



School of Computing
Second CIA Test – June 2021

Course Code: CSE201 – (Semi-Lab)

Course Name: Object Oriented Programming in C++

Duration: 45 minutes

Max Marks: 25

Program #1:

(15 marks)

Create a class called InputData. It has two private data members data_a (int) and data_b (int). Write a function input() to get input for the attributes from the user and a function display() to display the values of the attributes. The values of these two data members can be returned by using two public functions get_a() and get_b().

- Derive a class called Arith_Unit from InputData. It contains the functions add(), sub(), mul(), div() to perform arithmetic operations on data_a and data_b.
- Derive a class Logic_Unit from InputData. It contains the functions and(), or() and xor() to perform bitwise operations on data_a and data_b.

Write a main() to test functionalities of the Arith_unit and Logic_unit classes.

Program #2:

(10 marks)

Create a class called bMoney. It should store money amounts as Rupees(int) and Paise(int). Include input and output member functions getmoney() and putmoney(). Include the following arithmetic operations, performed with overloaded operators:

```
bMoney = bMoney * int
```

```
long double = bMoney / bMoney
```

Write a main() to demonstrate the overloaded operator by creating objects for bMoney.