

B.Tech. Degree V Semester (Supplementary) Examination, July 2009

CS/EB 506 MICROPROCESSOR BASED SYSTEM DESIGN (2006 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART – A

(Answer **ALL** Questions)
(All questions carry **EQUAL** marks)

(8 x 5 = 40)

- I
- a) Explain about segment registers in 8086.
 - b) What are assembler directives? Give any three examples.
 - c) Explain minimum mode configuration of 8086.
 - d) Explain the inter connection topologies of 8086 based on the communication between memories.
 - e) Comment on the usage of a descriptor table.
 - f) Explain the salient features of Pentium III.
 - g) Compare any two 8 bit micro controllers.
 - h) Write about 8051-instruction set.

PART – B

(4 x 15 = 60)

- II
- a) Explain the architecture of 8086 with a neat sketch. (10)
 - b) What is a debugger? Explain with suitable example. (5)

OR

- III
- a) Explain modular programming with a suitable example. (9)
 - b) Write notes on
 - i) Stacks
 - ii) interrupt routines. (3+3 = 6)

- IV
- a) Compare 8086 with 8088. (6)
 - b) Explain about Dynamic RAM interfacing. (9)

OR

- V
- a) Explain the interfacing of 8086 with programmable interrupt controller. (10)
 - b) Explain DMA operation with suitable diagram. (5)

- VI
- Discuss the register set of 80386. Explain the typical function of each of the registers in brief. (15)

OR

- VII
- a) Explain the different data types of 80386. (5)
 - b) Explain in detail the paging mechanism of 80386. (10)

- VIII
- With a neat sketch briefly explain the architecture of 8051. (15)

OR

- X
- a) What is an actuator? (3)
 - b) Briefly explain the interfacing of 8051 with sensors. (12)

