B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

B.Sc Computer Science Model III

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

2017 Admission Onwards

E31E423C

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What do you mean by memory? Explain the classifications of memory.

2. Explain the functions of ALE and SID signals in 8085 microprocessor.

3. What is the need for timing diagram?

4. List the IO instructions of 8086.

5. When does overflow occurs?How does the overflow flag is set with example?

6. What is the role of Direction Flag in string instructions?

7. Why a macro doesn't use the service of stack when it is invoked?

8. Explain the function of STI and CLI instructions.

9. What is the pupose of BSR mode of 8255?

10. Write short notes on physical memory of 80286.

11. Write short notes on Bus Unit of 80286.

12. Write short notes on maximum and minimum mode of 80486.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Discuss how the internal data operations are carried out in 8085 microprocessor with examples.

14. Explain the peripheral or externally initiated operations.

15. What do you mean by an Emulator? List are various steps in developing an assembly language program with necessary figures.

16. What is the role of stack in a procedure execution?

17. Explain the priorities in the interrupt structure of 8086.

18. What is OCW? Discuss the various OCW formats.

19. Writes notes on 80286 real mode operation.

20. Explain 80386 features.

21. Writes notes on RISC machines.

(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 80386 signal with pin diagram.

(2×15=30)