

# Object Oriented Programming

**Out: 19-10-2017**

**Homework # 1**

**Deadline:**

24-09-2017

9:00 am

## Structures in C++

(a) Implement a C++ struct named "**Employee**" with id, name, salary, height and designation as fields of this struct.

(b) Write functions to read in and print an Employee struct:

- void printEmployee(const Employee& c);
- Employee readEmployee();

(c) Write an additional function that passes in an array of Employees and returns the index to a found id.

- int findEmployee(const Employee emp[],int id,int num);

## Classes in C++

### 1. Time

Implement the following class **Time** and write a driver program using its functions:

<b>Time</b>
hr
min
sec
setTime(int,int,int)
printTime
nextTime(int)

### 2. Dice

Using the **Dice** class implement a 'dice roll' game. i.e. you roll two dices and if the sum of their facevalues is greater than 7 you win else you lose.

<b>Dice</b>
facevalue
roll
getFaceValue

## Interaction between objects:

### 1. 3DPoint

Implement the class for 3DPoint and write a driver program for its functions:

3DPoint
<i>think about attributes</i>
setPoint(int,int,int) printPoint getDistance(3DPoint) negate