## **IT 33- Software Testing and Quality Assurance**

- 1. What is the primary objective of Quality Assurance (QA)?
- a) Identifying defects in software
- b) Ensuring that software meets specified requirements and standards
- c) Fixing bugs in software
- d) Monitoring software performance

Answer: b) Ensuring that software meets specified requirements and standards

- 2. Which of the following is NOT a component of Software Quality Assurance (SQA) Planning?
- a) Defining testing objectives
- b) Identifying resources for testing
- c) Execution of test cases
- d) Developing a test schedule

**Answer: c) Execution of test cases** 

- 3. What are the building blocks of Software Quality Assurance?
- a) Design and Development
- b) Verification and Validation
- c) Planning and Implementation
- d) Execution and Monitoring

Answer: b) Verification and Validation

- 4. Which of the following is a Software Quality factor?
- a) Project Scope

- b) Number of lines of code
- c) Reliability
- d) Project Budget

**Answer: c) Reliability** 

- 5. Which ISO standard focuses on software quality models?
- a) ISO 9000
- b) ISO/IEC 9126
- c) ISO 27001
- d) ISO 14001

Answer: b) ISO/IEC 9126

- 6. Which testing principle states that exhaustive testing is impossible?
- a) Early testing
- b) Defect clustering
- c) Pesticide paradox
- d) Testing shows presence of defects

Answer: c) Pesticide paradox

- 7. What is the primary objective of Validation in software testing?
- a) Ensuring that the system behaves as expected
- b) Checking if the software meets specified requirements
- c) Finding defects in the software
- d) Verifying code syntax

Answer: a) Ensuring that the system behaves as expected

## 8. What level of testing involves testing individual software components or modules?

- a) System Testing
- b) Integration Testing
- c) Unit Testing
- d) Acceptance Testing

**Answer: c) Unit Testing** 

## 9. Which type of testing evaluates how well the system performs under load conditions?

- a) Usability Testing
- b) Load Testing
- c) Integration Testing
- d) Regression Testing

**Answer: b) Load Testing** 

### 10. What is the purpose of Smoke testing?

- a) To verify the major functionalities of the system
- b) To test the software on different operating systems
- c) To validate the entire system thoroughly
- d) To identify defects in the early stages of development

Answer: a) To verify the major functionalities of the system

### 11. What is a common technique used for static testing?

- a) Equivalence Partitioning
- b) Decision Table Testing

- c) Review
- d) Boundary Value Analysis

Answer: c) Review

#### 12. What is the primary goal of dynamic testing?

- a) To ensure software reliability
- b) To verify the correctness of the source code
- c) To evaluate software performance under varying conditions
- d) To execute the program and observe its behavior

Answer: d) To execute the program and observe its behavior

#### 13. Which technique is a white-box testing technique?

- a) Equivalence Partitioning
- b) Boundary Value Analysis
- c) Statement coverage
- d) Exploratory Testing

**Answer: c) Statement coverage** 

### 14. What is a role typically associated with Test Management?

- a) Software Developer
- b) Business Analyst
- c) Test Lead
- d) Project Manager

Answer: c) Test Lead

## 15. Which document outlines the testing approach, resources, and schedule for a project?

- a) Test Plan
- b) Test Log
- c) Test Summary Report
- d) Requirement Traceability Matrix

**Answer: a) Test Plan** 

## 16. Which aspect is NOT typically included in Configuration Management for Testing?

- a) Version Control
- b) Test Case Execution
- c) Baseline Management
- d) Change Control

**Answer: b) Test Case Execution** 

### 17. What is the purpose of Risk and Testing?

- a) To eliminate all project risks
- b) To identify potential defects in the software
- c) To mitigate risks associated with testing activities
- d) To ensure that testing is performed according to the schedule

Answer: c) To mitigate risks associated with testing activities

## 18. Which tool is primarily used for automated functional testing of web applications?

- a) JMeter
- b) Selenium
- c) Appium

d) Test Director

**Answer: b) Selenium** 

## 19. What is one potential risk associated with the introduction of testing tools into an organization?

- a) Decreased test coverage
- b) Increased efficiency
- c) Higher testing costs
- d) Improved defect detection

**Answer: c) Higher testing costs** 

#### 20. Which tool is commonly used for performance testing?

- a) Appium
- b) JMeter
- c) Selenium
- d) TestRail

Answer: b) JMeter

### 21. What is the primary objective of Quality Assurance (QA)?

- a) Identifying defects in software
- b) Ensuring that software meets specified requirements and standards
- c) Fixing bugs in software
- d) Monitoring software performance

Answer: b) Ensuring that software meets specified requirements and standards

22. Which of the following is NOT a component of Software Quality Assurance (SQA) Planning?

- a) Defining testing objectives
- b) Identifying resources for testing
- c) Execution of test cases
- d) Developing a test schedule

Answer: c) Execution of test cases

- 23. What are the building blocks of Software Quality Assurance?
- a) Design and Development
- b) Verification and Validation
- c) Planning and Implementation
- d) Execution and Monitoring

Answer: b) Verification and Validation

- 24. Which of the following is a Software Quality factor?
- a) Project Scope
- b) Number of lines of code
- c) Reliability
- d) Project Budget

Answer: c) Reliability

- 25. Which ISO standard focuses on software quality models?
- a) ISO 9000
- b) ISO/IEC 9126
- c) ISO 27001
- d) ISO 14001

