



United International University

Department of Computer Science & Engineering (CSE)

CT-2, Summer-2022, Section-A

Course Code: CSE 1115, Course Title: Object Oriented Programming

Time: 40 Minutes

Q.1.	<pre> class Rectangle { private int length; private int breadth; public Rectangle (int l, int b) { length = l; breadth = b; } public int getArea () { return length * breadth; } } </pre>	<ol style="list-style-type: none"> Create a main class named Test and create an Array of three objects of the given Rectangle class. Initialize the objects with values of (2,4), (4,5), and (7,8) for 1st, 2nd, and 3rd objects respectively. Using a loop, call the getArea() methods with three objects. 	[4]
Q.2.	<pre> classDiagram class Vehicle { +myBrand +myModel +toString() } class Bicycle { +myGearCount } class Skateboard { +myBoardLength } Vehicle < -- Bicycle Vehicle < -- Skateboard </pre>	<p>The Vehicle class's instance variables, myBrand, and myModel, and its toString() method are listed in the Vehicle class box in the above figure. You also need to create a 2-parameterized constructor in the Vehicle class which will initialize those instance variables. Similarly, the Bicycle and Skateboard each define their own instance variables: myGearCount and myBoardLength respectively. Create each of these classes where Vehicle is the superclass and Bicycle and Skateboard are subclasses. You need to create a constructor in both of these subclasses which will initialize their parent class variables as well as their own, by using the super keyword.</p>	[4]
Q.3.	<pre> package pkg; class display { int x; void show() { if (x > 1) System.out.print(x + " "); } } </pre>	<pre> package pkg2; class mainpackages { public static void main(String args[]) { display[] arr=new display[3]; for(int i=0;i<3;i++) arr[i]=new display(); arr[0].x = 0; arr[1].x = 1; arr[2].x = 2; for (int i = 0; i < 3; ++i) arr[i].show(); } } </pre> <p>Write necessary codes to correctly run the mainpackages class. What will be the output of the corrected class.</p>	[2]