Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and well labelled diagram as and when necessary.
3. Avoid vague answers and write specific answers related to questions.
1.

Either
a) What is problem analysis? Explain.
b) Explain logical operator with suitable example.

## OR

c) State the difference between interpreter and compiler.
d) Describe input and output statement in C.
2. Either
a) What is Ternary operator? Explain it with suitable example.
b) Write a program to check the given number is prime or not.

## OR

c) Explain the following:
i) Nested if
ii) Ladder if
d) Write a program for Fibonacci Series : $\begin{array}{llllll}1 & 1 & 2 & 3 & 5\end{array}$.
3. Either
a) What is Array? Explain different types of array with example.
b) Write a program to sort the elements of array using bubble sort.

## OR

c) What is string? Explain at least four string manipulation functions with example.
d) Write a program to swap the value of variables using call by value and call by reference.
4. Either
a) Explain the concept of pointer in detail.
b) Explain the concept of file. Describe various operations performed on file.

## OR

c) Explain the following:

1) Call by value
2) Call by reference
d) Write a program to entre ' $n$ ' numbers in a file. After entering read the number in reverse order.
5. Solve all the questions.
a) Explain different flowchart symbol. With their use. 4
b) Differentiate between while and do-while loop. 4
c) State the difference between structure and union. 4
d) Explain the use of void. 4
