

G. H. Raisoni College of Engineering and Management,
Waghuli Pune

F.Y.B.TECH

CAG-I

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Department - IT

Term/Section - WINTER TER- 2020 / C.

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Subject Name/Code - COMPUTER PROGRAMMING (UCOL101)

Roll No - C70

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Co Que:

CO2 1) Explain features of C programming language

Answer: C is an Mid-level programming language. It is most basic language. It is also portable language. There are 32 keyword in ANSI C and also has many built in function.

C is structured based. It means that the issues or complex problems are divided into smaller blocks or functions. The use of algorithm and data structures in C has made program computation very fast and smooth.

C also provides dynamic memory allocation. It is also case sensitive.

Debugging, testing and maintenance is easy.

It also fast due to its various data types and functions.

Q1 2.) Write short note on data type in C.

Answer: The data type present in C allows the programmer to use a particular type of data for the execution of particular function or program.

ANSI C has four classes of data type:

1. Primary data type
Ex: int, char etc.
2. User-defined data type
Ex: main
3. Derived data type
Ex: Array, functions
4. Empty data set.

PRIMARY DATA TYPES

INTEGRAL TYPE

INTEGRAL TYPE	RANGE	SIZE (bytes)
INTEGER & CHARACTER		

- | | | |
|----------------------------------|---------------------------|---|
| 1. int or signed int | -32769 to 32767 | 2 |
| 2. Unsigned int | 0 to 65535 | 2 |
| 3. short int or signed short int | -128 to 127 | 1 |
| 4. Long int | -2147483648 to 2147483647 | 4 |

float	$3.4E-38$ to $3.4E38$	4
Double	$1.7E--$	8
long double	$3.4E--$	10

Character Data Type: It is usually stored in 8 bits = 1 byte.
 Void Data Type: It has no value.

Q02. 3.) What is meant by algorithm? Explain its properties

Answer: Algorithm is a step-by-step procedure, which defines a set of instructions to be executed.

The characteristics and properties of an algorithm are:

1. Precision - The steps are precisely stated
2. Uniqueness - Result of each step should be unique.
3. Finiteness
4. Input - It must take input.

Q01 4.) Write short note on Flowchart.

Answer: A flowchart is a graphical representation of the problem solving process which is solved by using algorithm and various geometrical shapes.

It gives us step-by-step procedure for solution of a problem.

Various shapes and arrows are used to make a meaningful flowchart. The arrows show the flow of a solution.

It is also used to specify the method of solving a problem. To plan the sequence of a program.

CO2 5. Write a C program to perform addition of two numbers.

Answer:

```
#include <stdio.h>
int main()
{
    int n1, n2, add;
    printf("Enter the first number: ");
    scanf("%d", &n1);

    printf("Enter the second number: ");
    scanf("%d", &n2);

    add = n1 + n2; // calculating addition.

    printf("%d + %d = %d", n1, n2, add);
    return 0;
}
```