[2011]

ISEB ISTQB Sample Paper

www.istqb.guru

[BH0-010 ISEB ISTQB FOUNDATION LEVEL]

Total Questions: 40

1. Which of the following are the typical defects found by static analysis tools?
a. Variables that are never used.
b. Security vulnerabilities.
c. Poor performance.
d. Unreachable code.
e. Business processes not followed.
A. b, c and d are true; a and e are false
B. a is true; b, c, d and e are false
C. c, d and e are true; a and b are false
D. a, b and d are true; c and e are false
Answer: D

2. Which of the following are characteristics of good testing in any life cycle model?
a. Every development activity has a corresponding test activity.
b. Testers review development documents early.
c. There are separate levels for component and system integration test.
d. Each test level has objectives specific to that level.
e. Each test level is based on the same test basis.
A. a, d and e
B. b, c and e
C. a, c and d
D. a, b and d
Answer: D

3. Which of the following statements are true in relation to component testing?
a. Stubs may be used.
b. May cover resource behavior (e.g. memory leaks).
c. Tests the interactions between software components.
d. Defects are typically fixed without formally managing these defects.
A. a, c and d
B. a, b and d
C. b, c and d
D. a, b and c
Answer: B

4. A system specification states that a particular field should accept alphabetical characters in either upper or lower case. Which of the following test cases is from an INVALID equivalence partition?
A. Feeds
B. F33ds
C. FEEDS

D. fEEDs
Answer: B

5. Which of the following statements is GENERALLY true of testing?
a. Testing can show the presence of defects.
b. Testing reduces the probability of uncovered defects.
c. Testing can show that a previously present defect has been removed.
d. Testing can prove that software is defect free.

A. a, b and c
B. a, b and d
C. a, c and d
D. b, c and d
Answer: A

6. Which ADDITIONAL test level could be introduced into a standard V-model after system testing?
A. System Integration Testing
B. Acceptance Testing
C. Regression Testing
D. Component Integration Testing
Answer: A

7. Which statement BEST describes the role of testing?
A. Testing ensures that the right version of code is delivered
B. Testing can be used to assess quality.
C. Testing shows that the software is error free.
D. Testing improves quality in itself.
Answer: B

8. Which tasks would USUALLY be performed by a test leader and which by the tester?
a. Adapt planning based on test results.
b. Create test specifications.
c. Plan tests.
d. Write or review a test strategy
A. c and d by the test leader; a and b by the tester
B. a and b by the test leader; c and d by the tester.
C. a and d by the test leader; b and c by the tester
D. a, c and d by the test leader; b by the tester.
Answer: D

9. When in the lifecycle should testing activities start?
A. As early as possible
B. After the test environment is ready
C. After the requirements have been reviewed

D. Once the code is available to test
Answer: A

10. Which one of the following is a characteristic of good testing in any lifecycle model?
A. Each test level has the same test objective.
B. There should be more testing activities than development activities.
C. Test design can only begin when development is complete.
D. Testers should begin to review documents as soon as drafts are available.
Answer: D

11. During which activity of the Fundamental Test Process do you review the test basis?
A. Evaluating exit criteria and reporting.
B. Test implementation and execution
C. Test analysis and design
D. Test planning and control
Answer: C

12. Which one of the following statements about approaches to test estimation is true?
A. A metrics-based approach is based on data gathered from previous projects; an expert-based approach uses the knowledge of the owner of the tasks or experts
B. A metrics-based approach is based on creating a work-breakdown structure first; an expert-based approach is based on input from estimation experts
C. A metrics-based approach is based on data gathered from previous projects; an expert-based approach is based on a work-breakdown structure
D. A metrics-based approach is based on an analysis of the specification documents; an expert-based approach is based on the opinion of the most experienced tester in the organization
Answer: A

