

# **Subject: C Programming**

Total Marks: 80

Instructions: Answer all 16 questions. Each question carries 5 marks.

1. Explain the structure of a C program with an example.
2. What are data types in C? Explain with examples.
3. Describe various operators used in C.
4. Write a program to check whether a number is even or odd.
5. Explain the use of if, else if, and else statements with syntax.
6. What are loops? Explain for, while, and do-while loops.
7. Write a program to find the factorial of a number using a loop.
8. What is an array? Write a program to input and display an array.
9. Explain the concept of strings in C with example functions.
10. Define functions in C. Explain call by value and call by reference.
11. Write a program to swap two numbers using a function.
12. What is recursion? Give an example in C.
13. Explain structure and union with syntax and example.
14. Describe pointers in C. How are they declared and used?
15. Write a program to demonstrate the use of pointers with arrays.
16. Explain file handling in C with an example of writing to a file.