Answer: b) ISO/IEC 9126

- 26. Which testing principle states that exhaustive testing is impossible?
- a) Early testing
- b) Defect clustering
- c) Pesticide paradox
- d) Testing shows presence of defects

Answer: c) Pesticide paradox

- 27. What is the primary objective of Validation in software testing?
- a) Ensuring that the system behaves as expected
- b) Checking if the software meets specified requirements
- c) Finding defects in the software
- d) Verifying code syntax

Answer: a) Ensuring that the system behaves as expected

- 28. What level of testing involves testing individual software components or modules?
- a) System Testing
- b) Integration Testing
- c) Unit Testing
- d) Acceptance Testing

**Answer: c) Unit Testing** 

- 29. Which type of testing evaluates how well the system performs under load conditions?
- a) Usability Testing
- b) Load Testing

- c) Integration Testing
- d) Regression Testing

#### **Answer: b) Load Testing**

#### 30. What is the purpose of Smoke testing?

- a) To verify the major functionalities of the system
- b) To test the software on different operating systems
- c) To validate the entire system thoroughly
- d) To identify defects in the early stages of development

#### Answer: a) To verify the major functionalities of the system

### 31. What is a common technique used for static testing?

- a) Equivalence Partitioning
- b) Decision Table Testing
- c) Review
- d) Boundary Value Analysis

#### Answer: c) Review

#### 32. What is the primary goal of dynamic testing?

- a) To ensure software reliability
- b) To verify the correctness of the source code
- c) To evaluate software performance under varying conditions
- d) To execute the program and observe its behavior

#### Answer: d) To execute the program and observe its behavior

### 33. Which technique is a white-box testing technique?

a) Equivalence Partitioning

- b) Boundary Value Analysis
- c) Statement coverage
- d) Exploratory Testing

**Answer: c) Statement coverage** 

- 34. What is a role typically associated with Test Management?
- a) Software Developer
- b) Business Analyst
- c) Test Lead
- d) Project Manager

**Answer: c) Test Lead** 

- 35. Which document outlines the testing approach, resources, and schedule for a project?
- a) Test Plan
- b) Test Log
- c) Test Summary Report
- d) Requirement Traceability Matrix

Answer: a) Test Plan

- **36.** Which aspect is NOT typically included in Configuration Management for Testing?
- a) Version Control
- b) Test Case Execution
- c) Baseline Management
- d) Change Control

**Answer: b) Test Case Execution** 

37. What is the purpose of Risk and Testing?

- a) To eliminate all project risks
- b) To identify potential defects in the software
- c) To mitigate risks associated with testing activities
- d) To ensure that testing is performed according to the schedule

Answer: c) To mitigate risks associated with testing activities

38. Which tool is primarily used for automated functional testing of web applications?

- a) JMeter
- b) Selenium
- c) Appium
- d) Test Director

Answer: b) Selenium

39. What is one potential risk associated with the introduction of testing tools into an organization?

- a) Decreased test coverage
- b) Increased efficiency
- c) Higher testing costs
- d) Improved defect detection

**Answer: c) Higher testing costs** 

40. Which tool is commonly used for performance testing?

a) Appium

- b) JMeter
- c) Selenium
- d) TestRail

Answer: b) JMeter

## 41. Which testing principle emphasizes testing early in the software development lifecycle?

- a) Early testing
- b) Pesticide paradox
- c) Testing shows presence of defects
- d) Defect clustering

**Answer:** a) Early testing

#### 42. What is the primary purpose of Unit Testing?

- a) To test the integration between software modules
- b) To validate the entire system
- c) To verify the behavior of individual software components
- d) To perform end-to-end testing

Answer: c) To verify the behavior of individual software components

# 43. Which type of testing evaluates how well the system performs under expected conditions?

- a) Load Testing
- b) Stress Testing
- c) Usability Testing
- d) System Testing

#### **Answer: d) System Testing**

- 44. Which black-box testing technique divides the input domain into classes of data from which test cases can be derived?
- a) Boundary Value Analysis
- b) Equivalence Partitioning
- c) Decision Table Testing
- d) State Transition Testing

#### **Answer: b) Equivalence Partitioning**

- 45. What is the primary goal of Integration Testing?
- a) To validate the system against the specified requirements
- b) To ensure that individual software components work together
- c) To verify the functionality of the system as a whole
- d) To perform end-to-end testing

### Answer: b) To ensure that individual software components work together

- 46. Which testing technique evaluates the behavior of a system or component against its expected behavior?
- a) Black-box testing
- b) White-box testing
- c) Gray-box testing
- d) Mutation testing

#### Answer: a) Black-box testing

- 47. What is the primary objective of Acceptance Testing?
- a) To validate the system against the specified requirements

- b) To ensure that the system is ready for deployment
- c) To verify the functionality of the system as a whole
- d) To identify defects in the system

Answer: a) To validate the system against the specified requirements

- 48. Which type of testing focuses on non-functional aspects of the software?
- a) Functional Testing
- b) Non-Functional Testing
- c) Structural Testing
- d) Integration Testing

**Answer: b) Non-Functional Testing** 

- 49. What is the purpose of Regression Testing?
- a) To verify that new code changes have not adversely affected existing functionality
- b) To identify defects in the software
- c) To ensure that all requirements are met
- d) To validate the system against the specified requirements

Answer: a) To verify that new code changes have not adversely affected existing functionality

- 50. Which testing technique involves executing the software without any prior test case development or planning?
- a) Black-box testing
- b) White-box testing
- c) Exploratory testing
- d) Boundary value analysis

Answer: c) Exploratory testing