Sanjay Ghodawat University, Kolhapur 2019-20
Established as State Private University under Govt. of Maharashtra. Act No XL, 2017 EXM/P/09/01

Year and Program:2019-20 **School of Technology** **Department of SY B.Tech**

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

Day and Date Wednesday 27/11/19 **End Semester Examination (ESE)** **Time:3hr Max Marks: 100** 10.30am to 1.30 pm.

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)	Explain the 8085 microprocessor architecture with diagram.	07	L_2	CO1
	OR			
a)	With a neat diagram explain in detail the architecture of 8086 microprocessor	07	L_3	CO2
b)	Describe the addressing modes of 8086 microprocessor	08	L_2	CO2
	OR			
b)	Illustrate the addressing modes of 8085 microprocessor	08	L_3	CO1
Q.2	**Solve any Two**			
a)	Define the Assembler 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 logical instructions of 8085.	07	L_3	CO1
b)	Illustrate the 8086 minimum mode configuration with block diagram.	08	L_2	CO2
	OR			
b)	Describe the 8086 maximum mode configuration with block diagram	08	L_2	CO2

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Q.3	**Solve any Two**				
	a)	Explain block diagram of 8087 Numeric Data Processor.	08	L_3	CO3
	b)	Describe coprocessor configuration of 8086	08	L_2	CO3
	c)	Explain bus allocation schemes with block diagram.	08	L_3	CO3
Q.4	**Solve any Two**				
	a)	Illustrate 8255 PPI IC with diagram	09	L_3	CO4
	b)	What is DMA? Explain 8237 registers and operating modes in detail.	09	L_3	CO4
	c)	Distinguish Synchronous and Asynchronous serial communication in detail.	09	L_4	CO4
Q.5	**Solve any Two**				
	a)	Explain architectural block diagram of 8051 microcontroller	09	L_3	CO5
	b)	Describe the addressing modes of 8051 microcontroller	09	L_2	CO5
	c)	Differentiate between Microprocessor and Microcontroller	09	L_4	CO5
Q.6	**Solve any Three**				
	a)	Explain the salient features of 8051 Microcontroller	06	L_3	CO5
	b)	Describe the Pin diagram of 8051 Microcontroller	06	L_2	CO5
	c)	Write a program to store data FFH into RAM memory locations 50H to 58H using direct addressing mode	06	L_3	CO6
	d)	Write a program to add the values of locations 50H and 51H and store the result in locations in 52h and 53H.	06	L_3	CO6

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