

BACHELOR OF TECHNOLOGY (CBCS - 2023)
B. Tech. Sem-I Computer Science & Engineering : WINTER : 2024
SUBJECT: PROGRAMMING & PROBLEM SOLVING

Day : Thursday
Date : 12/12/2024

W-27611-2024

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.

- Q.1 Explain algorithm, flowchart and pseudocode. Also write example for finding the biggest among 3 numbers. (10)
- OR**
- Q.1 Explain the basic structure of 'C' program and explain the significance of each section. (10)
- Q.2 Write a menu driven program in 'C' using switch statement to perform arithmetic operations on two numbers entered by user. (10)
- OR**
- Q.2 Describe all Looping statement used in 'C' with syntax and example. (10)
- Q.3 What is array? Explain the declaration and initialization of one dimensional array with an example. (10)
- OR**
- Q.3 Explain about the following string handling functions with example programs. (10)
i) strlen ii) strcpy iii) strcmp iv) strcat
- Q.4 Explain the various categories of user defined functions in C with examples? (10)
- OR**
- Q.4 Define Recursion. Write a program to find factorial of a number using Recursion. (10)
- Q.5 What is pointer in c programming? What are its benefits? (10)
- OR**
- Q.5 Explain the process of declaring and initializing pointers. Give an example. (10)
- Q.6 Define file and explain about the types of files with examples. (10)
- OR**
- Q.6 Explain different modes of opening files with syntax and example? (10)
