Reg.No: ☐☐☐☐☐☐☐☐

SNS College of Technology, Coimbatore-35.
(An Autonomous Institution)
B.E/B.Tech- Internal Assessment -I
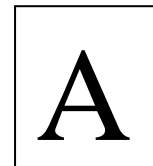**Academic Year 2023-2024(Even Semester)**
Fourth Semester
Electronics & Communication Engineering
19ECB211 – Microcontroller Programming & Interfacing

A

Time: 1¹ᐟ² Hours   Maximum Marks: 50

Answer All Questions

PART - A (5x 2 = 10 Marks)

		CO	Blooms
1.	Compare Microprocessor and Microcontroller	CO1	Ana
2.	List the applications of PIC Microcontroller	CO1	Rem
3.	Why PIC Microcontrollers are mostly used?	CO1	Rem
4.	What is Wreg register?	CO2	Rem
5.	How many bits in TRIS Register-Justify	CO2	Rem

PART – B (2*13=26 Marks) (1*14=14 Marks)

				CO	Blooms
6.	(a)	Draw and explain the pin diagram of 16F877A and its configuration	13	CO1	Rem
		(or)			
	(b)	Examine the evolution of microcontrollers and Embedded processors.	13	CO1	Ana
7.	(a)	Categorize about the TRIS registers in PIC16F8XX family.	13	CO2	Ana
		(or)			
	(b)	Analyze the counters and its usage in PIC16F877A	13	CO2	Ana

8.	(a)	How does the PIC 16F877A microcontroller function and what are its key features? Additionally, could you provide a detailed diagram illustrating the interface between the PIC 16F877A and an LCD display?	14	CO1	Ana
		(or)			
	(b)	Can you elaborate on the technique for implementing instruction-level parallelism within a single processor?	14	CO2	App

Abbreviations:

CO – Course Outcomes; Rem- Remembering; Und – Understanding; App – Applying; Ana – Analyzing;