Seat No.: Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER 2013

		ode: 162002 Date: 27-05-2013	3
Гim	ubject Name: Micro Processors and Micro controllers Time: 10.30 am - 01.00 pm Total Marks: 70 instructions:		
	1. A 2. N	Attempt all questions. Make suitable assumptions wherever necessary. Sigures to the right indicate full marks.	
Q.1	(a) (b)	Draw and explain the simple model of microprocessor based system. Explain the programming model of 8085 Microprocessor.	07 07
Q.2	(a) (b)	Explain the programming model of 8051 Microcontroller Describe the memory organization of 8051 Microcontroller. OR	07 07
	(b)	Explain the PSW register of 8051.	07
Q.3	(a)	Explain the generation of control signals in 8085 with necessary Diagrams.	07
	(b)	Draw and explain the timing diagram for the execution of the Instruction STA 8000H in 8085. The memory address is starting from 2050H.indicate all signals associated with instruction in Timing diagram. OR	07
Q.3	(a)	What are the Interrupts in microprocessor? Draw and explain the interrupt Structure of 8085 microprocessor.	07
	(b)	Explain the peripheral mapped Input/output with example.	07
Q.4	(a)	Write a Program to perform the Multiplication of Two 8 bit Numbers in 8085.	07
	(b)	Write a Program to find the largest number in an array of data using 8085 instruction set.	07
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Q.4 Q.4	(a) (b)	Explain the TCON register in 8051 with example. Describe the Addressing modes in the 8051 microcontroller.	07 07
Q.5	(a)	Write a program to perform the subtraction of two 16 bit numbers in 8051.	07
	(b)	Write a program to find average of 10 numbers using 8051 instruction set. OR	07
Q.5	(a) (b)	Explain the port structure in 8051. Enumerate the various types of JUMP instruction in 8051 according to range.	07 07

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