

C 80140

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Name.....

Reg. No.....

SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020

(CUCBCSS—UG)

B.C.A.

BCA 6B 17 (E1)—MICROPROCESSOR AND APPLICATIONS

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

1. 8085 has 16-bit address bus while 8086 has _____address bus.
2. Which REGISTER changes its status according to the result stored in the accumulator.
3. In _____ addressing mode the data is directly copied from the given address to the register
4. The opcode of INT 3-Break Point Interrupt Instruction is _____.
5. The DW directive is used to declare a _____ type variable.
6. Which directives are used to declare variables that are used in communications between program modules ?
7. STB means _____ in 8212.
8. _____ is a active-low three state signal which is used to write the data to the addressed memory location during DMA write operation.
9. _____ is an input that causes the Pentium to hold the address and AP signals for the next clock.
10. 80386 is _____ bit microprocessor.

(10 × 1 = 10 marks)

Part B

Answer all questions.

Each question carries 2 marks.

11. Which are the general purpose registers in 8086 and their uses ?
12. What is the use of HLDA and HOLD signals ?
13. Write a program to subtract two 8 bit numbers.

Turn over

14. Which are the instructions to transfer the instruction during an execution without any condition.
15. What is the use of PTR operator ? Explain with an example.
16. Write down an example for the use of SHORT directive.
17. What is the use of data Bus Buffer in 8255 ?
18. What is the use of Descriptors and Selectors in 80386 ?

(8 × 2 = 16 marks)

Part C

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

19. Write down the important features of 8086.
20. Explain in detail about the use of index registers.
21. List down the differences between maskable and non-maskable interrupts.
22. Explain in detail the Processor Control Instructions ?
23. Explain in detail about DUP directive.
24. What is the use of Branch Displacement directives ? Write the syntax for the same.
25. Write down the salient features of 8255.
26. Which are the operational modes of 8255 ? Explain.
27. List some of the features of 80486.

(6 × 4 = 24 marks)

Part D

*Answer any three questions.
Each question carries 10 marks.*

28. With neat figure explain 8086 pin diagram.
29. What are software and hardware interrupts ? Explain in detail the various software and hardware interrupts.
30. Explain in detail about MACRO directives with examples.
31. With neat diagram explain in detail the Block Diagram of 8259.
32. Write notes on BIOS and DOS interrupts.

(3 × 10 = 30 marks)