13. Which ordering of the list below gives increasing levels of test independence?
a. Tests designed by a fellow-member of the design team.
b. Tests designed by a different group within the organization.
c. Tests designed by the code author.
d. Tests designed by different organization.
A. c, a, b, d.
B. d, b, a, c
C. c, a, d, b.
D. a, c, d, b.
Answer: A

14. Which of the following are structure-based techniques?
a. Decision table testing
b. Boundary value analysis
c. Multiple condition coverage
d. Use case testing
e. Decision testing

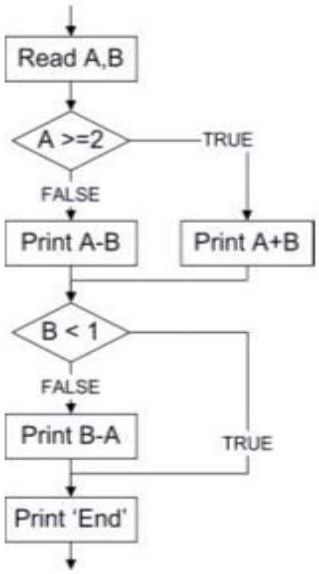
A. a and c.
B. b and d.
C. b and e.
D. c and e.
Answer: D

15. Pair the correct test design techniques (i to v) with the category of techniques (x, y and z):
i) Exploratory Testing
ii) Equivalence Partitioning
iii) Decision Testing
iv) Use Case Testing
v) Condition coverage
x) Specification-based
y) Structure-based
z) Experienced-based
A. x = i and ii; y = iii and v; z = iv.
B. x = i, ii and iv; y = v; z = iii
C. x = ii and iv; y = iii and v; z = i.
D. x = iii and iv; y = v; z = i and ii.

16. Which of the following is a MAJOR task of evaluating exit criteria and reporting?
A. Writing a test summary report for stakeholders
B. Logging the outcome of test execution
C. Repeating test activities as a result of action taken for each discrepancy.
D. Evaluating testability of the requirements and system
Answer: A

17. The digital ainbow Thermometer uses 7 colours to show the ambient temperature. Each colour spans a range of just 5, with an operating minimum and maximum of minus 5 and 30. Which of the following values is minimum and maximum of minus 5? and 30?. Which of the following values is LEAST likely to have been identified when applying the boundary value test design technique?
A. 3030?
B. 00?
C. 8?8
D. 15 15?
Answer: C

18. Given the following flow chart diagram:



What is the minimum number of test cases required for 100% statement coverage and 100% decision coverage, respectively?
A. Statement Coverage = 1, Decision Coverage = 3.
B. Statement Coverage = 2, Decision Coverage = 3.
C. Statement Coverage = 2, Decision Coverage = 2.
D. Statement Coverage = 3, Decision Coverage = 3
Answer: C

19. In which activity of the Fundamental Test Process is the test environment set up?
A. Test implementation and execution.
B. Test planning and control
C. Test analysis and design
D. Evaluating exit criteria and reporting
Answer: A

20. Which of the following statements about black box and white box techniques is correct?
A. Decision Testing, Equivalence Partitioning and Condition Coverage are all black box techniques
B. Decision Table Testing, State Transition and Use Case Testing are all black box techniques
C. Decision Testing, Equivalence Partitioning and Statement Testing are all white box techniques
D. Boundary Value Analysis, State Transition and Statement Testing are all white box techniques
Answer: B

21. Which of the following are characteristic of test management tools?
a) They support traceability of tests to source documents.
b) They provide an interface to test execution tools.

c) They help to enforce coding standards.
d) They manipulate databases and files to set up test data.
A. a and c
B. b and c
C. a and b
D. b and d
Answer: C

22. How is the scope of maintenance testing assessed?
A. Scope is related to the risk, size of the changes and size of the system under test
B. Scope is defined by the size and type of system being changed
C. Scope is defined by the size and type of system being changed
D. Scope is related to the number of system users affected by the change.
Answer: A

