



QP CODE: 21103001



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Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021**

**Fourth Semester**

B.Sc Computer Science Model III

**Complementary Course - EL4CMT09 - ELECTRONICS - MICROPROCESSOR AND  
ASSEMBLY LANGUAGE PROGRAMMING**

2019 Admission only

7ED43C50

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What are microprocessor initiated operations?
2. Explain the main difference between Stack pointer and program counter in 8085.
3. What is the need for timing diagram?
4. How clock signal is generated in 8086? What is the maximum internal clock frequency of 8086?
5. What is the need to introduce a delay between the execution of two instructions?
6. What is a macro and when it is used?
7. Define stack. What is its purpose?
8. Why mode 4 operation of 8254 termed as software triggered?
9. What are the features of 8257?
10. Write short notes on protected virtual mode of 80286.
11. Write short notes on maximum and minimum mode of 80486.
12. Explain RISC Characteristics.

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Explain the peripheral or externally initiated operations.
14. List the types of addressing modes used in 8085 with suitable examples.
15. Briefly explain unconditional Jump instruction types.
16. Write a procedure which converts a two digit BCD number passed in AX to its equivalent binary.
17. Differentiate maskable and non-maskable interrupts in 8086. Give examples.
18. What is ICW? Discuss the various ICW formats.
19. Writes notes on 80286 modes.
20. Explain 80386 modes.
21. Differentiate on 80386 signals.

(6×5=30)

### Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Describe in detail microprocessor architecture and its operations.
23. Write a brief note on (a) Memory Read / Write machine cycle (b) I/O Read /Write machine cycle in 8086
24. (a) With neat block diagram the explain the functions of 8257. (b) Explain DMA transfer timing diagram.
25. Explain 80286 signal with pin diagram.

(2×15=30)

