

Reg.No:

--	--	--	--	--	--	--	--



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
Coimbatore – 641 035.



B.E / B.Tech – Internal Assessment Exam- I

Academic Year 2023-2024 (ODD)

FIRST SEMESTER (REGULATION R2023)

23CST101- PROBLEM SOLVING AND C PROGRAMMING

Time: 1^{1/2} Hours

Maximum Marks: 50

Answer All Questions

PART A — (5 x 2 = 10 Marks)

- | | | | |
|----|---|-----|-----|
| 1. | Define Computer Software and list the types of software with an example | CO1 | REM |
| 2. | Draw the flow chart for swapping two numbers without 3 rd variable | CO1 | APP |
| 3. | Figure out the pseudo code for checking whether the given number is even or odd | CO1 | APP |
| 4. | List out fundamental rules for an identifier. | CO2 | UND |
| 5. | Give the difference between structure and union | CO2 | REM |

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

- | | | | | |
|--------|---|-----|-----|---|
| 6. (a) | i) Explain in detail about Algorithmic problem solving with neat diagram | CO1 | UND | 8 |
| | ii) Develop the flowchart for checking whether the given year is leap year or not | CO1 | APP | 4 |

(OR)

- | | | | | |
|--------|--|-----|-----|----|
| (b) | Draw flow chart along with the pseudo code to compute | CO1 | APP | 7 |
| | i) Greatest of three numbers | CO1 | APP | 8 |
| | ii) Factorial of the given number | | | |
| 7. (a) | (i) Enumerate the Structure of C programming with a Sample C program. | CO2 | REM | 10 |
| | (ii) Identify the possible errors that occurs during executing a C program | CO2 | UND | 3 |

(OR)

(b) Define Data type. Interpret about Derived and User-Defined Data type. Write the significance of each data type.	CO2	UND	13
8. (a) Give the algorithm (Normal English), Flowchart and Pseudo code to Reverse the given number	CO1	APP	14
(OR)			
(b) Ravi buys an old scooter for Rs. A and spends Rs. B on its repairs. If he sells the scooter for Rs. C, what is his gain %? Write an algorithm and Pseudo code to compute the gain % received by Ravi	CO2	APP	14