

Dear Students!!

In this e-book of [11th class](#), study material of computer science is being sent to you as per new syllabus (2021-22). You can easily prepare your test / papers by reading the contents in this file. Following are the links of the video lectures (for HTML and C Language) for various practical topics of your syllabus for better understanding of various concepts.



11th Class - Monthly distribution of Computer Science Syllabus & Video Lecture Links (Pbi)

How to do HTML Practical on Mobile?

<https://youtu.be/PYFuKCwdIOY>

HTML Part-1

<https://youtu.be/DcYz0QX9CVs>

HTML Part-2

<https://youtu.be/qLlzLKrbhIA>

Programs, Programming & Programming Languages

https://youtu.be/CKwC8oeOw_o

Introduction to C Language: Part-1

<https://youtu.be/G9ZaHvTd5sU>

Introduction to C Language: Part-2

<https://youtu.be/8NXsnDCr1ho>

Introduction to C Language: Part-3

<https://youtu.be/aU06gTkp82k>

Operators and Expressions in C

https://youtu.be/PGv1_8Q5fh8

Control Statements in C - Branching

<https://youtu.be/xi-38dRt3mY>

Control Statements in C – Looping & Jumping

<https://youtu.be/NlkDGA-rAjE>

C Language – Practical Video Lectures

C Language Practical -1

<https://youtu.be/8hg3BJAyBqE>

C Language Practical -2

https://youtu.be/v_lw8wmfIP4

C Language Practical -3

<https://youtu.be/RBq--darc0I>

Following is the Link of Playlist for detailed Lectures on C Programming

<https://youtube.com/playlist?list=PLja3EaJFAjmYjeAcDs0ZQdVmx7liCtg5P>

PLEASE DO NOT FORGET TO LIKE, SHARE AND SUBSCRIBE OUR YOUTUBE CHANNEL

 **YouTube** <http://youtube.com/c/computersciencepunjab>

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Please use the following link to download the study material/e-books/e-contents for 6th to 12th classes:

<http://cspunjab.nirmancampus.co.in/study.php>

Que1: Multiple Choice Questions

1. The symbols which are used to perform some specific type of operation on data are called?

- a. Operands **b. Operators** c. Expressions d. Formulas

2. Which operator acts only on one operand?

- a. Unary** b. Binary c. Ternary d. Conditional

3. Which of the following is not a Logical Operator?

- a. And (&&) b. OR (||) **c. Equality (==)** d. NOT (!)

4. Which symbol is used for Ternary Operator?

- a. : ? b. ; ? **c. ? :** d. ? ;

5. Which of the following cannot be considered as assignment operator?

- a. = **b. ==** c. += d. %=

Que:2 Fill in the Blanks:

- _____ are the data items on which operators can perform operations.
- Unary operator acts on only _____ operand.
- _____ arithmetic operator performs only on integer operands.
- When value of one type is converted into some other type, it is called _____.
- Ternary operator is also known as _____.

- Ans:** 1. **Operands** 2. **One** 3. **Modulus (%)**
 4. **Type Conversion** 5. **Conditional**

Que:3 Write True or False

- Increment Operator causes its operand to be increased by one.
- Relational operators are used to test the relationship between two variables.
- Arithmetic Operators used in C programming are six.
- sizeof() operator returns the size of its operand, in bytes.
- Type conversion is of two types.
- There are 6 relational operators in C Language.

- Ans:** 1. **True** 2. **True** 3. **False** 4. **True** 5. **True** 6. **True**

Que:4 Short Answer Type Questions.**Q1: Define Expression?**

Ans: Expression is like a formula in mathematics. An expression can be any valid combination of operators and operands. A valid combination is a combination that confirms the syntax rules of the C language. Expression always returns some value after evaluation. For example: $x = y * z$;

Q2: What is Operand?

Ans: Operands are data items on which operators can work. These operands can be variables or constant values. For example:

$$a + 5 * 10$$

In this example, operators + and * are doing their work on variable 'a', constant values 5 and 10. Here, 'a', 5 and 10 are the operands.

