SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
Coimbatore – 641 035.

B

B.E / B.Tech – Internal Assessment Exam- III
Academic Year 2022-2023 (ODD)
FIRST SEMESTER (REGULATION R2019)

19CST101- PROGRAMMING FOR PROBLEM SOLVING

Time: 1^{1/2} Hours **Maximum Marks: 50**

Answer All Questions

PART A — (5 x 2 = 10 Marks)		
1.	Define function. Differentiate between calling function and	CO4	REM
2.	Build a working code for the implementation of recursive function	CO4	CRE
3.	Illustrate Pointers and justify why pointer is a more efficient datatype.	CO4	UND
4.	Define structure and How a structure element can be accessed.	CO5	REM
5.	Differentiate Structure and Union.	CO5	ANA

PART B — (2 x 13 = 26 Marks & 1 x 14 = 14 Marks)

6.	(a)	Illustrate and explain about the various Category Of Functions with example codes.	CO4	UND	13
		(OR)			
	(b)	Construct a code for calculating the Factorial of a number using recursive function.	CO4	APP	13
7.	(a)	Appraise and Explain any four arithmetic operations on pointer with example for each.	CO4	EVA	13
		(OR)			
	(b)	Generate a C Code to Swap 2 numbers entered by the user using call by reference and call by value	CO4	CRE	13
8.	(a)	A college conducts a semester exam and there are 6 subjects in that semester. Get all the required details of student and display the progress card with percentage of marks obtained in semester using Structures.	CO5	APP	14
		(OR)			
	(b)	Elaborate Union. Explain Union in detail with suitable program.	CO5	CRE	14