

Q1.

(a) Button – example, Calculate Area

(1 Marks for Component, 1 Mark for Example)

TextField – example, the rectangular box next to the “Input Length of First Side:” label

(1 Marks for Component, 1 Mark for Example)

Label – example, the label “Input Length of First Side:”

(1 Marks for Component, 1 Mark for Example)

(b)

```
/****** Declare the various GUI components/ variables *****/
    static Label firstSideLabel = new Label("Input Length of
First Side: ");
    static Label secondSideLabel = new Label("Input Length of
Second Side: ");
    static Label thirdSideLabel = new Label("Input Length of
Third Side: ");
    static Label areaLabel = new Label("Area of Triangle is:");
    static TextField firstSideValue = new TextField(10);
    static TextField secondSideValue = new TextField(10);
    static TextField thirdSideValue = new TextField(10);
    static TextField areaValue = new TextField(10);
    static Button calculateArea = new Button("Calculate
Area");
    static Button clearButton = new Button("Clear");
```

(1/2 mark for each

declaration and 1/2 mark for each instantiation)

(c)

```
/****** assign the values, input by the user into the textFields,
to the elements of the triangleSides array *****/
triangleSides[0] = Double.parseDouble(side1Text.getText());
triangleSides[1] = Double.parseDouble(side2Text.getText());
triangleSides[2] = Double.parseDouble(side3Text.getText());
```

(2 Marks each)

```
/****** create an instance called myTriangle, of the Triangle
class *****/
TriangleClass myTriangle = new TriangleClass();
```