COMPUTER ENGINEERING   COURSE NO. COM – 601

(Advanced Microprocessor)

Time Allowed – 3 Hours   *Maximum Marks – 100*

Note: Attempt five questions in all selecting at least two questions from each Section. Each question carries 20 marks.

SECTION – A

1. (a) Discuss in detail 8086 Architecture.

   (b) Discuss segmented memory architecture in detail.

   (10, 10)

2. (a) Explain all addressing modes of 8086 with example.

   (b) Give comparative analysis of 80186, 80286 and 80386.
   (10, 10)

3. (a) Write a program for the addition of a series of 8-bit numbers. The series contain 100 numbers.

   (b) Discuss the read and write cycle timing diagrams of 8086 in minimum mode.   (10, 10)

4. (a) What are interrupts? Discuss various Hardware and Software interrupts in 8086?

   (b) Write a program to find the factorial of an 8-bit number stored in memory location X.   (10, 10)

SECTIC... B

5. (a) Discuss the following data types in NPD with examples:

   (i) Integer data type

   (ii) Packed BCD data type

   (iii) Real data type

   (b) What is NDP? Discuss its architecture. (10, 10)

6. (a) Discuss interfacing of microprocessor to Keyboard in detail.

   (b) Draw and explain the interfacing of output device with 8086 microprocessor. (10, 10)

7. (a) Explain Pentium IV and compare it with 8086/88.

   (6, 4)

   (b) Explain queue status and lock facility in 8086/88 microprocessor.

   (5, 5)

8. Explain the following:

   (a) Interfacing of NDP with 8086/88

   (b) Programmable parallel ports. (10, 10)

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