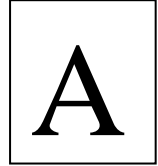




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SNS College of Technology, Coimbatore-35.
(Autonomous)
B.E/B.Tech- Internal Assessment -III
Academic Year 2022-2023 (ODD)
First Semester



19CST101 – PROGRAMMING FOR PROBLEM SOLVING
[Common to CSE, IT, ECE, EEE, E&I, BME]

Time: 1^{1/2} Hours

Maximum Marks: 50

Answer All Questions

PART-A (5 x 2 = 10 Marks)

	CO	BLOOMS
1. Identify the usage of user defined function.	CO4	Ana
2. Outline the use of Recursive function?	CO4	Und
3. What is Pointer? How an address variable is declared to the pointer?	CO4	App
4. Justify the use of #DEFINE	CO5	Und
5. Define Union with syntax.	CO5	Und

PART-B (13+13+14= 40 Marks)

6. (a)(i) Compute the factorial of a number using recursion.	5	CO4	App
(ii) Construct the c program for swap 2 numbers using Call by Value and Call by Reference.	8	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) Distinguish Structure and Union? Write an Example program for the Concept of Union. 13 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) Mrs. Anitha , our favourite Maths teacher instructed to implement a menu driven calculator to work with integers using C. Use the functions mentioned in the problem specification. check in submit code tab. 14 CO4 App
- The choice of operations are as follows:
- 1 – addition
 - 2 – subtraction
 - 3 – multiplication
 - 4 – division
 - 5 – modulus
 - 6 – average
 - 7 – power

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