



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

School of Computer Science and Engineering

Winter Semester 2023-2024 Continuous Assessment Test – I

Program Name & Branch: BCB, BCE, BCI, BCT, BDS, BKT

SLOT: A1+TA1

Course Name & code: Embedded system BCSE305L

Date of exam: 11/02/2024

Class Number (s):

VL2023240501048,1023,1030,1060,1039,1064,1084,1095,1087,1013,1052,1017,1093,1059,1085,1069,1019

Exam Duration: 90 Min.

Maximum Marks: 50

General instruction(s):

Answer all five questions.

	Question	Max Marks
1.	Draw and explain the internal block diagram of PIC and mention the difference between microprocessor and microcontroller.	10
2.	Develop the embedded system design process for GPS moving map?	10
3.	Write a program using 8051 to generate square wave of 1 kHz at pin P1.0? (Note- crystal frequency -11.0592 MHz, Machine cycle-12, using timer 1 mode 2)	10
4.	Draw and explain the working principle of analog to digital converter along with its characteristic?	10
5.	Explain the interfacing of ultrasonic sensor with 8051 for object detection?	10