



- Notes : 1. All questions are compulsory and carry equal marks.
2. Use either ANSI or TURBOC for programming.

1. EITHER

- a) What is an array? **1+4**
Explain Declaration and initialization of one dimensional array. **+5**
Write a C – program to store marks of 10 students in an array and find their sum. Marks are inputted through keyboard.

OR

- b) What is C function? **1+3**
Explain syntax for C function declaration. **+6**
Write a program with multiple functions that do not communicate data between them.

2. EITEHR

- a) What is a pointer variable? **1+5**
Explain general form of declaring a pointer variable. **+4**
Write a C program using pointers to determine the length of a character string.

OR

- b) How does structure differ from an array? **2+4**
Explain the syntax for defining the structure and structure variables. **+4**
Write a C program using structure to accept record of an employee containing name, age and salary and display the same as output.

3. EITHER

- a) What is a data file? **2+4**
Mention the functions used for opening and closing a file. Give their syntax. **+4**
Write a program to enter 10 integer values in a file "Sample.dat" and display the contents of the file on the screen.

OR

- b) Explain the following functions, **3+3**
i) ftell, and **+4**
ii) fseek.
Write a C program that uses the functions ftell and fseek.

4. EITHER

- a) What is symbolic constant? **3+7**
How are symbolic constants created in C++? Explain.

OR

- b) Explain the followings with respect to C++ programming:
- i) Manipulators, and
 - ii) Operators overloading.

5+5

5. a) State the output of the program given below:

**2½
x4**

```
# include <stdio.h>
void check ( )
main ( )
{
    check ( ) ;
    check ( ) ;
    check ( ) ;
}
void check ( )
{
    static int C = 0 ;
    printf ("%d\t", C);
    C+=5;
}
```

- b) What is union? Explain its need.
- c) What is command line argument? Explain
- d) How variables are declared in C++? Explain.