23. A system under development contains complex calculations and decision logic, and it is assessed as high risk because of the relative inexperience of the development team in the application domain. Which of the following would be the MOST appropriate choice of test design technique for component testing?
A. Decision testing.
B. Statement testing
C. State transition testing
D. Equivalence partitioning
Answer: A

24. Which of the following is an example of a product risk?
A. Software that does not perform its intended functions
B. Failure of a third party
C. Problems in defining the right requirements
BH0-010
5 http://www.certmagic.com
D. Skill and staff shortages
Answer: A

25. Given the following sample of pseudo code:
01 Input number of male tigers
02 Input number of female tigers
03 If male tiger > 0 and female tiger > 0 then
04 Input Do you want to breed (Yes / No)
05 If breed = No?
06 Print Keep male and female tigers apart
07 End if
08 End If
Which of the following test cases will ensure that statement 6 is executed?

A. male tiger = 1, female tiger = 1, breed = yes
B. male tiger = 1, female tiger = 1, breed = no
C. male tiger = 1, female tiger = 2, breed = yes
D. male tiger = 1, female tiger = 0, breed = no
Answer: B

26. Which of the following BEST describes a data-driven approach to the use of test execution tools?
A. Monitoring response times when the system contains a specified amount of data
B. Manipulation of databases and files to create test data
C. Using a generic script that reads test input data from a file
D. Recording test scripts and playing them back
Answer: C

27. Which statement about combinations of inputs and preconditions is true for a large system?
A. It is easy to test them all in a short time
B. It is not practically possible to test them all
C. It is not possible to test any of them
D. It is essential to test them all in order to do good testing
Answer: B

28. Given the following state table:

	On	Off	Channel 1	Channel 2	Channel >2	Stby
Standby	Live	N	N	N	N	N
Live	N	Standby	Display Channel 1	Display Channel 2	N	Standby
Display Channel 1	N	N	N	Display Channel 2	Live	Standby
Display Channel 2	N	N	Display Channel 1	N	Live	Standby

Which of the following represents an INVALID transition (N)?
A. Off from isplay Channel 1?
B. Channel 2 from Display Channel 1?
C. Stby from Live?
D. Channel 2 from Live?
Answer: A

29. Which of the following is a purpose of the review kick off activity?
A. Explain the objectives
B. Select the personnel group
C. Document results

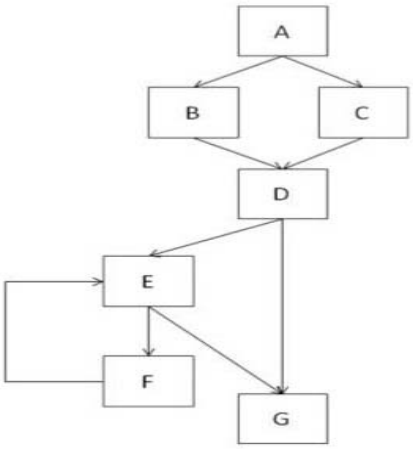
D. Define entry and exit criteria
Answer: A

30. Given the following decision table:

	Rule 1	Rule 2	Rule 3	Rule 4
Conditions				
Age	<21 yrs	21 - 29 yrs	30 – 50yrs	>50 yrs
Insurance Class	A	A or B	B, C or D	C or D
Actions				
Premium	£100	£90	£70	£70
Excess	£2,500	£2,500	£500	£1,000

Which of the following test cases and expected results is VALID?
A. 23 year old in insurance class A Premium is ?0 and excess is ?,500.
B. 51 year old in insurance class C Premium is ?0 and excess is ?00.
C. 31 year old in insurance class B Premium is ?0 and excess is ?,500.
D. 43 year old in insurance class C Premium is ?0 and excess is ?,000
Answer: A

31. The flow graph below shows the logic of a program for which 100% statement coverage and 100% decision coverage is required on exit from component testing.



