Assignment 02

Introduction to Programming Fundamentals

Deadline 15th May 2025

_____

Q.No 1) What is the Order of Precedence of Operators? Explain the Order of Precedence of Arithmetic Operators.

Q.No 2) Distinguish between Overflow and Underflow.

Q.No 3) What is meant by type casting?

Q. No 4) Differentaite between Cin object and getline function.

Q.No 5) Determine the result of the expressions;

> *i)* `6 + (12 / 6) * 2 - 1`
> `ii) (6 + 12) / 6 * 2 - 1`

Q,No 6) Determine the value of the statement.

> *i)* `int a = 27, b = 6, c; c = b % a;`
>
> *ii)* `int a;`
> `float b = 6, c = 18.6;`
> `a = c / b;`

Q,No 7) Hand trace the program.

```
#include <iostream>
using namespace std;
int main()
{
int t, vi, a;
double s;
    t = 50;
vi = 10;
    a = 5;
    s = vi * t + 0.5 * a * t * t;
cout<< "The distance covered is: " << s;
return 0;
}
```

Q.No 8) What are relational operators used in C++?

Q.No 9) Explain if-else statement.

Q.No. 10) Explain Nested if-else statement.

Q.No 11) Encircle the correct option.

> i)   if you have to make decision based on multiple choices, which of the following is best
>
>   suited?
>
>   a) if   b) if-else   c) if-else-if   d) All of the them

ii)   _____ operator is used to compare numbers

a) logical   b) relational   c) arithmetic   d) None of them

iii)   To execute more than one statement as a part of an if statement, it should be enclosed
          in ____

a) ()   b) b) []   c) {}   d) all of them

iv)   _____ statement provides two possible paths of execution

a) If   b) b) if-else   c) c) if-else-if   d) d) Nested if

v)   "&&" is a ___ operator

a) Logical   b) Relational   c) Arithmetic   d) None of them

vi)   _____ statement is used to select among statement from several alternative.

a) if   b) if-else   c) if-else-if   d) switch

vii)   _____ object is used to ready input from keyboard

a) cout   b) cin   c) getline   d) All of them

viii)   _____ occurs when assigning a value that is too large.

a) Overflow   b) underflow   c) Type casting   d) None of them

ix)   _____ is used for manual data type conversion.

a) Overflow   b) Underflow   c) Type casting   d) None of them

x)   Sum = Sum +1 is a example of _____ assignment.

a) Multiple   b) Combined   c) logical   d) All of them