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	ECE	5/08/2020

ONLINE CONTINOUS INTERNAL EVALUATION – 3

Dept:EC	Sem / Div:4A&B	Sub:Microcontroller	S Code:18EC46
Date:6/8/2021	Time: 3:00-4:30PM	Max Marks: 50	Elective: N

QN		Questions	Marks	RBT	CO's
PART A					
1	a	With a bit pattern explain TMOD register. Explain how gate is used to start and stop the timer	9	L2	CO4
	b	Explain the steps to program timer0 in mode1	8	L2	CO4
	c	Write assembly level program using autoreload mode of timer0 to generate a frequency of 10 KHZ on P1.2	8	L3	CO4
OR					
2	a	With the bit pattern explain TCON register	9	L2	CO4
	b	Explain autoreload mode of timer1. How to make timer1 work as counter1	8	L2	CO4
	c	Write 8051 C program to transfer a message “HELLO” serially at 9600 baud,8bit data 1 stop bit	8	L3	CO4
PART B					
3	a	Explain the types of interrupts in 8051 with their addresses and priority. What are the sequence of operations that takes place when an interrupt occurs	9	L2	CO5
	b	With a bit pattern explain IE (Interrupt Enable) and IP (Interrupt Priority) register	8	L2	CO5
	c	Write an ALP to generate a square wave of frequency 5KHz on pin P2.1 using timer1 in mode2.Assume crystal frequency of 11.0592MHz	8	L3	CO5
OR					
4	a	With a neat diagram explain LCD interface with 8051.Write a program to display a message “YES” on the LCD display	9	L3	CO5
	b	Explain ADC interface with 8051.Write a program to convert analog input to digital output	8	L3	CO5
	c	Write assembly level program to generate a triangular wave	8	L3	CO5

Prepared by:Rajani Rai B & Suhandas