The following test cases have been run:
* Test Case 1 covering path A, B, D, G
* Test Case 2 covering path A, B, D, E, F, E, F, E, F, E, G
* Test Case 3 covering path A, C, D, E, F, E, G
Which of the following statements related to coverage is correct?
A. Statement coverage is 100%; decision coverage is 100%.
B. Statement coverage is less than 100%; decision coverage is 100%.B .Statement coverage is less than 100%; decision coverage is 100%.

C. Statement coverage is 100%; decision coverage is less than 100%.C. Statement coverage is 100%; decision coverage is less than 100%.
D. Statement coverage and decision coverage are both less than 100%.D .Statement coverage and decision coverage are both less than 100%.
Answer: A

32. Four testers have each submitted an incident report in which each reported a problem with the User log-on process. User log-on is a critical component of the system. The table below describes the four defect reports submitted.

Tester ID	Incident description	Inputs/Expected and Actual results	Business Priority (1 high 2 medium 3 Low)
Tester 1	User log-on validation error	Entered User id of J SMITH and password of ABC01 but got an error message	1
Tester 2	Log-on does not meet requirement	Inputs: Entered valid user id and password Expected result - Main menu screen to be displayed Actual result: Error saying incorrect password	2
Tester 3	Log-on Password validation error	Inputs: User id = J SMITH, password = ABC01 Expected result - Main menu screen Actual result: Error message EM008 'Invalid password' This test has worked many times before	2
Tester 4	Password validation error	Inputs: User id = J SMITH, password = ABC01 Expected result - Main menu screen Actual result: EM008 'Invalid password' N.B the same inputs worked yesterday, before code release 1.2 was delivered	1

Which Tester has reported the incident MOST effectively, considering the information and priority they have supplied?
A. Tester 3
B. Tester 1
C. Tester 2
D. Tester 4
Answer: D

33. Which one of the following is true of software development models?
A. There are always four test levels in the V-model.
B. In a Rapid Application Development (RAD) project, there are four test levels for each iteration.
C. In Agile development models, the number of test levels for an iteration can vary depending on the project.
D. There must be at least four test levels for any software development model.
Answer: C

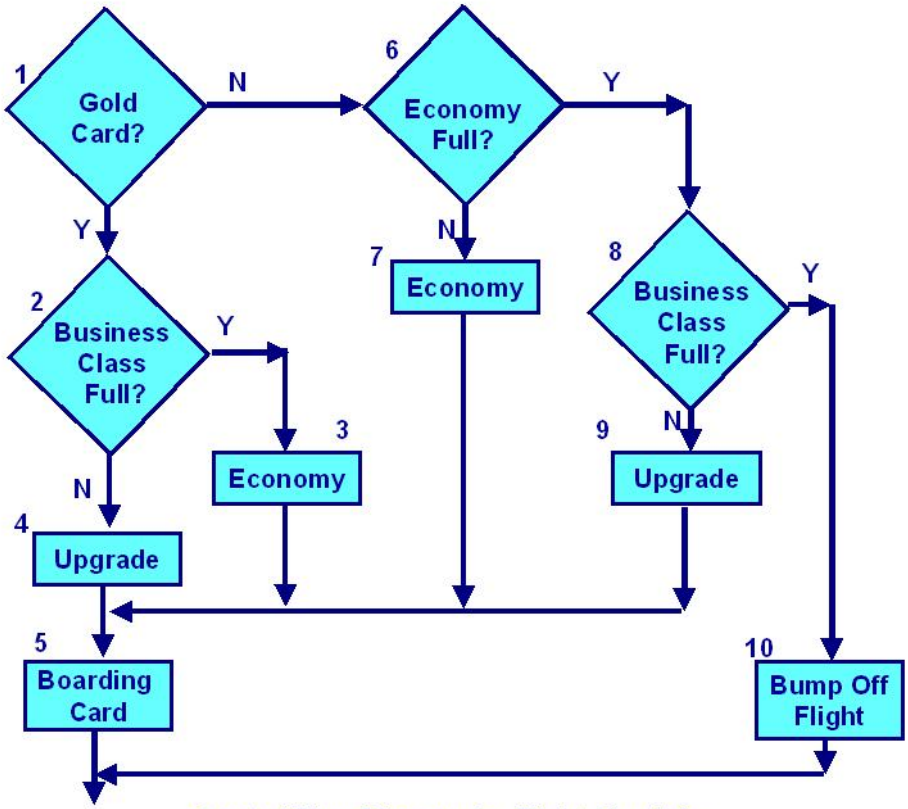
34. Which of the following activities should be performed during the selection and implementation of a testing tool?
a) Determine whether the organization existing test process needs to change.
b) Conduct a proof of concept.
c) Implement the selected tool on a project behind schedule to save time.
d) Identify coaching and mentoring requirements for the use of the selected tool
A. a, b and c.
B. b, c and d.
C. a, c and d.
D. a, b and d.
Answer: D

