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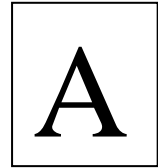
SNS College of Technology, Coimbatore-35.
(Autonomous)
B.E/B.Tech- Internal Assessment -III
Academic Year 2023-2024 (ODD)
First Semester

A

23CST101 – PROBLEM SOLVING AND C PROGRAMMING
[Common to CSE, IT, AIML]

Time: 1¹ᐟ² Hours   Maximum Marks: 50

Answer All Questions

PART-A (5 x 2 = 10 Marks)

		CO	BLOOMS
1.	Distinguish between Call by value and call by reference	CO4	Ana
2.	Outline the use of Recursive function	CO4	Und
3.	Write a program in C to add two numbers using pointers.	CO4	App
4.	Write a simple program demonstrating union	CO5	App
5.	Define file. List few file handling functions.	CO5	Und

PART–B (13+13+14= 40 Marks)

6.	(a)(i)	Write C Programs to find the sum of elements in a given array using pointer and array concept	7	CO4	App
	(ii)	Construct the c program for swapping 2 numbers using Call by Reference.	6	CO4	App

(or)

	(b)	Define function and explain the 4 categories of function with example program	13	CO4	App

7.	(a)	Explain in detail about Preprocessor directives with an example.	13	CO5	Rem

(or)

(b)	(i) Write a C Program to read file contents and display on console, get the contents to be written in file from console and write in the file		7	CO5	App
	(ii) Write a C Program to append the content to a file		6	CO5	App

8.	(a)	A College wants to create a Student Database by defining a Structure called Student and get the details of a student as student_regno, student_name, student_dept. Create another structure called date_of_birth with details as date, month, year. Develop a C program to display all the above Student Details using the concept Structure within Structure.	14	CO5	App

(or)

(b)	(i) Write a program to compute the factorial of a given number using recursive functions.		7	CO4	App
	(ii)Write a program to compute the sum of digits in a given number using function with argument and with return value		7	CO4	App

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

Staff Incharge   **Teaching Coordinator**   **HOD**