Reg.No: [ ][ ][ ][ ][ ][ ][ ][ ]

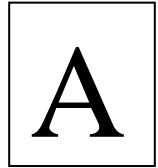# SNS College of Technology, Coimbatore-35.
(Autonomous)
B.E/B.Tech- Internal Assessment -II
Academic Year 2023-2024(EVEN)
Second Semester (Regulation R2023)
COMPUTER SCIENCE AND ENGINEERING
23ITT101 – PROGRAMMING IN C AND DATA STRUCTURES

A

Time: 1$^{1/2}$ Hours   **Maximum Marks: 50**
Answer All Questions

PART A — (5 x 2 = 10 Marks)

1.	List out the four types of function declaration.	CO2	REM
2.	Distinguish between Call by value and call by reference	CO2	ANA
3.	Write the logic for performing sorting of numbers in ascending order.	CO3	APP
4.	What is Pointer? How a variable is declared to the pointer?	CO3	UND
5.	What do you mean by non-linear data structure? Give example	CO3	REM

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

6. (a)	Define function and Write a C program for arithmetic operations by using with argument with return type method and without argument, without return type method	CO2	APP	13
	(OR)			
(b)	Explain different classification of user defined functions based on parameter passing and return type with examples	CO2	UND	13
7. (a)	Illustrate one dimensional array and its characteristics and Construct a C program to calculate the Sum of array elements.	CO3	UND	13
	(OR)			
(b)	Write a C program to perform matrix addition for the matrix size 3 X 3.	CO3	APP	13
8. (a)	Construct the c program for swapping 2 numbers with temporary variable using call by value method with sample output	CO2	APP	14
	(OR)			
(b)	What is purpose of the 'Structure' in language C? Explain in detail with an example program.	CO3	APP	14

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(Note: Und-Understand   Rem-Remember   Ana-Analyze   App-Apply)