E 3782

00003782

Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2022

Fourth Semester

Core Course : MICROPROCESSOR AND ITS APPLICATION

[For the Programme B.Sc. I.T.]

(2013—2016 Admissions)

Time : Three Hours Maximum Marks : 80

Part A

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

1. How many bit microprocessor is Intel 8085 ?
2. How many pins are there in 8085 ?
3. What is the function of a data bus ?
4. What is PUSH instruction ?
5. What is INC instruction ?
6. What is a linker ?
7. What is RET instruction ?
8. How many interrupt are there in 8086 ?
9. Expand DMA.
10. How many bit microprocessor is Intel 80386 ?

(10 × 1 = 10)

Part B

Answer any **eight** *questions.*
Each question carries 2 *marks.*

11. What is 8085 accumulator ?
12. What are the Flags in 8085 ?

Turn over

13. How many Input/Output parts are there in 8085 ?

14. How many counters are used by Intel 8253 ?

15. What is the use of Intel 8259 ?

16. What is transparent mode of operation of 8257 ?

17. How many transistors are there in 80286 ?

18. What are the components and functions of BIU in 8086 ?

19. What is direct addressing mode of 8086 ?

20. What is TEST instruction ?

21. What is COMPS instruction ?

22. What is difference between JUMP and Call instruction ?

(8 × 2 = 16)

Part C

Answer any **six** *questions.*
Each question carries 4 *marks.*

23. With a black diagram, describe the basic architecture of 8085.

24. What are various data transfer instructions of 8085 ?

25. Explain unconditional JUMP instructions.

26. With an example, write a program in 8086 to show multiple IF-THEN-ELSE.

27. Write a 8086 program to divide a 16 bit number by an 8 bit number.

28. With an example 8086 program, explain recursive procedure.

29. Write a 8086 program to perform one byte BCD Addition.

30. Explain 8257 DMA controller Architecture.

31. Explain Protected mode addressing in 80286.

(6 × 4 = 24)

Part D

Answer any **two** *questions.*
Each question carries 15 *marks.*

32. Explain basic architecture of 8086.

33. Explain basic architecture of 8254 and its modes of operation.

34. Explain 80386 basic architecture, pins and its signals.

35. Explain RISC Machines in detail.

(2 × 15 = 30)