

CT4: CSE 203 - Object-Oriented Programming I: Java (Sec D)**Time: 25 min****Mark: 20****Name:****ID:**

- 1) Identify the errors in the code below and fix the errors. You are not allowed to delete any line of code. You can only add new line or edit existing line [8]

```
package ct5.secD;

public class TestAnimal {
    public static void main(String[] args) {
        Animal tiger = new Animal("Tiger") {
            boolean canSwim = true;

            @Override
            public void makeSound() {
                System.out.println("Roar");
            }

            public void hunt(String prey) {
                System.out.printf("%s like to hunt %s\n", name, prey);
            }
        }

        tiger.makeSound();
        tiger.hunt("Deer");
        System.out.println(tiger.canSwim);
    }
}

abstract class Animal{
    String name, color;
    float weight;

    public Animal(String name) {
        this.name = name;
    }

    public abstract void makeSound();

    public String toString() {
        return String.format("%s-%s-%.1f", name, color, weight);
    }
}
```

- 2) Create a multi-threaded application extending the Thread class. The application will run 3 threads where each thread will print the summation of first 10 even numbers. Note: Do not use hardcoded 10 numbers, rather use logic to identify the even numbers. [12]

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- 1) Complete the code below as per the comment in the code.

[8]

```
package ct5.secD;

public class CT5_OuterClass {
    String ctName;
    int mark = 20;

    public void display() {
        System.out.println(ctName);
        System.out.println(mark);
    }

    class QuizInner{
        int markInner = 10;

        public void printDetails() {
            display();
            System.out.println(markInner);
        }
    }
}

class TestNestedClass{
    public static void main(String[] args) {
        // Create the object of the QuizInner class in proper way
        // and assign to a variable name "inner"

        //Call the printDetails() method using the "inner" variable.
    }
}
```

- 2) Create a multi-threaded application implementing the Runnable interface. The application should run 3 threads where each thread will print 10 random numbers between 0 to 99. [12]