35. The following code segment contains a potential "divide by 0" error.
J=50
K=1
while (N>=–10) and (N<=10) loop
M [K] = J/N
K = K + 1
N = N – 1
end loop;
Which of the following is the most effective way of detecting this error?
A. Boundary testing
B. Condition testing
C. Compilation of the source code
D. Source code inspection
Answer: D

36. A test team consistently finds between 90% and 95% of the defects present in the system under test. While the test manager understands that this is a good defect-detection percentage for her test team and industry, senior management and executives remain disappointed in the test group, saying that the test team misses too many bugs. Given that the users are generally happy with the system and that the failures which have occurred have generally been low impact, which of the following testing principles is most likely to help the test manager explain to these managers and executives why some defects are likely to be missed?
A. Exhaustive testing is impossible
B. Defect clustering
C. Pesticide paradox
D. Absence-of-errors fallacy
Answer: A

37. If you are flying with an economy ticket, there is a possibility that you may get upgraded to business class, especially if you hold a gold card in the airline's frequent flier program. If you don't hold a gold card, there is a possibility that you will get 'bumped' off the flight if it is full

and you check in late. This is shown in following Figure. Note that each box (i.e. statement) has been numbered.



Control Flow Diagram for Flight Check-in

Three tests have been run:
Test 1: Gold card holder who gets upgraded to business class
Test 2: Non-gold card holder who stays in economy
Test 3: A person who is bumped from the flight
What is the statement coverage of these three tests?
A. 60%
B. 70%
C. 80%
D. 90%
Answer: C

38. Consider the following decision table for Car rental.

Conditions	**Rule 1**	**Rule 2**	**Rule 3**	**Rule 4**
Over 23?	F	T	T	T
Clean driving record?	Don't care	F	T	T

On business?	Don't care	Don't care	F	T
Actions				
Supply rental car?	F	F	T	T
Premium charge	F	F	F	T

Given this decision table, what is the expected result for the following test cases?
TC1: A 26-year-old on business but with violations or accidents on his driving record
TC2: A 62-year-old tourist with a clean driving record
A. TC1: Don't supply car; TC2: Supply car with premium charge.
B. TC1: Supply car with premium charge; TC2: Supply car with no premium charge.
C. TC1: Don't supply car; TC2: Supply car with no premium charge.
D. TC1: Supply car with premium charge; TC2: Don't supply car.
Answer: C

39. System test execution on a project is planned for eight weeks. After a week of testing, a tester suggests that the test objective stated in the test plan of 'finding as many defects as possible during system test' might be more closely met by redirecting the test effort according to which test principle?
A. Impossibility of exhaustive testing.
B. Importance of early testing.
C. The absence of errors fallacy.
D. Defect clustering
Answer: D

40. Which of the following statements is MOST OFTEN true?
A. Source-code inspections are often used in component testing.
B. Component testing searches for defects in programs that are separately testable.
C. Component testing is an important part of user acceptance testing.
D. Component testing aims to expose problems in the interactions between software and hardware components.
Answer: B

This sample paper is collated and uploaded by www.istqb.guru