

III B.Tech I Semester Supplementary Examinations, November 2005
MICROPROCESSORS AND MICRO-CONTROLLERS
(Electronics & Computer Engineering)

Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Draw the internal architecture of 8085? Explain about each block in it. [8]
(b) List out the assembler directives of 8086? And explain them? [8]
2. (a) Draw and discuss the register set of 80386 and explain the typical function of each of the registers in brief. [9]
(b) What do you mean by Paging? What are its advantages and disadvantages? [3+4]
3. Explain the architectural features of MC 68000. [16]
4. (a) Explain how pipelining improves the speed of operation? [6]
(b) What is score boarding and its use in RISC? [10]
5. (a) Explain the salient features of Pentium architecture. [6]
(b) Draw the schematic blocks of Floating Point Unit (FPU) of Pentium micro-processor and explain its different segments. [10]
6. (a) Explain the various stages involved in the development of Pentium based systems? [8]
(b) Explain the use of in circuit emulator in a development system? Discuss ICE for Pentium based system development? [8]
7. (a) How many ports are available in 8051? Out of them, which port pins, are individually programmable? [4]
(b) Explain the port pin circuits for all the ports with neat diagrams? [12]
8. (a) Write a program of 8051 to copy the value 55 H into RAM memory location 40H to 45H using. [9]
 - i. Direct addressing mode
 - ii. Register indirect addressing mode without a loop
 - iii. With a loop
(b) Assume that ROM space of 8051 starting at 250H contains "Hello", write a program to transfer the bytes into RAM locations starting at 40H. [7]
