer)

Answer all questions:

 $(6 \times 1 = 6)$

- 1. Define Stack.
- 2. Explain Bus Cycle.
- 3. Define bandwidth.
- 4. What is RISC processors?
- 5. Explain instruction register and decoder.
- 6. Explain the use of INTA pin.

PART - B

(Short Essay)

Answer any 6 questions:

 $(6 \times 2 = 12)$

- 7. Explain Interrupts and Interrupt Service Routines.
- 8. Explain the various features of Microprocessors.
- 9. Explain any two flag registers.
- 10. Explain instruction to transfer the address.



- 11. Mention iteration control instructions.
- 12. Explain Assembler directives.
- 13. Explain I/O mapped memory.
- State the uses of flag manipulation instructions.

PART – C (Essay)

Answer any 4 questions:

 $(4 \times 3 = 12)$

- 15. Explain General purpose registers.
- 16. Explain interrupt cycle of 8086.
- 17. Explain Machine Language Instruction format with example.
- 18. Explain addressing modes in 8086.
- 19. Differentiate maskable and non maskable interrupts.
- 20. List the data transfer instruction sets in 8086 microprocessor.

PART – D (Long Essay)

Answer any 2 questions :

 $(2 \times 5 = 10)$

- 21. Explain Pin diagram of 8086 Microprocessor.
- 22. Explain features and architecture of DMA Controller 8257.
- 23. Discuss the Bus Organization of 8085 microprocessor with diagram.
- 24. Explain generations of Microprocessors with suitable examples.