Q3: What is Unary operator?

Ans: Operators that require only one operand to perform their operations are called Unary Operators. For example: ++, --, ! and ~ operators etc. The following example uses increment (++) Unary Operator:

```
int x = 10;
++ x;
```

Here, ++ increment operator is a unary operator that performs its operation at only single operand x. This operator will increase the value of x by one unit and make its value 11.

Q4: Define Conditional operator?

Ans: Conditional operator is also known as Ternary Operator. This operator requires three operands to perform its operation. Symbols ? : are used to represent Conditional/Ternary operator. The syntax for using this operator is as follows:

Exp1? Exp2 : Exp3;

Exp1 should be a conditional expression that always returns a true (1) or false (0) result. If the result of Exp1 is true then Exp2 will perform its function otherwise Exp3 will perform its function.

Q5: What is Type Conversion?

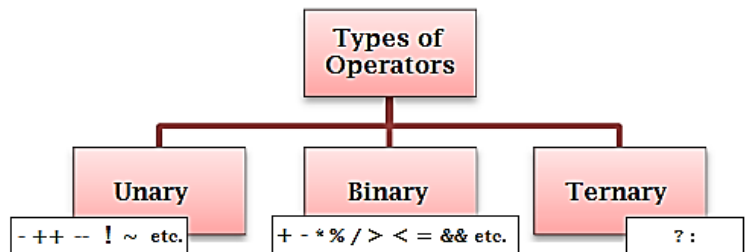
Ans: In C language, the value of an expression can be changed to a specific type of data type as required. When one type of value is converted to another type of value, it is called Type Conversion. In C language, this conversion can be done in two ways:

1. Implicit Conversion
2. Explicit Conversion

Q6: What is an operator? Write the name of different types of operators?

Ans: Operators are the symbols that are used to perform specific operations on data. For example: We use + symbol to perform addition operation, * symbol is used to multiply, > symbol is used to compare etc. In these examples, +, *, > symbols (operators) are used that represents various types of operations. All operators return a value after performing their operation. Operators can be divided into the following three types:

- Unary Operators
- Binary Operators
- Ternary Operators



Q7: Write about increment and decrement operators?

Ans: The increment and decrement operators are the unary operators. The ++ sign is used for the increment operator and the -- sign is used for the decrement operator. The increment operator (++) increases the value of its operand by one while the decrement operator (--) decreases the value of its operand by one. The operand used with these operators must be a variable. They cannot be applied directly to a fixed value.

for example:

```
int x = 10;
++ x;
--x;
```

It will increase the value of x to 11.
It will decrease the value of x (10) to 9.

Que:5 Long Answer Type Questions.

Q:1 Explain the Arithmetic Operators? Write any program using Arithmetic Operators?

Ans: Arithmetic operators are used to perform arithmetic operations, such as: addition, subtraction, multiplication, division, etc. There are 5 arithmetic operators in C language: + (addition), - (subtraction), * (multiplication), / (division), and % (modules). Following program shows the use of arithmetic operators in C language:

<pre>void main() { int a=20, b=3, c, d, e, f, g; c=a+b; d=a-b; e=a*b; f=a/b; g=a%b; printf("%d \n%d \n%d \n%d \n%d", c, d, e, f, g); }</pre>	
--	--

Q:2 What are Relational operators? Write a program for Relational operator?

Ans: Relational operators are also called Comparison Operators. These operators are used to compare values. After comparing the values, these operators return either true (1) or false (0) value. There are 6 relational operators in C language: == (Equals to), != (Not Equal to), > (Greater than), < (Less than), >= (Greater than or equal to) and <= (Less than or equal to). All these are Binary operators. Following Program shows the use of relational operators in C:

```
#include<stdio.h>
void main()
{
    int a, b, result1,result2;
    a=20;
    b=15;
    result1=a<b;
    printf("result1=%d",result1);
    result2=a>b;
    printf("\nresult2=%d",result2);
}
```

Output

