1 When what is visible to end-users is a deviation from the specific or expected behavior, this is called:
a) an error
b) a fault
c) a failure
d) a defect
e) a mistake

2 Regression testing should be performed:
v) every week
w) after the software has changed
x) as often as possible
y) when the environment has changed
z) when the project manager says

a) v & w are true, x – z are false
b) w, x & y are true, v & z are false
c) w & y are true, v, x & z are false
d) w is true, v, x y and z are false
e) all of the above are true

3 IEEE 829 test plan documentation standard contains all of the following except:
a) test items
b) test deliverables
c) test tasks
d) test environment
e) test specification

4 Testing should be stopped when:
a) all the planned tests have been run
b) time has run out
c) all faults have been fixed correctly
d) both a) and c)
e) it depends on the risks for the system being tested

5 Order numbers on a stock control system can range between 10000 and 99999 inclusive. Which of the following inputs might be a result of designing tests for only valid equivalence classes and valid boundaries:
a) 1000, 5000, 99999
b) 9999, 50000, 100000
c) 10000, 50000, 99999
d) 10000, 99999
e) 9999, 10000, 50000, 99999, 10000

6 Consider the following statements about early test design:
i. early test design can prevent fault multiplication
ii. faults found during early test design are more expensive to fix
iii. early test design can find faults
iv. early test design can cause changes to the requirements
v. early test design takes more effort

a) i, iii & iv are true. Ii & v are false
b) iii is true, I, ii, iv & v are false
c) iii & iv are true. i, ii & v are false
d) i, iii, iv & v are true, ii us false
e) i & iii are true, ii, iv & v are false

7 Non-functional system testing includes:
a) testing to see where the system does not function properly
b) testing quality attributes of the system including performance and usability
c) testing a system feature using only the software required for that action
d) testing a system feature using only the software required for that function
e) testing for functions that should not exist

8 Which of the following is NOT part of configuration management:
a) status accounting of configuration items
b) auditing conformance to ISO9001
c) identification of test versions
d) record of changes to documentation over time
e) controlled library access

9 Which of the following is the main purpose of the integration strategy for integration testing in the small?
a) to ensure that all of the small modules are tested adequately
b) to ensure that the system interfaces to other systems and networks
c) to specify which modules to combine when and how many at once
d) to ensure that the integration testing can be performed by a small team
e) to specify how the software should be divided into modules

10 What is the purpose of test completion criteria in a test plan:
a) to know when a specific test has finished its execution
b) to ensure that the test case specification is complete
c) to set the criteria used in generating test inputs
d) to know when test planning is complete
e) to plan when to stop testing

11 Consider the following statements
i. an incident may be closed without being fixed
ii. incidents may not be raised against documentation
iii. the final stage of incident tracking is fixing
iv. the incident record does not include information on test environments
v. incidents should be raised when someone other than the author of the software performs the test

a) ii and v are true, I, iii and iv are false
b) i and v are true, ii, iii and iv are false
c) i, iv and v are true, ii and iii are false
d) i and ii are true, iii, iv and v are false
e) i is true, ii, iii, iv and v are false

12 Given the following code, which is true about the minimum number of test cases required for full statement and branch coverage:
Read P
Read Q
IF P+Q > 100 THEN
Print "Large"
ENDIF
If P > 50 THEN
Print "P Large"
ENDIF

a) 1 test for statement coverage, 3 for branch coverage
b) 1 test for statement coverage, 2 for branch coverage
c) 1 test for statement coverage, 1 for branch coverage
d) 2 tests for statement coverage, 3 for branch coverage
e) 2 tests for statement coverage, 2 for branch coverage

13 Given the following:

Switch PC on
Start "outlook"
IF outlook appears THEN
Send an email
Close outlook

a) 1 test for statement coverage, 1 for branch coverage
b) 1 test for statement coverage, 2 for branch coverage
c) 1 test for statement coverage. 3 for branch coverage
d) 2 tests for statement coverage, 2 for branch coverage
e) 2 tests for statement coverage, 3 for branch coverage

14 Given the following code, which is true:
IF A > B THEN
C = A – B
ELSE
C = A + B
ENDIF
Read D
IF C = D Then
Print "Error"
ENDIF

a) 1 test for statement coverage, 3 for branch coverage
b) 2 tests for statement coverage, 2 for branch coverage
c) 2 tests for statement coverage. 3 for branch coverage
d) 3 tests for statement coverage, 3 for branch coverage
e) 3 tests for statement coverage, 2 for branch coverage

15 Consider the following:
Pick up and read the newspaper
Look at what is on television
If there is a program that you are interested in watching then switch the the television on and watch the program
Otherwise
Continue reading the newspaper
If there is a crossword in the newspaper then try and complete the crossword

a) SC = 1 and DC = 1
b) SC = 1 and DC = 2
c) SC = 1 and DC = 3
d) SC = 2 and DC = 2
e) SC = 2 and DC = 3

