ISTQB Question Paper - 11

- 1. Which of the following is true
- a. Testing is the same as quality assurance
- b. Testing is a part of quality assurance
- c. Testing is not a part of quality assurance
- d. Testing is same as debugging
- 2. Why is testing necessary?
- a. Because testing is good method to make there are not defects in the software
- b. Because verification and validation are nto enough to get to know the quality of the software
- c. Because testing measures the quality of the software system and helps to increase the quality
- d. Because testing finds more defects than reviews and inspections.
- 3. Integration testing has following characteristics
- I. It can be done in incremental manner
- II. It is always done after system testing
- III. It includes functional tests
- IV. It includes non-functional tests
- a. I, II and III are correct
- b. I is correct
- c. I, III and IV are correct
- d. I, II and IV are correct

- 4. A number of critical bugs are fixed in software. All the bugs are in one module, related to reports. The test manager decides to do regression testing only on the reports module.
- a. The test manager should do only automated regression testing.
- b. The test manager is justified in her decision because no bug has been fixed in other modules
- c. The test manager should only do confirmation testing. There is no need to do regression testing
- d. Regression testing should be done on other modules as well because fixing one module may affect other modules
- 5. Which of the following is correct about static analysis tools?
- a. Static analysis tools are used only by developers
- b. Compilers may offer some support for static analysis
- c. Static analysis tools help find failures rather than defects
- d. Static analysis tools require execution of the code to analyze the coverage
- 6. In a flight reservation system, the number of available seats in each plane model is an input. A plane may have any positive number of available seats, up to the given capacity of the plane. Using Boundary Value analysis, a list of available seat values were generated. Which of the following lists is correct?
- a. 1, 2, capacity -1, capacity, capacity plus 1
- b. 0, 1, capacity, capacity plus 1
- c. 0, 1, 2, capacity plus 1, a very large number
- d. 0, 1, 10, 100, capacity, capacity plus one
- 7. For the code fragment given below, which answer correctly represents minimum tests required for statement and branch coverage respectively?

```
Discount rate=1;

Fare = 1000;

If ((person == "senior citizen") and ("travel month = January"))

Bonuspoints = 100+Bonuspoints

If (class=="first")

discountRate = .5;

Fare = fare * discountRate;

a. Statement Coverage = 1, Branch Coverage = 2

b. Statement Coverage = 2, Branch Coverage = 2

c. Statement Coverage = 1, Branch Coverage = 3

d. Statement Coverage = 2, Branch Coverage = 4
```

- 8. Which of the following is correct about static analysis tools
- a. They help you find defects rather than failures
- b. They are used by developers only
- c. They require compilation of code
- d. They are useful only for regulated industries
- 9. Acme Inc. decides to use functional test execution automation tool for testing GUI of their product. The GUI is expected to change frequently. Acme Inc. has put some of the manual testers through a 3 day training program on how to use the tool. Which of the following is likely to be true?
- a. Automation is likely to fail because of frequent changes and lack of experience
- b. Automation is likely to fail because of GUI automation is not the right way to automate
- c. Automation is likely to succeed because automation is very useful for frequent changes

- d. Automation is likely to succeed because the team has been trained on tool.
- 10. In foundation level syllabus you will find the main basic principles of testing. Which of the following sentences describes one of these basic principles?
- a. Complete testing of software is attainable if you have enough resources and test tools
- b. With automated testing you can make statements with more confidence about the quality of a product than with manual testing
- c. For a software system, it is not possible, under normal conditions, to test all input and output combinations.
- d. A goal of testing is to show that the software is defect free.
- 11. Which of the following statements contains a valid goal for a functional test set?
- a. A goal is that no more failures will result from the remaining defects
- b. A goal is to find as many failures as possible so that the cause of the failures can be identified and fixed
- c. A goal is to eliminate as much as possible the causes of defects
- d. A goal is to fulfil all requirements for testing that are defined in the project plan.
- 12. In system testing...
- a. .. Both functional and non-functional requirements are to be tested
- b. ... Only functional requirements are tested; non-functional requirements are validated in

a review

c. ... Only non-functional requirements are tested; functional requirements are validated in

