**TEST PLAN**

1. **SCOPE**
   1. In Scope

Focus on testing all the functions and user interface.

* Main Menu: Function consists of code for the design of the user interface page.
* Sphere: Function which takes parameters for the sphere from the user and computes the area and volume of the Sphere.
* Cone: Function which takes parameters for the cone from the user and computes the area and volume of the Cone.
* Cylinder: Function which takes parameters for the cylinder from the user and computes the area and volume of the Cylinder.
* Cube: Function which takes parameters for the cube from the user and computes the area and volume of the Cube.
* Circle: Function which takes parameters for the circle from the user and computes the area and volume of the Circle.
* Square: Function which takes parameters for the square from the user and computes the area of the Square.
* Rectangle: Function which takes parameters for the rectangle from the user and computes the area of the Rectangle.
* Triangle: Function which takes parameters for the triangle from the user and computes the area of the Triangle.
  1. Out of Scope

Focus on non-functional testing such as stress and performance of the tool.

1. **QUALITY OBJECTIVE**

* The objective is to verify that the tool is working properly under all input conditions.
* For that all the inscope and out of scope functions should be tested based on the test cases.
* Guarantee all operations can work normally in a real business environment.

1. **ASSUMPTIONS**

* Acceptance testing will be conducted only after the completion of Unit, Integration and System testing.

1. **TEST STRATEGY**
   1. Unit Testing

* The individual modules such as functions in the program need to be tested individually.
* Verify that the output from each module matches the expected results.
  1. Integration Testing
* Individual modules are combined and are tested as groups.
* Verify that the modules work properly in groups.
  1. System Testing
* Testing conducted on a complete integrated system.
* Verify the system’s compliance with the specified requirements.
  1. Acceptance Testing
* Testing performed by the end user or the client.
* Verify/accept the tool before moving to the production environment step.
* Final phase of testing after the completion of functional, integration and system testing.

1. **SUSPENSION AND RESUMPTION CRITERIA**

* If testing reports failure in 40% of test cases the testing will be suspended.
* The testing should be resumed only after fixing the test cases.

1. **TEST COMPLETENESS**

* Run rate: 100%, unless a clear reason is given.
* Pass rate: 100%, achieving proposed pass rate is mandatory.

1. **TEST DELIVERABLES**
   1. Before Testing

* Test cases and test plan documents
  1. During the Testing
* Test Data
  1. After Testing
* Test reports
* Defect reports