## 9.0 Testing

**Testing** means to check the behaviour of a complete and fully integrated System based on the software requirements specification (SRS) document. The main focus of this testing is to evaluate Business / Functional / End-user requirements.

This is black box type of testing where external working of the software is evaluated with the help of requirement documents & it is totally based on Users point of view. For this type of testing do not required knowledge of internal design or structure or code.

##### ****Why system testing is important:****

a) In Software Development Life Cycle the System Testing is perform as the first level of testing where the System is tested as a whole.

b) In this step of testing check if system meets functional requirement or not.

c) System Testing enables you to test, validate and verify both the Application Architecture and Business requirements.

d) The application/System is tested in an environment that particularly resembles the effective production environment where the application/software will be lastly deployed.

* **Types of testing**

1. **Unit testing** – Testing is done in the development process while developer completes the unit development.  The object of this testing is to verify correctness of the module.
2. **Integration testing** – System Integration Testing is started after the individual software modules are integrated as a group. A typical software project consists of multiple modules & these are developed by different developers.
3. **System testing** – This is the first time end to end testing of application on the complete and fully integrated software product before it is launch to the market.
4. **Acceptance testing** – User acceptance is a type of testing performed by the Client to certify the system with respect to the requirements that was agreed upon.  This is beta testing of the product & evaluated by the actual end users. The main purpose of this testing is to validate the end to end business flow.