a review

- d. ... Only requirements which are listed in the specification document are to be tested
- 13. Which of the following activities differentiate a walkthrough from a formal review?
- a. A walkthrough does not follow a defined process
- b. For a walkthrough individual preparation by the reviewers is optional
- c. A walkthrough requires meeting
- d. A walkthrough finds the causes of failures, while formal review finds the failures
- 14. Why does the boundary value analysis provide good test cases?
- a. Because it is an industry standard
- b. Because errors are frequently made during programming of the different cases near the 'edges' of the range of values
- c. Because only equivalence classes that are equal from a functional point of view are considered in the test cases
- d. Because the test object is tested under maximal load up to its performance limits
- 15. Which of the following list contains only non-functional tests?
- a. Interoperability (compatibility) testing, reliability testing, performance testing
- b. System testing, performance testing
- c. Load testing, stress testing, component testing, portability testing
- d. Testing various configurations, beta testing, load testing
- 16. The following list contains risks that have been identified for a software product to be developed. Which of these risks is an example of a product risk?
- a. Not enough qualified testers to complete the planned tests
- b. Software delivery is behind schedule

- c. Threat to a patient's life
- d. 3rd party supplier does not supply as stipulated

- 17. Which set of metrics can be used for monitoring of the test execution?
- a. Number of detected defects, testing cost;
- b. Number of residual defects in the test object.
- c. Percentage of completed tasks in the preparation of test environment; test cases prepared
- d. Number of test cases run / not run; test cases passed / failed
- 18. Which of the following statements is correct?
- a. Static analysis tools produce statistics during program execution
- b. Configuration management systems allow us to provide accurate defect statistics of different configurations
- c. Stress testing tools examine the behaviour of the test object at or beyond full load
- d. Performance measurement tools can be used in all phases of software life-cycle
- 19. What makes an inspection different from other review types?
- a. It is led by a trained leader, uses formal entry and exit criteria and checklists
- b. It is led by the author of the document to be inspected
- c. It can only be used for reviewing design and code

- d. It is led by the author, uses checklists, and collects data for improvement
- 20. Which of the following is a valid collection of equivalence classes for the following problem: An

integer field shall contain values from and including 1 to and including 15

- a. Less than 1, 1 through 15, more than 15
- b. Negative numbers, 1 through 15, above 15
- c. Less than 1, 1 through 14, more than 15
- d. Less than 0, 1 through 14, 15 and more
- 21. Which of the following is a valid collection of equivalence classes for the following problem: Paying with credit cards shall be possible with Visa, Master and Amex cards only.
- a. Visa, Master, Amex;
- b. Visa, Master, Amex, Diners, Keycards, and other option
- c. Visa, Master, Amex, any other card, no card
- d. No card, other cards, any of Visa Master Amex
- 22. Which of the following techniques are black box techniques?
- a. State transition testing, code testing, agile testing
- b. Equivalence partitioning, state transition testing, decision table testing
- c. System testing, acceptance testing, equivalence partitioning
- d. System integration testing, system testing, decision table testing

23. A	defect managemen	nt system shall	keep track	of the status	of every de	fect register	red
and e	nforce the rules ab	out changing th	nese states.	If your task	is to test the	e status tracl	king,
which	n method would be	e best?		-			_

- a. Logic-based testing
- b. Use-case-based testing
- c. State transition testing
- d. Systematic testing according to the V-model
- 24. If a program is tested and 100% condition coverage is achieved, which of the following coverage criteria is then guaranteed to be achieved?
- a. 100% branch coverage
- b. 100% condition coverage and 100% statement coverage
- c. Equivalence class and boundary value coverage
- d. No other white box coverage criterion is guaranteed to be fulfilled 100%
- 25. This part of a program is given:-

WHILE (condition A) Do B

END WHILE

How many decisions should be tested in this code in order to achieve 100% decision coverage?

a. 2

- b. Indefinite
- c. 1
- d. 4
- 26. Why can be tester dependent on configuration management?
- a. Because configuration management assures that we know the exact version of the testware and the test object
- b. Because test execution is not allowed to proceed without the consent of the change control board
- c. Because changes in the test object are always subject to configuration management
- d. Because configuration management assures the right configuration of the test tools
- 27. What test items should be put under configuration management?
- a. The test object, the test material and the test environment
- b. The problem reports and the test material
- c. Only the test object. The test cases need to be adapted during agile testing
- d. The test object and the test material
- 28. Why is successful test execution automation difficult?
- a. Because the tools for automated testing require too much effort for learning
- b. Because the maintenance of the test system is difficult
- c. Because the test robot tools are restricted in their ability to recognize outputs
- d. Because the test robot needs to be supported by a test management.

