C1

VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

SCHOOL OF ELECTRONICS ENGINEERING (SENSE)
Win 2019 ~ 20
Continuous Assessment Test - II
B.Tech. (BIS, BML &BSW)

Course : ECE3031– Microcontroller and Embedded Systems

Duration : 90 Minutes.   Max. Marks : 50

Slot : C1

Answer all questions

1. Assume that bit P2.3 is an input and represents the condition of an oven. If it goes high, it means that the oven is hot. Monitor the bit continuously. Whenever it goes high, send a high-to-low pulse to port P1.5 to turn on a buzzer.   [5]

2. Assume XTAL = 11.0592 MHz, write a program to generate a square wave of 50 kHz frequency on pin P2.3.   [10]

3. Assuming that clock pulses are fed into pin T1, write a program for counter 1 in mode 2 to count the pulses and display the state of the TL1 count on P2, which connects to 8 LEDs.   [10]

4. Write a program for the 8051 to receive bytes of data serially, and put them in P1, set the baud rate at 4800, 8-bit data, and 1 stop bit.   [10]

5. Write an ALP to implement the following circuit also mention the truth table of the circuit.   [15]