

### Offline – 03 Set - B

#### Project Name: TestQuadrilateral (main class)

Marks

<p>Class: <b>Quadrilateral</b>  Private Variable: <b>type</b> (String), <b>quadArea</b> (double)  Design the class (getter setter, constructors) as per your requirements.</p>	2
<p>Class: <b>CreateQuadrilateral</b>  Create <u>3 overloaded</u> methods typed <b>generateQuad()</b> whose return type is <b>Quadrilateral</b>.   The methods calculate the quadAreas according to the number of parameters. Then assigns the quadArea and type to the Quadrilateral object and returns it.</p>	
<p><b>generateQuad(double side)</b>  quadArea = <math>side^2</math>  type = Square</p>	3
<p><b>generateQuad(double side, double base)</b>  quadArea = base x side  type = Rectangle</p>	3
<p><b>generateQuad(double side1, double side2, double height)</b>   quadArea= (1/2) x (side1+ side2) *height  type = Trapezium</p>	3
<p>Now create the object of <b>CreateQuadrilateral</b> class and call all the 3 overloaded methods. Then print the <b>types</b> and <b>quadAreas</b> from the objects generated by the methods.  <b>Take user input wherever needed.</b></p>	4

Total: 15

Sample Input	Sample Output
Input 1 value: 4 Input 2 values: 5 7 Input 3 values: 2 3 4	Square Area: 16.0 Rectangle Area: 35.0 Trapezium Area: 10.0