Sanjay Ghodawat University, Kolhapur 2018-19

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017 EXM/P/09/01

Year and Program:2018-19 **School of Technology** **Department of SY B.Tech**

Course Code: CST213 **Course Title: Microprocessor & Microcontroller** **Semester – III**

Day and Date Friday 14/06/2019 **End Semester Examination (ESE)** **Time:** 3Hrs. 2.30 to 5.30 PM **Max Marks: 100**

Instructions:
1) All questions are compulsory.
2) Assume suitable data wherever necessary.
3) Figures to the right indicate full marks.

		Marks	Bloom's Level	CO
Q.1	**Solve any Two**			
a)	Draw and Explain the 8085 microprocessor architecture	07	L_3	CO1
	OR			
a)	With a neat diagram explain in detail the architecture of 8086 microprocessor	07	L_3	CO2
b)	Elaborate the addressing modes of 8086 microprocessor	08	L_2	CO2
	OR			
b)	Illustrate the addressing modes of 8085 microprocessor	08	L_2	CO1
Q.2	**Solve any Two**			
a)	Define the Assemble Directive? Explain any six assembler directives with suitable example	07	L_3	CO2
	OR			
a)	What are the types of instructions set in 8085? Explain the arithmetic instructions of 8085.	07	L_3	CO1
b)	Explain the 8086 minimum mode configuration with block diagram.	08	L_2	CO2
	OR			
b)	Explain the 8086 maximum mode configuration with block diagram	08	L_2	CO2

ESE

Q.3	**Solve any Two**				
	a)	Draw & Explain block diagram of 8087 Numeric Data Processor.	08	L_2	CO3
	b)	Explain coprocessor configuration of 8086	08	L_2	CO3
	c)	Explain bus allocation schemes with block diagram.	08	L_2	CO3
Q.4	**Solve any Two**				
	a)	Draw and Explain 8255 PPI IC	09	L_3	CO4
	b)	What is DMA? Explain 8237 registers and operating modes in detail.	09	L_3	CO4
	c)	Explain Synchronous and Asynchronous serial communication in detail.	09	L_3	CO4
Q.5	**Solve any Two**				
	a)	Draw and explain architectural block diagram of 8051 microcontroller	09	L_3	CO5
	b)	Explain the addressing modes of 8051 microcontroller	09	L_3	CO5
	c)	Give the difference between Microprocessor and Microcontroller	09	L_3	CO5
Q.6	**Solve any Three**				
	a)	Explain the salient features of 8051 Microcontroller	06	L_2	CO6
	b)	Draw and Explain the Pin diagram of 8051 Microcontroller	06	L_2	CO6
	c)	Explain the timers and counters of 8051	06	L_2	CO6
	d)	Explain the serial communication interrupts with block diagram	06	L_2	CO6

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