**PF-AI-C**

**Quiz 02-B**

**Name:**  **Roll No.**

**Question 01: Write the correct output of the following code snippets. (5 marks)**

| **1.** | int a = 10; int b = 5;  int c=((a+b)+a/c);  a += b \* 2 - (b / 2) % 3+(((a+b)+b)/c);  b \*= a + 1; a /= b - 5;  cout << "a = " << a <<endl; cout << "b = " << b << endl; | a = 0  b = 100 |
| --- | --- | --- |
| **2.** | int main() { int x = 12; int y = 5; int z = 3;  int result = (x & y) | (z ^ y) << 1; cout << "Result: " << result << endl;  return 0;  } | Result: 12 |

**Question 02: Write a C++ program that:**

1. **Takes two user inputs: an unsigned integer n and an integer p representing a bit position.**
2. **Sets the bit at position p in n to 1 using bitwise operations.**
3. **Outputs the updated value of n.**

**solution:**

**#include <iostream>**

**using namespace std;**

**int main() {**

**unsigned int n;**

**int p; // Input //**

**cout << "Enter an unsigned integer n: ";**

**cin >> n;**

**cout << "Enter the bit position to set p: ";**

**cin >> p;**

**n = n | (1 << p); // Set the bit at position p //**

**cout << "The value of n is: " << n << endl;**

**}**

**(5 Marks)**