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FIRST SEMESTER M.Sc. DEGREE EXAMINATION
JANUARY 2009

Computer Science (Main)

CS 105—ADVANCED MICROPROCESSOR

(2005 Admissions onwards)

Time : Three Hours   Maximum : 80 Marks

Part A

Answer any **five** *questions.*
All questions carry equal marks.

1. Explain the clock system and timing cycles used in 8085 microprocessor.
2. What are directives ? Explain the use of page and title directives.
3. Explain how the physical memory address is obtained by the use of segment register.
4. Explain the term pipelined memory access.
5. Describe how the alphanumeric characters are represented using ASCII.
6. Describe the features of INT 21H and 13H functions.
7. What are the features of subprograms ?

(8 x 5 = 40 marks)

Part B

Answer any **four** *questions.*
All questions carry equal.

8. (a) Describe the internal architecture of 8086 microprocessor.

   (b) Discuss the advantages of using segment registers.
9. (a) Describe different types of interrupts in a microprocessor.

   (b) What is DMA ? Explain the DMA type data transfer scheme.
10. (a) Describe the procedure for developing an assembly language program.

    (b) Explain linking and execution programs.
11. (a) Describe the extended method for screen display and keyboard operations in DOS.

    (b) Explain INT 10 H operations.
12. (a) Explain how the data storage is organized in a disk.

    (b) Explain the features of file names and directory and subdirectory names.
13. (a) What are the important additional instructions with 80286 compared to its predecessors.

    (b) What are the important features of Pentium microprocessors ?

(4 x 10 = 40 marks)