Ch-5   Testing Tools

* Manual testing is a testing process that is carried out manually in order to find defects without the usage of automation tools or automation scripting.

* Limitations
  1. Slow and costly
  2. Do no scale well
  3. Not consistent or Repeatable
  4. Difficult to manage

* Automation testing is a process of changing any manual test case into test scripts by using automation tools and scripting or programming language

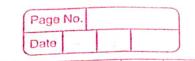* Benefit of A.T
  1. Faster Feedback cycle
  2. Repeatable
  3. Reusable
  4. Better Quality software.
  5. Reliable.
  6. High accuracy
  7. Fast

✶ Two types of testing tools
① Static Test Tools → Coverage analyzers, Flow analyzers
② Dynamic Test Tools → Emulator, Test driver.

✶ Test tools characteristics
① Testing tools should be easy to use.
② Tools should provide complete code coverage and create test documentation in various format .pdf, .html, etc
③ Testing tools should support CTUI based test preparation
④ Should adopt underlying hardware.

✶ Test automation Frameworks.
→ Guidelines which can be followed to create test cases.

① Data Driven Automation Framework
→ test data and test script are separated which makes it easier to maintain and update the test data at any point of time without affecting test scripts.

② Keyword Driven Automation Frameworks
→ test logic is divided into Keywords and functions

③ Modular Automation Framework
→ application is divided into different modules which can be tested independently.

(IV) Hybrid Automation Framework
→ more than one Framework is used
   to achieve the desired objectives.

★ Benefits of test automation Framework
(i) Flexibility
(ii) Reduced manual Interaction.
(iii) Efficiency
(iv) Easy maintenance

★ Tools
(i) Selenium
(ii) Appium
(iii) Robotium
(iv) cucumber
(v) Apache JMeter

★ Installation steps [Selenium]
(i) Download + install latest version Java JDK
(ii) Download + install latest version of eclipse.
(iii) While install select ~~Java~~ 'Eclipse IDE for
    Java Developers' and click install.
(iv) Download zip of selenium and
    Extract it in one $_v$ (.jar files)
                    folder