



K15F 0161

Reg. No. :

Name :



**V Semester B.Tech. Degree (Reg./Sup./Imp. – Including Part Time)
Examination, November 2015
(2007 Admn. Onwards)**

PT 2K6/2K6EC/AEI 506 : MICROPROCESSORS AND MICROCONTROLLERS

Time : 3 Hours

Max. Marks : 100

- I.

 - 1) Explain the following 8086 instructions :
 - a) LOOPZ LABEL
 - b) PUSHF
 - 2) What is the use of TRAP flag ? How can you set it ?
 - 3) Draw simple digital ckts to generate I/O read and I/O write signals from basic 8086 signals.
 - 4) Write and explain the keyboard/display mode set command word of 8279 display/keyboard controller.
 - 5) Explain the format of an 80386 memory descriptor.
 - 6) List the main differences between real and protected modes of 80386.
 - 7) Explain any one mode of 8051 timer.
 - 8) Explain the instructions of 8051 :
 - a) DJNZ
 - b) MOVC A, @A + DPTR

II. a) Draw and explain the architecture of 8086.

QB

15

b) Explain the interrupt system of 8086.

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- III. a) Draw and explain an interface of 8 LEDs and 8 DIP switches to 8086 using 8255 PPI. 15
- OR
- b) Draw and explain keyboard/display interface chip (8279) block diagram. 15
- IV. a) Explain how memory paging is implemented in 80386. 15
- OR
- b) Explain the concept of branch prediction and various methods to implement. 15
- V. a) Draw and explain the architecture of 8051 microcontroller. 15
- OR
- b) Explain the interrupt system of 8051. 15
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