

		March 2015		
Q1	(A)	Select correct alternative and rewrite the following :	(4)	
	(a)Instruction would not affect zero flag. (1) XRA A (2) SUB A (3) CMP A (4) MVI A,00H		
	(b)	Data bus of 80286 MPU is of size..... (1) 8bit (2) 16 bit (3) 32 bit (4) 64 bit		
	(c) Is used to store 8 bit opcode is 8085 . (1) IR (2) PC (3) SP (4) Accumulator		
	(d)	The device used to extend cable length of a network is (1) MODEM (2) REPEATER (3) HUB (4) ROUTER		
Q1	(B)	Answer any two of the following :	(6)	
	(a)	Draw block diagram of generic microprocessor .		
	(b)	State any six features of 8051 microcontroller .		
	(c)	What is HUB? explain all the types of HUB .		
Q2	(A)	Answer any two of the following:	(6)	
	(a)	Explain multiplexed address and data bus of 8085 MPU .		
	(b)	Explain star and bus network topology .		
	(c)	State any six arithmetical and logical instructions of 8085 MPU .		
Q2	(B)	Answer any two of the following:	(4)	
	(a)	What are the Hardware interrupts ? Explain vectored and non-vectored interrupts of 8085 MPU .		
	(b)	Explain the following instructions of 8085 MPU: (1) MOV B,M (2) ADC C (3) SPHL (4) XCHG		
Q3	(A)	Answer any two of the following:	(6)	
	(a)	What is a single chip computer ? state its advantages .		
	(b)	State any three features of Pentium processor .		
	(c)	Explain Ethernet protocol used in network .		
Q3	(B)	Answer any two of the following:	(4)	
	(a)	Explain PUSH and POP instructions of 8085 .		
	(b)	Explain any four flags of 8085,giving example .		
Q4	(A)	Answer any two of the following:	(6)	
	(a)	Explain function of the following pins of 8085: (1) INTA (2) IO/M (3) RD		
	(b)	State any six applications of microcontrollers .		
	(c)	Compare twisted pair cable and coaxial cable.		
Q4	(B)	Answer any two of the following:	(4)	
	(a)	Explain the following : (1) T-States (2) Machine Cycle (3) Instruction cycle (4) FETCH Cycle		

	(b)	Give advantages of fiber optic cable over an electrical cable.		
Q5	(A)	Answer any two of the following :	(10)	
	(a)	Write ALP to multiply number stored at 8085H by 09H and store result at 8086 H and 8087 H, with lower byte at 8086H.		
	(b)	Write ALP to find 2's complement of a 16 bit number stored in De pair. Store. Result in HL pair.		
	(c)	Locate smallest number in a block from 2050 H to 2060H and store it in memory location 2061 H.		
		OR		
Q5	(B)	Answer any two of the following :	(10)	
	(a)	Write ALP to store data BCH in 20 continuous memory location starting from 8081 H.		
	(b)	Write ALP to divide number at 6068H by a non-zero number at 6067 H. store .quotient at 6069H and remainder at 606AH.		
	(c)	Write ALP to clear register B, if number at memory location 20F9H is palindrome otherwise store FFH in register B.		