

CT4: CSE 203 - Object-Oriented Programming I: Java

Time: 25 min

Mark: 20

Name:

ID:

Sec:

- Q1. Which of the following is a valid header for user-defined exception? Mark all that apply. [2]
- a) class **MyException** implements **Exception**
 - b) class **MyException** extends **Exception**
 - c) public class **MyException** extends **ArithmeticException**
 - d) public class **MyException** implements **Throwable**
- Q2. Write one line code to throw an **IOException** with message set to "Invalid Source". [2]
- Q3. Notice the following code is showing an error at line#11. What will be the fix for this error? Write the fixed code (Note: You do not need to write the complete code, only the changes required to make the code free of any compile-time error.) [6]

```
1 package ct4;
2 public class TestException {
3     public static void main(String[] args) {
4         validData(10);
5     }
6
7     public static void validData(int data) {
8         if(data>0 && data<100)
9             System.out.println(data);
10        else
11            throw new Exception("Should be between 0 and than 100");
12    }
13 }
```

- Q4. Will the following code execute successfully? If does, what will be the output? If not, why? Justify your answer. [10]

Code of CT class	Code of TestClass
<pre>1 package ct4; 2 3 public class CT{ 4 String name; 5 int score; 6 7 public CT(String name) { 8 this.name = name; 9 } 10 11 public void giveMark(int mark) { 12 score += mark; 13 } 14 15 public int getMark() { 16 return score; 17 } 18 19 public void display() { 20 System.out.println(name + ":" + score); 21 } 22 }</pre>	<pre>1 package ct4; 2 public class TestClass { 3 public static void main(String[] args) { 4 CT ct4 = new CT("CT4") { 5 int quesCount = 0; 6 7 @Override 8 public void giveMark(int mark) { 9 quesCount++; 10 score += mark; 11 } 12 13 public void display() { 14 super.display(); 15 System.out.println(":" + quesCount); 16 } 17 }; 18 19 ct4.giveMark(5); 20 ct4.giveMark(5); 21 System.out.println(ct4.score + ":" + ct4.quesCount); 22 ct4.display(); 23 } 24 }</pre>