Q.P. Code: 19EC0421 **R19**

Reg. No: | | | | | | | | | | |

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech II Year I Semester Supplementary Examinations December-2021

MICROPROCESSORS & MICROCONTROLLERS

(Common to CSE & CSIT)

Time: 3 hours Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	Write short notes on output devices.	L1	6M
	b	Compare static RAM and Dynamic RAM	L1	6M
		OR		
2		Define instruction and explain different type's instructions supported by µP.	L1	12M
		UNIT-II		
3	a	Explain the requirement of a program counter, stack pointer & ALU in 8085µP.	L1	6M
	b	Draw and define the flags in 8085µp.	L2	6M
		OR		
4		Explain in detail how a data flow from memory to Microprocessor Unit.	L2	12M
		UNIT-III		
5	a	List the features of 8051 microcontroller.	L1	6M
	b	Mention the applications of microcontrollers in everyday life.	L4	6M
		OR		
6	a	Compare serial communication and parallel communication.	L5	6M
	b	Explain how the 8051 µC transfers the data using serial port.	L2	6M
		UNIT-IV		
7	a	Mention the difference between Jump and Call operations.	L1	6M
	b	Explain Jump and Call instructions of 8051 µC with an example.	L2	6M
		OR		
8	a	Write an assembly program of 8051 µC to logically AND two 8-bit numbers and store the result in a memory location.	L2	6M
	b	Write an assembly program of 8051 µC to logically OR two 8-bit numbers and store the result in a memory location.	L2	6M
		UNIT-V		
9	a	List instruction command codes for programming an LCD.	L1	6M
	b	List the merits, demerits and applications of an LED display over an LCD.	L4	6M
		OR		
10		Design and explain the implementation of 4-way traffic control system using 8051 microcontroller.	L4	12M

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