- 29. Which of the following can be root cause of a bug in a software product?
- (I) The project had incomplete procedures for configuration management.
- (II) The time schedule to develop a certain component was cut.
- (III) the specification was unclear
- (IV) Use of the code standard was not followed up
- (V) The testers were not certified
- a. (I) and (II) are correct
- b. (I) through (IV) are correct
- c. (III) through (V) are correct
- d. (I), (II) and (IV) are correct
- 30. Which of the following is most often considered as components interface bug?
- a. For two components exchanging data, one component used metric units, the other one used British units
- b. The system is difficult to use due to a too complicated terminal input structure
- c. The messages for user input errors are misleading and not helpful for understanding the input error cause
- d. Under high load, the system does not provide enough open ports to connect to
- 31. Which of the following project inputs influence testing?
- (I) contractual requirements
- (II) legal requirements

(III) Industry standards
(IV) application risk
(V) project size
a. (I) through (III) are correct
b. All alternatives are correct
c. (II) and (V) are correct
d. (I), (III) and (V) are correct
32. If a program is tested and 100% branch coverage is achieved, which of the following coverage criteria is then guaranteed to be achieved?
a. 100% Equivalence class coverage
b. 100% Condition coverage and 100% Statement coverage
c. 100% Statement coverage
d. 100% Multiple condition coverage
33. This part of a program is given:-
WHILE (condition A) Do B
END WHILE
How many paths should be tested in this code in order to achieve 100% path coverage?
a. One
b. Indefinite
c. Two
d. Four
34. What is the purpose of test exit criteria in the test plan?

- a. To specify when to stop the testing activity
- b. To set the criteria used in generating test inputs
- c. To ensure that the test case specification is complete
- d. To know when a specific test has finished its execution
- 35. Which of the following items need not to be given in an incident report?
- a. The version number of the test object
- b. Test data and used environment
- c. Identification of the test case that failed
- d. The location and instructions on how to correct the fault
- 36. V-Model is:
- a. A software development model that illustrates how testing activities integrate with software development phases
- b. A software life-cycle model that is not relevant for testing
- c. The official software development and testing life-cycle model of ISTQB
- d. A testing life cycle model including unit, integration, system and acceptance phases
- 37. Why is incremental integration preferred over "big bang" integration?
- a. Because incremental integration has better early defects screening and isolation ability
- b. Because "big bang" integration is suitable only for real time applications
- c. Incremental integration is preferred over "Big Bang Integration" only for "bottom up" development model
- d. Because incremental integration can compensate for weak and inadequate component

testing

- 38. Maintenance testing is:
- a. Testing management
- b. Synonym of testing the quality of service
- c. Triggered by modifications, migration or retirement of existing software
- d. Testing the level of maintenance by the vendor
- 39. A test engineer is testing a Video Player (VCR), and logs the following report:

Title: Fast Forward stops after 2 minutes. It happens every time

Expected result: Fast forward continues till the end of the tape

Severity: High

Priority: Urgent

What important information did the engineer leave out?

- a. Identification (Software and hardware) of the VCR
- b. Actual result
- c. History of the report
- d. Ideas for the test case improvement

40. Why is it necessary to define a Test Strategy?

- a. As there are many different ways to test software, thought must be given to decide what will be the most effective way to test the project on hand.
- b. Starting testing without prior planning leads to chaotic and inefficient test project
- c. A strategy is needed to inform the project management how the test team will schedule the test-cycles
- d. Software failure may cause loss of money, time, business reputation, and in extreme cases injury and death. It is therefore critical to have a proper test strategy in place.

Answers:

- 1 B
- 2 C
- 3 C
- 4 D
- 5 B
- 6 B
- 7 **-** A
- 8 A
- 9 A
- 10 C 11 - B
- 12 A
- 13 B
- 14 B
- 15 C
- 16 C
- 17 D
- 18 C
- 19 A
- 20 A
- 21 D
- 22 B
- 23 C
- 24 B
- 25 A
- 26 A
- 27 A

- 28 B

- 29 B 30 A 31 B
- 32 B 33 C
- 34 A 35 D
- 36 A
- 37 A 38 C 39 B 40 D