

Reg. No.:

Name :



VIT

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

Continuous Assessment Test II – March 2022

Programme	: B.Tech(CSE)	Semester	: FS 2021-22
Course	: Microprocessor and Interfacing	Code	: CSE2006
Faculty	: Dr. S. Muthulakshmi & Prof. Ralph Thangaraj	Slot	: A2
		Class Nbr	: CH2021225000508 & CH2021225000509
Time	: 90 Minutes	Max. Marks	: 50

Answer ALL the questions

5 X 10 = 50 MARKS

Q.No.	Sub. Sec.	Question Description	Marks
1		Write an 8086 assembly language program to check whether the given string "racecar" is a palindrome or not. If it is a palindrome, display the message "It's a palindrome". If not, display the message "it's not a palindrome" using DOS interrupt. Also, display the message "program terminated successfully".	[10]
2		Which port can you use for BSR mode in 8255? Configure control word to set bit number 3 and reset bit number 5 of specific port of 8255. Also, discuss the ports used in mode 2 of 8255.	[10]
3		Write an ALP to use counter 1 of 8254 to generate a square wave with frequency of 1KHz. Assume the clock frequency of 8086 is 5 KHz. Assume address of control word as 0746H	[10]
4		Discuss the architecture of 8259 in detail with proper block diagram.	[10]
5		Consider an application designed using 8255 and 8086, where port A and Port C (upper 4 bits) are used as an input ports and Port B and Port C (lower 4 bits) are used as output ports. Derive the control word for this to use 8255 in mode 1. Discuss the control word format in detail.	[10]

Total Marks

[50]