

FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2017

(CUCBCSS—UG)

BCA 5B 12—MICRO PROCESSOR AND APPLICATIONS

Time : Three Hours

Maximum : 80 Marks

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

1. The method in which an operand is specified for an instruction is called _____.
2. The 8086 is a _____ bit processor.
3. The INTR is a _____ interrupt.
4. Programmed testing of ready bits or signals is known as _____.
5. Zero flag is set when _____.
6. _____ executes instructions from the instruction system byte queue.
7. _____ signal is used to insert wait states into the bus cycle such that it is extended by a number of clock periods.
8. _____ is a maskable hardware interrupt.
9. _____ is a general purpose programmable I/O device designed for use with Intel microprocessors.
10. The instruction which moves contents of register C to register B is _____.

(10 × 1 = 10 marks)

Part B*Answer all questions.**Each question carries 2 marks.*

11. What is the difference between microprocessor and micro computer.
12. What is the purpose of ALE signal in an 8086 system ?
13. What is meant by register addressing mode ?
14. What is the function of stack pointer ?
15. What is the maximum size of the memory that can be accessed by 8086.

(5 × 2 = 10 marks)

Turn over

Part C

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

16. Explain the term Assembler Directive.
17. Describe the general features of 8257.
18. Explain Minimum and Maximum mode configuration in 8086.
19. What is meant by pipelined architecture ? How is it implemented in 8086 ?
20. What is stack ? Explain the use and operation of stack and stack pointer ?
21. Explain the address capability of 8086 and also show its memory map ?
22. What is a procedure ?
23. What are the features of 80286 ?

(5 × 4 = 20 marks)

Part D

*Answer any five questions.
Each question carries 8 marks.*

24. Explain various status flags in 8086.
25. What are the various interrupts in 8086 ? Explain ?
26. Explain different addressing modes in 8086 ?
27. What is DMA data transfer ?
28. Explain the concept of assembler macros.
29. Explain different registers in 8086 microprocessor.
30. Explain different modes 8255 operation.
31. Draw and discuss the architecture of 8086. Mention the jobs performed by BIU and EU.

(5 × 8 = 40 marks)