

Vivekananda College of Engineering & Technology,Puttur

[A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®]

Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08

Rev 1.10

EC

24/05/2021

ONLINE CONTINUOUS INTERNAL EVALUATION - 1

Dept:EC	Sem / Div:4A&B	Sub:Microcontroller	S Code:18EC46
Date:26/5/2021	Time: 3:00-4:30PM	Max Marks: 50	Elective: N

QN	Questions	Marks		CO's	
PART A					
1	a	Draw the pin diagram of 8051 microcontroller and write the functionality of each Pin	10	L2	CO1
	b	Explain each bit of Program status word with the frame pattern	7	L2	CO1
	c	Write the contents in the following after the execution of all the instructions i)A register ii)B register iii)Location 50H iv)Location 30H MOV 50H,#20H MOV 20H,#10H MOV A,50H MOV R0,#20H MOV B,@R0 MOV 50H,20H MOV R5,50H MOV R1,A MOV 30H,@R1	8	L2	CO2
2	a	With a neat diagram explain the memory organisation of internal RAM of 8051 microcontroller	10	L2	CO1
	b	Explain when overflow ,auxiliary and parity flag bit in 8051 PSW is set.What will be the value in the PSW register after the execution of the following instructions MOV A,#20H MOV B,#6FH ADD A,B	7	L2	CO1
	c	Explain the following instruction with one example each i)MOVC A,@A+DPTR ii)MOVX @DPTR,A iii)MOVX A,@DPTR iv)MOV @R1,20H	8	L2	CO2
PART B					
3	a	With a neat block diagram explain the architecture of 8051 Microcontroller	10	L2	CO1
	b	Differentiate Microprocessors and Microcontrollers	7	L2	CO1

	c	Check if the following 8051 microcontroller instructions are valid or not . State the reason and correct the invalid instruction i) MOV #34H,R1 ii) MOV R1,R2 iii)MOV @R5,A iv)MOV R5,DPTR v)MOV 34H,56H vi)MOV A,R5	8	L2	CO2
4	a	Interface 8051 microcontroller with 8KB of ROM and 64KB of RAM	10	L2	CO1
	b	Explain port 0 operation of 8051 microcontroller	7	L2	CO1
	c	What is an addressing mode? Explain the different types of addressing modes with two examples for each	8	L2	CO2

