QP Code : 5398   04/12/15

(3 Hours)   **[Total Marks : 80]**

N.B. : 1. Question no. 1 is compulsory
      2. Solve any three from the remaining five questions.
      3. Assume suitable additional data if necessary.

Q1	a)	Explain interrupts of 8085	5
	b)	Compare min-mode with max-mode of 8086.	5
	c)	Write an 8086 assembly language program to divide 16 bit number by 4 bit number	5
	d)	Explain System bus arbitration in Loosely Coupled System	5
Q2	a)	What is DMA. Explain 8237DMAC	10
	b)	What is segmentation? Give usages, advantages of segmentation	5
	c)	Compare 8085,8086 and 8088 microprocessors.	5
Q3	a)	Design 8086 based system for following specifications: 8086 operating at 3 MHz; 6KByte of EPROM, 3KByte of ROM; 2 i/o ports.	15
	b)	Explain interrupt acknowledge (INTA) cycle of 8086	5
Q4	a)	Explain parameter passing methods in 8086	10
	b)	Write an 8086 assembly language program to divide to divide 32 bit number by 8 bit number	5
	c)	What is instruction pipelining? Give advantages and challenges associated with it.	5
Q5	a)	Explain interfacing of 8259 with 8086 (Cascade mode)	10
	b)	Explain Closely Coupled System (CCS)	5
	c)	Write short notes on assembler directives	5
Q6	a)	Give applications of interrupts. Explain interrupts of 8086	7
	b)	Explain low-speed (slow) peripheral (memory) interface with 8086 with wait states with the help of timing diagram.	7
	c)	Explain 8087 math co-processor and its usages	6