

Roll No.

Total Pages : 2

8933**BT-7/D09****ADVANCED MICROPROCESSORS****Paper : ECE-423(E)****Time : Three Hours]****[Maximum Marks : 100****Note :** Attempt any *five* questions. All questions carry equal marks.

1. (a) For 8086 microprocessor, discuss the functions of
(i) Segment registers, and (ii) Index registers.
(b) Explain addressing modes of 8086. 10+10
2. (a) Discuss the functions of the following signal/pins in 8086 :
(i) **READY**
(ii) **LOCK**
(iii) **TEST**
(iv) **BHE**.
(b) Explain the functions of the following 8086 instructions :
(i) **JCXZ**
(ii) **ADD**
(iii) **LOOP**
(iv) **MOVS**. 10+10

http://www.kuonline.in

3. (a) Explain the use of the following 8086 assembler directives with the help of examples :
(i) **PTR**
(ii) **ORG**
(iii) **PROC**
(iv) **OFFSET**.
(b) Describe the flag register in 8086 and discuss the functions of various flags. 10+10
4. Discuss the internal architecture of 80186 with the help of a neat block diagram. Explain the improvement in 80186 in comparison to 8086. 20
5. Discuss the block diagram of 80286. Explain its multitasking capability in Protected Virtual Addressing Mode (PVAM). 20
6. Discuss the internal architecture of 80287 and explain how it is interfaced with 80286. 20
7. (a) What do you understand by Virtual memory ? Explain clearly with the help of an example.
(b) Discuss the interfacing of 8259 interrupt controller with 8086. 10+10
8. Write short notes on the following :
(a) Interrupt system in 80386.
(b) Internal architecture of 80387.
(c) Semiconductor memories. 6+7+7

http://www.kuonline.in

http://www.kuonline.in