

Department of CSE, Stamford University Bangladesh
CSI 121: Object Oriented Programming
Midterm Exam

Full Marks: 100

Time: 2 Hours

1. Differentiate between class and structure.

Explain the difference in meaning between the structure

```
struct a {  
    int i, j, k;  
};
```

and the class

```
class a {  
    int i, j, k;  
};
```

Explain why the class declaration is not useful. How can you use the keyword `public` to change the class declaration into a declaration equivalent to `struct a`?

2. What is a constructor? Explain various types of constructors available in C++
3. Define a class and object. Explain about class and object with syntax and give examples for each.
4. Create a class named 'AreaCalculate' that uses overloaded function 'Area' to calculate area of circle, rectangle, square and triangle.
5. Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare an object of class student. Provide facilities to input data in data members and display result of student?