BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - I Computer Science & Engineering AI & ML : SUMMER : 2025
SUBJECT: PROGRAMMING & PROBLEM SOLVING

Day : Monday
Date : 19/05/2025

S-23927-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

1) All questions are **COMPULSORY.**
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Draw neat diagrams **WHEREVER** necessary.

Q.1 What do you mean by TOP-DOWN approach of problem solving? **(10)**

OR

Q.1 What do you mean by DECISON MAKING BOX used in Flow chart? Give 02 examples, where such symbols are used. **(10)**

Q.2 We have nested looping concept used in programming language. Give syntax to use nested for - loop and give one suitable example for nesting of loop. **(10)**

OR

Q.2 What are the various LOGICAL Operations in C Programming language? **(10)**

Q.3 Write a C program to input a name of 05 students in 2-D array. Use suitable type of array and looping construct. **(10)**

OR

Q.3 Write a program to ADD two integer arrays named as "A1" and "A2" of length "n" and store summation into A1 itself. **(10)**

Q.4 State benefits of function based program development. Write a program to find out factorial of "n" using user defined functions. **(10)**

OR

Q.4 Explain the following concepts used in functions. Give examples for both. Call by Value, Call by Reference. **(10)**

Q.5 A program development using POINTERS gives what kind of benefits? **(10)**

OR

Q.5 Write a C program to find AVERAGE of 10 integers numbers stored into arrays using pointers. Explain each instruction using comments. **(10)**

Q.6 What do mean by COMMAND LINE ARGUMENTS? How is it beneficial? **(10)**

OR

Q.6 Give a simple C program to create a file using fopen ( ) function in W mode and if it's is created print "File Created Successfully" otherwise print "File is not Opened". **(10)**

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