

## Software Testing Lectureflow

|  |           |
|--|-----------|
| <b>Module 1) ST - Introduction and Fundamentals</b>  | <b>6</b>  |
| <ul style="list-style-type: none"> <li>• Introduction of Software Engineering</li> <li>• Software Architecture</li> <li>• Software Development Life Cycle (SDLC)</li> <li>• (Water fall, Iterative and Incremental, Spiral, Agile, Use Case)</li> <li>• Software Testing Methodologies</li> <li>• Software Requirement Specifications (SRS)</li> <li>• Structure Query Language (SQL)</li> <li>• OOPS</li> </ul>   |           |
| <b>Module 2) ST - Manual Testing</b>   | <b>25</b> |
| <ul style="list-style-type: none"> <li>• What is Testing?</li> <li>• Testing Activities</li> <li>• Test Objectives</li> <li>• Objectives and purpose</li> <li>• When and Why Testing?</li> <li>• When to start and stop Testing?</li> <li>• 7 Key Principles of Testing</li> <li>• Error, Bug, Defects and Causes of Defects ,Quality , Risk : Types of Risks.</li> <li>• Test Organization : (Tester, Test Leader, Test planning , QA v/s QC , Testing V/s Debugging )</li> <li>• Test Development Process -Test Analysis</li> <li>• Test Plan</li> <li>• Strategy</li> <li>• HLR</li> <li>• Script</li> <li>• Scenario</li> <li>• Cases</li> <li>• Traceability</li> <li>• Fundamental Test Process -STLC</li> <li>• Psychology of Testing</li> <li>• Software Development Model :: (V-Model and RAD)</li> <li>• Software Testing Levels</li> <li>• Unit Testing</li> <li>• Integration Testing</li> <li>• System Testing</li> <li>• Acceptance Testing</li> <li>• , Alpha and Beta Testing</li> <li>• Testing, Testing definitions as per ISQTB.</li> <li>• Test Design Techniques</li> </ul> |           |

- Dynamic Testing
- Functional and Non Functional Testing
- Black Box Testing Techniques
- White Box Testing Techniques
- Experience Based Testing Techniques
- Maintenance Testing
- Smoke and Sanity Testing
- End to End Testing
- Retesting and Regression Testing
- Positive and Negative Testing
- Static Testing (Formal, Informal, Types of Review, Estimation Techniques)
- Agile Testing
- Agile with Scrum process
- Scrum process
- Sprint Review and Retrospective
- Scrum Board
- JIRA Tools
- Build Release Process

|   |          |
|---|----------|
| <b>Module 3) Testing on Live Application</b>  | <b>4</b> |
| <ul style="list-style-type: none"> <li>• Web Application Testing</li> <li>• Desktop Application Testing</li> <li>• Mobile Application Testing</li> <li>• Responsive Testing</li> <li>• Basic intro of API Testing</li> <li>• Cross Browser Testing</li> <li>• Advanced Mobile Testing (aPk, IPA)</li> <li>• Database SQL Testing</li> </ul> |          |



|  |          |
|--|----------|
| <b>Module 4) ST - Defect Management</b>  | <b>2</b> |
| <ul style="list-style-type: none"> <li>• Defect Management and Tracking</li> <li>• Bug Life Cycle</li> <li>• Defect Management</li> <li>• Reporting</li> <li>• Priority</li> <li>• Severity</li> <li>• Cost</li> <li>• Bugzilla</li> </ul> |          |



|  |          |
|--|----------|
| <b>Module 5) ST - Automation and Selenium</b>  | <b>6</b> |
| <ul style="list-style-type: none"> <li>• Fundamentals of Automation Testing</li> </ul> |          |

- Introduction of Functional Testing Using Automation Tool
- Selenium IDE with use of Fire bug tools
- Introduction of Non-Functional Testing Using Automation Tool
- Introduction about Load Runner-up
- Load Runner-up procedure
- How to use Load Runner-up
- Load Runner-up IDE
- Generate Single Scripting and Assign V-Users
- Multi Scripting with Grouping
- Parameterization in Load Runner-up