

QP CODE: 20101021



Reg No : .....

Name : .....

**BSC DEGREE (CBCS) EXAMINATION , MARCH 2020**

**Fourth Semester**

B.Sc Computer Science Model III

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

2017 ADMISSION ONWARDS

CE573C8A

Time: 3 Hours

Marks: 80

**Part A**

*Answer any **ten** questions.*

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

1. Write a short note on 8085 programmable registers.
2. Explain the functions of ALE and SID signals in 8085 microprocessor.
3. List any three instruction that affects only carry flags in 8086. Also three instruction that affect interrupt flag.
4. What does bit manipulation instructions composed of? List any four bit manipulation instruction.
5. What do you mean by Instruction Templates? Draw the coding template for 8086 IN instruction and MOV instruction.
6. Which are the pointer registers used to access segments for string instructions?
7. What is the difference between CALL and INT n instructions?
8. Which are the ways in which 8086 can be interrupted?
9. What two elements make up an interrupt vector?
10. Write short notes on physical memory of 80286.
11. Write short notes on Instruction Unit of 80286.
12. Write short notes on segment Unit of 80386.

(10×2=20)





### Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain rotate and compare instructions of 8085 with suitable examples.
14. Write a short note on memory mapped I/O and peripheral mapped I/O in 8085.
15. List the major steps in developing an assembly language program.
16. What are the sequence of operations following a procedure call?
17. Explain about the control word formats used in 8255.
18. Explain the initialization sequence of 8259A.
19. Write notes on 80286 protected mode operation.
20. Explain 80486 features.
21. Write 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) 8086 Loop Instructions (b) Instruction Timing and Delay Loops.
24. What is a programmable interval timer? Explain its operating modes with the help of relevant timing diagrams.
25. Explain 80386 signal with pin diagram.

(2×15=30)

