Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2020-21	**School of Technology**	**Department: Electrical & Electronics Engineering**
Course Code: EET 305	**Course Title: Microcontroller and its Applications**	**Semester : V**
Day : Monday **Date: 21.12.2020**	**End Semester Examination**	**Time:2 Hrs.** **Max Marks:50**

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	**Answer the following (any Two)**–				
	a)	Draw and summarizes the block diagram of Microcontroller 8051	8	L3	CO1
	b)	Explain in details the modes and SFR's of serial port of 8051	8	L2	CO3
	c)	Discuss the following instructions in detail **i**. SETB P1.2 **ii.**MOV C, 68H **iii.**XCHD A, 30H **iv.**MOVCA, @A + DPTR	8	L2	CO2
Q.2	**Answer the following (any two)** –				
	a)	Show the Interfacing of 16kx8 RAM to 8051. Also find the start and end address of RAM	8	L1	CO3
	b)	Show the Interfacing ADC 0808 to 8051. Analyze the use of each pin of ADC 0808.	8	L1	CO3
	c)	Write am assembly language program to add X + Y where X and Y are 32 bit numbers present in the internal RAM 30h and 40h, put the result in the internal RAM from 50h. Use indirect addressing mode.	8	L4	CO2

Q.3	**Answer the following (any two) –**			
a)	Explain the interfacing of temperature sensor LM 35 to 8051. Write an algorithm to read the temperature and display it on LCD display	9	L2	CO4
b)	Explain I^2C protocol in detail	9	L2	CO1
c)	Identify and explain the SFR's and internal peripherals required for communication between two 8051 microcontrollers.	9	L3	CO3

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