# Class Test 05(A): CSI 203 – Object Oriented Programming, Fall 2019
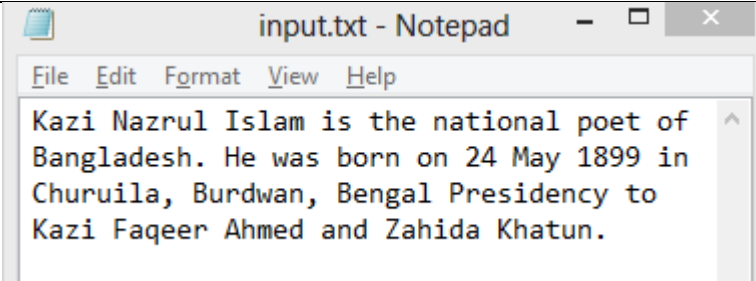## Total Marks: 20, Time: 25 minutes

Name:                                                                    ID:

1. Assume the content of .txt file contains both number and non-number(String). Write a java program to read the content of a file "input.txt", find out only the numbers and write those numbers in console. [14]

| Sample Input | Expected Output for Sample input |
|---|---|
| input.txt - Notepad<br><br>File Edit Format View Help<br><br>Kazi Nazrul Islam is the national poet of Bangladesh. He was born on 24 May 1899 in Churuila, Burdwan, Bengal Presidency to Kazi Faqeer Ahmed and Zahida Khatun. | 24<br>1899 |

2. The object of Box class is not serializable. Update the class below so that we can serialize the object of this class. [6]

```java
public class Box {
    int length, width, height;

    public Box(int length, int width, int height) {
        this.length = length;
        this.width = width;
        this.height = height;
    }

    @Override
    public String toString() {
        return "Box [length=" + length + ", width=" + width + ", height="
                + height + "]";
    };
}
```
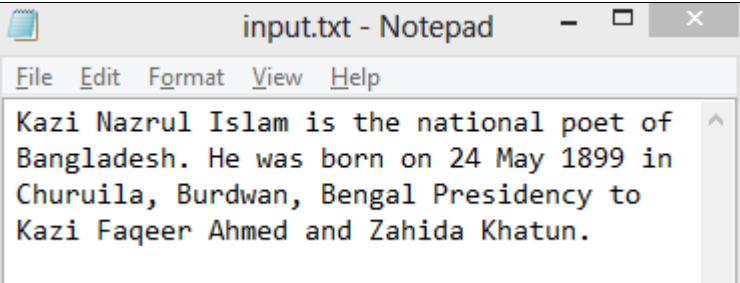
# Class Test 05(B): CSI 203 – Object Oriented Programming, Fall 2019
## Total Marks: 20, Time: 25 minutes

Name:                                                    ID:

1. Write a java program to read the content of a file, find out the words start with vowel and write those words in another file.                                                                    [14]

| Sample Input | Expected Output for Sample input |
|---|---|
|  | Islam is of on in Ahmed and |

2. Observe the classes below. Are objects of both classes serializable? Explain your answer.     [6]

```java
import java.io.Serializable;

public class Patient extends Person{
        String docName;
        public Patient(String name, int age, String dName) {
                super(name, age);
                dName = docName;
        }

        public void goForCheckUp(){
        String info = String.format("%s is visiting %s for check-up", docName);
        System.out.println(info);
        }
}

class Person implements Serializable{
        String name;
        int age;
        public Person(String name, int age) {
                this.name = name;
                this.age = age;
        }

        public void eat() {
                System.out.println("Human is omnivorous.");
        }
}
```