

C 1138

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION, MARCH 2021

Computer Science

BCS 6B 16 (B)—MICROPROCESSOR AND APPLICATIONS

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer all questions.
Each question carries 1 mark.*

1. How many bits a data bus has in 8086 Microprocessor ?
2. What is used to implement the control circuitry in 8086 maximum mode configuration ?
3. Which is the addressing mode that references the data in a register or in a register pair ?
4. Name a non-maskable interrupt.
5. What marks the end of a macro definition ?
6. How many important functions are to be performed by every data definition statement ?
7. Which hardware device is used for direct memory access ?
8. How many levels of interrupt priorities can be resolved by a Programmable Interrupt Controller ?
9. How many bit microprocessors are contained in 80286 ?
10. How many caches are contained in Pentium ?

(10 × 1 = 10 marks)

Section B

*Answer at least four questions.
Each question carries 4 marks.
All questions can be attended.
Overall Ceiling 16.*

11. What are data amplifiers in 8086 minimum mode configurations ? Why are they required ?
12. What are the different reasons for a software interrupt in 8086 ?
13. What are Assembler directives in 8086 ?
14. What are the applications of Programmable Peripheral Interface ?
15. Give some features of 80486.

(4 × 4 = 16 marks)

Turn over

Section C

Answer at least four questions.

Each question carries 6 marks.

All questions can be attended.

Overall Ceiling 24.

16. Name some common, Minimum mode and Maximum mode signals with their functions.
17. Briefly explain the different Data transfer instructions in 8086.
18. What are the different sources from which 8086 Interrupts occurs ? Explain.
19. Write a short note on Programmable DMA Controller.
20. Briefly explain Data storage with an example.
21. Briefly describe any three blocks of Programmable Interrupt Controller.
22. What are the different features of 80286 ?
23. Differentiate 80386 and 80486 microprocessors.

(4 × 6 = 24 marks)

Section D

Answer any two questions.

Each question carries 15 marks.

24. Explain the architecture of 8086 with a diagram.
25. Explain the Processor control and String instructions in 8086.
26. What are the different Assembler directives available ? Explain any three.
27. Explain the two basic operational modes of 8255.
28. Write short note on DOS and BIOS interrupts.

(2 × 15 = 30 marks)

