Manual Testing

Software Testing Introduction
- Introduction to Software Testing
- Software Development Process
- Project vs. Product
- Error / Fault / Failure
- Why Software has defects
- Cost of fixing defects
- Most common defects
- Verification vs Validation
- Objectives of Testing
- Role of a Tester

Software Development Life Cycle (SDLC)
- SDLC Phases
- SDLC Models
  - Waterfall Model
  - Incremental Model
  - Prototype Model
  - Spiral Model
  - V Model
  - Agile Model

Software Testing Methodologies
- Static Testing
- White Box Testing
- Black Box Testing
- Gray Box Testing

Software Testing Techniques
- Reviews
- Types of Reviews
- Inspections & Audits
- Walkthroughs

White Box Testing
- Unit Testing
  - Mutation Testing
- Integration Testing
  - Big-bang approach
  - Top-down approach
  - Bottom-up approach
- Stubs & Drivers

White Box Test Design Techniques
- Code coverage
  - Statement Coverage
  - Condition Coverage
  - Path Coverage
- Cyclomatic Complexity

Black Box Testing
- System Testing
- UAT
  - Alpha Testing
  - Beta Testing

Software Testing Life Cycle (STLC)
- Test Plan & Test Strategy
- Test Scenarios
- Designing Test Cases & Generating Test Data

Black Box Test Design Techniques
- ECP
- BVA
- Decision Table Testing
- State Transition Testing
- Use Case Testing

Requirement Traceability Matrix

Build Release Process
- SRN && DD
- Build Deployment

Test Execution & Types of Testing
- Smoke / Sanity Testing
- Risk Based Testing
- Ad-hoc Testing
- Re-Testing
- Regression Testing
- End-to-End Testing
- Exploratory Testing
- Monkey Testing
- UI Testing
- Usability Testing
- Security Testing
- Performance Testing
- Load Testing

- Stress Testing
- Compatibility Testing
- Installation Testing
- Globalization Testing
- Localization Testing
- Recovery Testing
- Acceptance Testing
- Concurrent Testing
- Benchmark Testing

Database Testing

Defect / Bug Life Cycle & Defect Management
- What is defect?
- Defect Classification
- Defect report Template

Test Closure
- Criteria for Test Closure
- Test Summary Report

Project Metrics

Software Configuration Management

Overview of Testing on Banking, Insurance

Testing Certifications

QA & QC

ISO & CMM Standards