**Manual Testing**

* **Introduction of Software Testing**

What is testing?

What to be tested in now-a-days Web/mobile applications?

What is difference Manual Testing and Automation?

Explain below terminologies?

1. Project
2. Product
3. Error
4. Defect/Bug/Fault
5. Failure

Software Testing Principles

* **SDLC Models**

Waterfall Model

V-Model

Incremental Iterative Models

RAD Model

Prototype Model

Spiral Model

Agile Methodology

Introducing Agile Process

Agile Manifesto

Agile Principles

* **Software Testing Methods**

White Box Testing

Black Box Testing

Grey Box Testing

Agile Testing

Ad Hoc Testing

* **Software Testing Life Cycle (STLC)**

Requirement Analysis

Test Planning

Test Scenario/ Test Case Design

Test Environment Setup

Test Execution

Test Closure

* **Test process Documents**

Test plan

Test scenarios

Test Case

Test case Design Techniques

* + 1. Equivalence Partitioning
    2. Boundary Value analyses
    3. Decision Table
    4. Error Guessing

RTM (Requirement Traceability Matrix)

Defect Report

* **Defect**
* How to raise a defect
* Defect Tracking and Management
* Defect Life Cycle
* Priority VS Severity
* Triage Team
* Deferred defects
* Defect Reports
* **Test Case Authoring**

Functional Test case

Review of Test case.

Walkthroughs

Inspection

Peer Review

* **Agile Methodology (Scrum Framework)**

Introduction to Scrum Framework

* What is scrum?
* For what kind of projects scrum is suitable?
* For what kind of projects scrum is not suitable?
* Discussion on Sprint Planning
* Discussion on story cards

Components of Scrum Framework

* Scrum Roles
* Scrum Artifacts
* Scrum Events

Scrum Roles and Responsibilities

* Product Owner
* Scrum Master
* Scrum Development team

Scrum Artifacts

* Product Backlog
* Sprint Backlog
* Burn down Chart Scrum

Events or Ceremonies

* Sprint Planning Meeting
* Daily Scrum Meeting
* Sprint Review Meeting
* Sprint Retrospective Meeting
* **Test / Project Management Tool: JRA**

Importance of JIRA and How to Install JIRA

What are the features of JIRA?

How to create a JIRA Project.

Adding Users tour JIRA Account

Importance of Defect Life Cycle and

Understanding the various stages / states of a defect.

Converting a Defect Life Cycle into JIRA

workflow for a project

Adding Bugs to the JIRA Project

Attaching screenshots to the Bugs in JIRA

Assigning, Closing, Adding comments etc. to the JIRA bugs.

Creating and Customizing JIRA Dashboard.

* **DATA BASE TESTING:**

Introduction to database testing

Why to test and what to test in a database

Differences between UI and Database testing

How to test a database

SQL Concepts

Types of SQL statements

1. Data Definition Language
2. Data Manipulation Language
3. Data Control Language

Important SQL Commands

SQL in detail

DESC/SHOW

COUNT

DISTINCT

WHERE

OPERATORS IN SQL

AND & OR

TOP

ORDER BY

GROUP BY/HAVING

INSERT INTO/SELECT INTO

UPDATE/ALTER

DELETE/TRUNCATE/DROP

ALIASES

JOINS

UNION/INTERSECT/EXCEPT

CREATE

DATA TYPES

NULL VALUES

INDEXES

VIEWS

DATE FUNCTIONS

TEMPORARY TABLES

SUB QUERIES