**Roll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ AI-A Fall 2024**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ProgrammingFundamentals**

**Section:\_\_\_\_\_\_\_\_\_\_\_\_\_ Quiz 2**

**A**

**Q1: Write output of the following cpp code:**

int main() {

int a = 5;

int b = 3;

int c = 8; Solution : 28 3

int d = 2;

int result;

result = (a + b) \* (c / d) - (a % b) \* d;

b = a \* (b + d) / c - (c % d) \* b;

cout << result << " " << b;

return 0;

}

**Q2: Write output of the following cpp code:**

int main() {

unsigned int a = 1;

cout << (a << 31) << endl;

return 0;

}

Solution : 2147483648

**Q3:**Write a cpp program that swaps two integers, a and b, without using any extra variables, only using bitwise operators.

#include <iostream>

using namespace std;

int main() {

int a, b;

cout << "Enter the first number (a): ";

cin >> a;

cout << "Enter the second number (b): ";

cin >> b;

a = a ^ b;

b = a ^ b;

a = a ^ b;

cout << "After swapping: a = " << a << ", b = " << b << endl;

return 0;

}