**Generating Effective Test Reports for Stakeholders**

A **test report** provides a summary of testing activities, results, and defect trends to stakeholders. It helps in decision-making by presenting the overall quality, risks, and readiness of the software for release.

**1. Purpose of a Test Report**

* Communicate **test execution progress** and results.
* Provide insights into **defects, test coverage, and risks**.
* Help stakeholders make informed **release decisions**.

**2. Types of Test Reports**

1. **Daily Test Execution Report** – Summarizes daily test activities.
2. **Defect Summary Report** – Provides details on reported defects.
3. **Test Summary Report** – Gives an overall assessment at the end of testing.

**3. Key Components of a Test Report**

1. **Test Execution Summary**
   * Total test cases: **Planned vs. Executed**
   * Pass/Fail percentage
   * Pending or blocked test cases
2. **Defect Summary**
   * Number of defects: **Open, Closed, Critical**
   * Severity and priority distribution
   * Defect resolution rate
3. **Test Coverage Analysis**
   * Percentage of requirements tested
   * Modules with the most defects
4. **Risks and Challenges**
   * Unresolved defects
   * Environment issues
   * Delays in execution

**4. Example Test Report Format**

**Test Execution Summary**

| **Test Case ID** | **Description** | **Status** | **Defects Linked** |
| --- | --- | --- | --- |
| TC\_001 | Verify login functionality | Passed | None |
| TC\_002 | Validate incorrect password | Failed | 101 |
| TC\_003 | Check password reset | Blocked | 102 |

**Defect Summary**

| **Defect ID** | **Description** | **Severity** | **Status** | **Assigned To** |
| --- | --- | --- | --- | --- |
| 101 | Login button not working | Critical | Open | Dev Team |
| 102 | Password reset fails | Major | In Progress | Dev Team |

**Test Coverage**

* **Requirements Tested:** 90%
* **Critical Modules Tested:** 85%
* **Defect Density:** 5 defects per 100 test cases

**Risks & Challenges**

* **High-priority defects still open.**
* **Integration test environment unstable.**

**5. Best Practices for Effective Test Reporting**

1. **Keep reports clear and concise** – Use structured tables and summaries.
2. **Include actionable insights** – Highlight risks and recommendations.
3. **Use visuals** – Graphs and charts for defect trends.
4. **Customize for stakeholders** – **Developers** need defect details, **management** needs high-level summaries.

**Conclusion**

A well-structured **test report** helps stakeholders assess the **quality, risks, and readiness** of the software, ensuring informed decisions before release.