### QA Engineer Theory & Answer Prep Sheet

### Tell me about yourself

I am a Quality Assurance Engineer with hands-on experience in functional, regression, and automation testing. In my previous roles at Mahorix Technologies and Boosta Investment Limited, I worked on web, mobile, and API projects, leveraging tools like JIRA, Postman, JMeter, and Python automation to improve software quality and reduce defects. I enjoy ensuring applications meet both business and user needs.

#### What is SDLC?

Software Development Life Cycle (SDLC) is a structured process followed for software development, covering phases such as requirement gathering, design, development, testing, deployment, and maintenance.

#### What is STLC?

Software Testing Life Cycle (STLC) defines the phases of testing: requirement analysis, test planning, test case development, environment setup, test execution, defect reporting, and test closure.

## What is API Testing?

API testing validates the functionality, reliability, performance, and security of APIs. I have used Postman and Newman to validate API endpoints, check response codes, payloads, and performance under load.

## What is Integration Testing?

Integration testing checks how different modules or services work together. At my previous role, I performed integration testing between frontend, backend, and third-party services like payment gateways.

# Types of Testing

• Functional Testing • Regression Testing • Smoke Testing • Sanity Testing • Performance/Load Testing • Security Testing • UAT (User Acceptance Testing) • Integration Testing

#### Automation in QA

I developed and maintained automation scripts in Python, reducing manual testing effort by 40%. Automation is useful for regression testing, repeated scenarios, and performance validation.

### Performance & Load Testing

I used Apache JMeter to simulate concurrent users and measure system performance. This helped identify bottlenecks and improve performance by 15% in production systems.

# Agile Methodology

I actively participated in Agile ceremonies like sprint planning, daily stand-ups, and retrospectives. This helped me align QA activities with business priorities and collaborate effectively with developers and product owners.

#### Test Case Documentation

I designed and executed 100+ test cases for web and API projects, ensuring coverage of edge cases and reducing post-release defects. I also introduced reusable documentation templates that improved onboarding speed by 50%.

# **Defect Management Tools**

I used JIRA and ClickUp to log detailed defect reports with reproducible steps, screenshots, and severity ratings. This streamlined collaboration with developers and reduced debugging time.