



Max. Marks: 80

Time : 3 Hrs

N.B:

1. Question No.1 is compulsory
2. Answer any three out of remaining five questions

- Q. 1 a. Define algorithm. Write algorithm to calculate Fibonacci series. 04
- b. Explain conditional operator with example. 04
- c. Differentiate between structure and union. 04
- d. Explain strcmp, strcat functions from string.h 04
- e. Compare if-else ladder and switch control structure. 04
- Q. 2 a. Write a program to sort elements of array in descending order. 10
- b. Explain parameter passing with the help of call by value and call by reference. Give example. 10
- Q. 3 a. Explain in detail the concept of structured programming. Define flowchart. Draw flowchart to check given number is prime number or not. 08
- b. Write a program to calculate GCD and LCM of given number. 07
- c. Explain concept of recursion with example. 05
- Q. 4 a. Write a program to count vowels, consonants and blank spaces in a given string. 08
- b. Explain all bitwise operators in C. 06
- c. Write a program to print following pattern. 06
- ```

 A
 A B
 A B C
 A B C D

```
- Q. 5 a. Explain different storage classes in C. 10
- b. Write a program to create a user defined functions to read matrix, to perform matrix multiplication and to display result matrix. 10
- Q. 6 a. Explain structures in C. Write a program to create structure for cricket player to store his name, number of matches played, number of runs, strike rate. Write a program to store records of 10 cricketers. Display the records according to their runs in ascending order. 10
- b. Explain different file handling functions in C. 05
- c. Write a program to reverse a given string. 05

\*\*\*\*\*