B.C.A. (Part-II) Semester–IV (Old) Examination

ADVANCE MICROPROCESSORS AND MICROCONTROLLER

Paper–4ST5

Time : Three Hours]   [Maximum Marks : 60

Note :— (1)   All questions are compulsory.

(2)   All questions carry equal marks.

(3)   Draw neat sketches wherever necessary.

(4)   Assume suitable data wherever necessary.

1. (A)   Explain internal architecture of 80286 microprocessor with diagram in detail.   8

(B)   Explain interrupt of 80286 microprocessor.   4

OR

2. (A)   Explain flag Register of 80286 microprocessor in detail.   6

(B)   Explain protected mode operation of 80286 microprocessor.   6

3. (A)   Explain different data types in 80386 microprocessor.   6

(B)   Explain flag register in 80486 microprocessor.   6

OR

4. (A)   Explain addressing mode of 80386 microprocessor.   6

(B)   Explain register organization of 80586 microprocessor.   6

5. (A)   Draw a Block diagram of 8051 microcontroller and explain it.   6

(B)   What is PSW Register ? Explain and Draw PSW register of 8051 microcontroller.   6

OR

6. (A)   Explain the Internal RAM architecture.   6

(B)   Explain SP, PC and Data pointer register in 8051 microcontroller.   6

7. (A)   Describe the addressing modes of 8051 microprocessor.   6

(B)   Enlist Data transfer instruction of 8051 microprocessor.   6

OR

8. (A)   Explain the classification of instruction set of 8051 microprocessor.   6

(B)   Write ALP program for multiplication of two 8-bit numbers using 8051 μc with flowchart.

6

9. (A) Explain the concept of asynchronous and synchronous data Transmission.   6

    (B) What do you mean by interfacing ? Explain interfacing of DAC 0808 with 8051 microcontroller.

    6

OR

10. (A) What is the need of RS-232C ? Explain interfacing of RS-232C with 8051 μc.   6

    (B) Enlist the applications of 8051 microcontroller.   6