

**Class Test 03(A): CSI 203 – Object Oriented Programming, Fall 2019**  
**Total Marks: 20, Time: 30 minutes**

Name: \_\_\_\_\_

ID: \_\_\_\_\_

1. What would be the output of the code below?

[6]

```
public class Monkey {
    String breed;
    float weight, height;
    static String animalClass = "Vertebrates";

    public Monkey(String breed, float weight, float height) {
        this.breed = breed;
        this.weight = weight;
        this.height = height;
    }

    public void display(){
        System.out.println(breed+":"+weight+":"+height+":"+animalClass);
    }
}

public class TestMonkey {
    public static void main(String[] a){
        Monkey m1 = new Monkey("Pigmy", 0.25f, .42f );
        Monkey m2 = new Monkey("Mandrill", 77.0f, 3.0f );
        m1.display();
        m2.display();
        m1.animalClass = "Mammal";
        funMonkey(m1, m2);
        m1.display();
        m2.display();
    }

    public static void funMonkey(Monkey m1, Monkey m2){
        m1 = m2;
        m1.breed = "Japanese macaque";
    }
}
```

Output:

2. What would be the output of the code below?

[7]

```
public class TestString {

    public static void main(String[] args) {
```

```

        String input = "Object Oriented programming is a programming
        paradigm based on the concept of objects, which can contain data, and code.";
        String[] words = input.split(" "); // Splitting using space
        String temp = "";

        for(int i =0; i<words.length; i++){
            if(words[i].length()<= temp.length()){
                output = output + " " + words[i];
            }
            temp = words[i];
        }

        System.out.println(output);
    }
}

```

Output:

3. Identify the error in the code below and rewrite the fixed code. Do not delete any line.

[7]

Code with error	Fixed code
<pre> -----Student.java ----- package ct2;  public class Student {     String name;     private float cgpa;      public Student(String name, float c) {         this.name = name;         this.cgpa = c;     }      void updateCgpa(float a){         cgpa += a;     }      public void display(){         System.out.println(name + ":" + cgpa);     } }  -----TestStudent.java----- package ct2.secB;  public class TestStudent {     public static void main(String[] args) {         Student st1 = new Student("Asif", 3.0f);         st1.display();         st1.updateCgpa(2.8f);         System.out.println(st1.cgpa);     } } </pre>	

**Class Test 03(B): CSI 203 – Object Oriented Programming, Fall 2019**  
**Total Marks: 20, Time: 30 minutes**

Name: \_\_\_\_\_

ID: \_\_\_\_\_

1. What would be the output of the code below?

[6]

```
public class Monkey {
    String breed;
    float weight, height;
    static String animalClass = "Vertebrates";

    public Monkey(String breed, float weight, float height) {
        this.breed = breed;
        this.weight = weight;
        this.height = height;
    }

    public void display(){
        System.out.println(breed+":"+weight+":"+height+":"+animalClass);
    }
}

public class TestMonkey {
    public static void main(String[] a){
        Monkey m1 = new Monkey("Pigmy", 0.25f, .42f );
        Monkey m2 = new Monkey("Mandrill", 77.0f, 3.0f );
        m1.display();
        m2.display();
        swap(m1,m2);
        m1.display();
        m2.display();
    }

    public static void swap(Monkey m1, Monkey m2){
        Monkey m = m1;
        m1 = m2;
        m2 = m;
        m2.animalClass = "Mammal";
        m1 = new Monkey("Ape", 25.0f, 2.2f);
    }
}
```

Output:

2. Identify the error of the code below and rewrite the fixed code. Do not delete any line. [7]

<u>Code with error</u>	<u>Fixed code</u>
<pre>public class BankAccount {     String name, id;     double balance;     static String bankName = "DBBL";      public BankAccount(String name, String id, double bal) {         this.name = name;         this.id = id;         this.balance = bal;     }      public void display(){          System.out.println(name+":"+id":"+bal ance+":"+bankName);     }      public static void update(){         balance += 100;         display();     } }</pre>	

3. What would be the output of the code below? [7]

<pre>public class TestString {      public static void main(String[] args) {         String input ="Object Oriented programming is a programming paradigm based on the concept of objects, which can contain data, and code.";         String[] words = input.split(" "); // Splitting using space         String output = "";         String temp = "";          for(int i =0; i&lt;words.length; i++){              if(words[i].length()&gt;= temp.length()){                 output = output +" "+ words[i];             }              temp = words[i];         }         System.out.println(output);     } }</pre>
Output: