



**SRI KRISHNA COLLEGE OF TECHNOLOGY**  
An Autonomous College, Accredited by NAAC with “A” grade and by NBA-AICTE  
**Coimbatore, Tamil Nadu**  
**Academic Year 2021-2022 (ODD SEM)**



**B.E. ELECTRONICS AND COMMUNICATION ENGINEERING**

**CONTINUOUS INTERNAL ASSESSMENT - I**

Class <b>III Year CSE</b>	Course Code <b>19CS502</b>	Course Title <b>MICROPROCESSORS AND MICROCONTROLLERS</b>	Date <b>10.8.2021</b>
Duration: <b>90 min</b>			Max: <b>50 Marks</b>

Course Outcomes:	
CO 1	Understand the Fundamental Concepts of 8,16,32 bit microprocessors and microcontrollers
CO 2	Understand the architecture, Instruction Set and Addressing Modes of 8051
CO 3	Do assembly language programming.
CO 4	Identifying the appropriate peripheral/interfacing device for specific applications
CO 5	Do interfacing design of peripherals like I/O, A/D, D/A, timer etc.
CO 6	Develop systems using different microcontrollers.

Part – A (09 x 02 = 18 Marks) Answer All Questions		BT	CO	Marks
1	Classify the bus signals used in computer system.	U	CO1	2
2	Calculate the total amount memory in a processor for the given size of address bus. Address bus = 16 bit and 32 bit.	AP	CO1	2
3	List types of the signals generated by external device to perform task in 8085.	U	CO1	2
4	If a word is defined as 16 bit, estimate the number of words in 64 bit data item.	AP	CO1	2
5	For a microcontroller based product, suggest a criteria for choosing the microcontroller.	AN	CO1	2
6	Compare X86PC with embedded systems used in many applications.	AN	CO 1	2
7	Inter the SFR used for controlling operation in 8051.		CO 2	2
8	Sketch XTAL connection to 8051 using quartz crystal oscillator	U	CO 2	2
9	Microcontroller is referred as “system on chip”. Justify the statement.	AN	CO 2	2

Part – B (02 x 16 = 32 Marks) Answer All Questions		BT	CO	Marks
10 .	Elaborate on the different sections of 8085 microprocessor with its Architecture using necessary diagrams.	U	CO 1	16
11.	Examine the Logical design of data manipulation and communication inside an 8051 Microcontroller using its Block Diagram and narrate on each block and pin of 8051.	AN	CO2	16