**Test Plan for Simple Calculator App**

**1. Project Overview**

The **Simple Calculator App** is a mobile application that performs basic arithmetic operations such as addition, subtraction, multiplication, and division. The purpose of this test plan is to verify that all calculator functionalities work correctly and consistently across valid and invalid inputs.

**2. Test Objectives**

* Validate core calculator functionalities (add, subtract, multiply, divide).
* Verify input handling for valid and invalid values.
* Check error handling (e.g., divide by zero).
* Ensure usability and correct UI display of results.

**3. Scope**

**In Scope:**

* Functional Testing: All arithmetic operations.
* Input Validation: Positive numbers, negative numbers, decimal numbers.
* Edge Cases: Large numbers, zero, divide by zero.
* UI Testing: Button responsiveness, display screen updates.

**Out of Scope:**

* Performance/Load Testing.
* Security Testing.
* Cross-platform testing (only Android considered).

**4. Test Strategy**

* **Testing Type:** Manual Functional Testing, UI Testing.
* **Test Design Techniques:**
  + Equivalence Partitioning (valid vs invalid inputs).
  + Boundary Value Analysis (large numbers, decimals, zero).
  + Positive and Negative Scenarios.

**5. Test Environment**

* **Device:** Android 12
* **Application:** Simple Calculator (from Play Store, latest version)
* **Tools:** Excel (for test cases & bug reports)

**6. Test Deliverables**

* Test Plan
* Test Cases (at least 25 test cases)
* Bug Report (if defects are found)
* Test Summary Report

**7. Entry & Exit Criteria**

**Entry Criteria:**

* Calculator app is installed successfully.
* Test environment device is ready.

**Exit Criteria:**

* All planned test cases executed.
* No critical/high severity bugs remain unresolved.
* Test summary report is completed.

**8. Risks & Mitigation**

* **Risk:** App may crash with large inputs.
  + **Mitigation:** Test with multiple input ranges.
* **Risk:** Limited features compared to advanced calculators.
  + **Mitigation:** Focus only on available core functions.

**9. Roles & Responsibilities**

* Create test cases, execute testing, log defects, prepare report.
* Validate test documentation.

**10. Schedule**

* **Test Planning:** 1 day
* **Test Case Design:** 1 day
* **Test Execution:** 1 day
* **Bug Reporting & Summary:** 1 day