1. a) Explain the components of digital computer with a block diagram.
    b) Write an algorithm for finding the sum of all digits in a given number.
    OR
    c) Explain the symbols used in drawing flowchart with diagram.
    d) Write an algorithm for printing first ‘n’ numbers in a Fibonacci series.

2. a) What are the preprocessor commands used in ‘C’ language?
    b) List the different data types used in C.
    OR
    c) Write short notes on:
       i) variables     ii) symbolic constant
       iii) identifiers iv) keywords
    d) Write a program to demonstrate the different input / output statements.

3. a) Write a program to find the maximum of 3 numbers using only conditional operator.
    b) Write a program to print the prime numbers in a Fibonacci series up to ‘n’.
    OR
    c) Write a program to print multiplication table.
    d) Explain Bitwise operator with example.

4. a) Write a program to find the maximum element in an array using a function.
    b) Write notes on various storage classes.
    OR
    c) Define recursion, write a recursive program to find the GCD of two numbers.
    d) Write a C program for matrix multiplication using function.

5. a) Write a program to find the student who gets maximum marks in class using a structure definition for the students.
    b) Write a C program to find the number of characters, lines and words in a text file.
    OR
    c) Differentiate structure and union.
    d) Differentiate between call-by-value and call by reference with suitable example.

*****