Faculty of Engineering & Technology
Fourth Semester B.E. (Computer Technology) (C.B.S.)
Examination
ADVANCED MICROPROCESSOR AND
INTERFACING

Time—Three Hours]   [Maximum Marks—80

INSTRUCTIONS TO CANDIDATES

(1) All questions carry marks as indicated.

(2) Due credit will be given to neatness and adequate dimensions.

(3) Assume suitable data wherever necessary.

(4) Diagrams and Chemical equations should be given wherever necessary.

(5) Illustrate your answers wherever necessary with the help of neat sketches.

1. Draw and explain Architectural diagram of 8086, in detail. Also mention advantages of pipelining.   13

OR

2. (a) Explain all the addressing modes of 8086 with one example each.   7

(b) Write a program to arrange 10 bytes in Ascending order.   6

www.Solveout.in

3. (a) Draw and explain block diagram of 8253 PIT. 7

(b) Explain CWR of 8253 PIT. 6

OR

4. (a) Interface DAC with 8086 in minimum mode and write a program to generate sawtooth wave of 0 to 10V. 8

(b) Interface ADC 0809 with 8086, and explain. 5

5. (a) Explain dedicated interrupts of 8086. 6

(b) Explain all the modes of operation of 8255 PPI in detail. 8

OR

6. (a) Draw and explain block diagram of 8259 PIC. 7

(b) Interface 8251 USART with 8086, and write a program to transfer 100 bytes in Asynchronous mode. 7

7. (a) Explain different keyboard modes of 8279 PKDC. 7

(b) Interface 8237 DMAC with 8086 from address 6000 H. 7

OR

8. (a) Explain loosely coupled and closely coupled configuration. 7

(b) Draw and explain NDP Architecture Diagram. 7

9. Draw and explain Architectural Diagram of 8051. 13

OR

10. (a) Explain Real and Protected mode.   7

    (b) Explain the concept of paging.   6

11. (a) Mention the advantages of Super Scalar Architecture.

                                          6

    (b) Give difference between RISC and CISC.   7

OR

12. (a) Explain GDT, LDT and IDT, in detail.   8

    (b) Explain the process of multitasking using TSS.   5