16 The place to start if you want a (new) test tool is:
a) Attend a tool exhibition
b) Invite a vendor to give a demo
c) Analyze your needs and requirements
d) Find out what your budget would be for the tool
e) Search the internet

17 When a new testing tool is purchased, it should be used first by:
a) A small team to establish the best way to use the tool
b) Everyone who may eventually have some use for the tool
c) The independent testing team
d) The managers to see what projects it should be used in
e) The vendor contractor to write the initial scripts

18 What can static analysis NOT find?
a) The use of a variable before it has been defined

b) Unreachable ("dead") code
c) Whether the value stored in a variable is correct
d) The re-definition of a variable before it has been used
e) Array bound violations

19 Which of the following is NOT a black box technique:
a) Equivalence partitioning
b) State transition testing
c) LCSAJ
d) Syntax testing
e) Boundary value analysis

20 Beta testing is:
a) Performed by customers at their own site
b) Performed by customers at their software developer's site
c) Performed by an independent test team
d) Useful to test bespoke software
e) Performed as early as possible in the lifecycle

21 Given the following types of tool, which tools would typically be used by developers and which by an independent test team:
i. static analysis
ii. performance testing
iii. test management
iv. dynamic analysis
v. test running
vi. test data preparation

a) developers would typically use i, iv and vi; test team ii, iii and v
b) developers would typically use i and iv; test team ii, iii, v and vi
c) developers would typically use i, ii, iii and iv; test team v and vi
d) developers would typically use ii, iv and vi; test team I, ii and v
e) developers would typically use i, iii, iv and v; test team ii and vi

22 The main focus of acceptance testing is:
a) finding faults in the system
b) ensuring that the system is acceptable to all users
c) testing the system with other systems
d) testing for a business perspective
e) testing by an independent test team

23 Which of the following statements about the component testing standard is false:
a) black box design techniques all have an associated measurement technique
b) white box design techniques all have an associated measurement technique
c) cyclomatic complexity is not a test measurement technique
d) black box measurement techniques all have an associated test design technique
e) white box measurement techniques all have an associated test design technique

24 Which of the following statements is NOT true:
a) inspection is the most formal review process
b) inspections should be led by a trained leader
c) managers can perform inspections on management documents
d) inspection is appropriate even when there are no written documents
e) inspection compares documents with predecessor (source) documents

25 A typical commercial test execution tool would be able to perform all of the following EXCEPT:
a) generating expected outputs
b) replaying inputs according to a programmed script
c) comparison of expected outcomes with actual outcomes

d) recording test inputs
e) reading test values from a data file

26 The difference between re-testing and regression testing is
a) re-testing is running a test again; regression testing looks for unexpected side effects
b) re-testing looks for unexpected side effects; regression testing is repeating those tests
c) re-testing is done after faults are fixed; regression testing is done earlier
d) re-testing uses different environments, regression testing uses the same environment
e) re-testing is done by developers, regression testing is done by independent testers

27 Expected results are:
a) only important in system testing
b) only used in component testing
c) never specified in advance
d) most useful when specified in advance
e) derived from the code

28 Test managers should not:
a) report on deviations from the project plan
b) sign the system off for release
c) re-allocate resource to meet original plans
d) raise incidents on faults that they have found
e) provide information for risk analysis and quality improvement

29 Unreachable code would best be found using:
a) code reviews
b) code inspections
c) a coverage tool
d) a test management tool
e) a static analysis tool

30 A tool that supports traceability, recording of incidents or scheduling of tests is called:
a) a dynamic analysis tool
b) a test execution tool
c) a debugging tool
d) a test management tool
e) a configuration management tool

31 What information need not be included in a test incident report:
a) how to fix the fault
b) how to reproduce the fault
c) test environment details
d) severity, priority
e) the actual and expected outcomes

32 Which expression best matches the following characteristics or review processes:
1. led by author
2. Undocumented
3. No management participation
4. Led by A trained moderator or leader
5. uses entry exit criteria

s) inspection
t) peer review
u) informal review
v) walkthrough

a) s = 4, t = 3, u = 2 and 5, v = 1
b) s = 4 and 5, t = 3, u = 2, v = 1
c) s = 1 and 5, t = 3, u = 2, v = 4

d) s = 5, t = 4, u = 3, v = 1 and 2
e) s = 4 and 5, t = 1, u = 2, v = 3

33 Which of the following is NOT part of system testing:
a) business process-based testing
b) performance, load and stress testing
c) requirements-based testing
d) usability testing
e) top-down integration testing

34 What statement about expected outcomes is FALSE:
a) expected outcomes are defined by the software's behavior
b) expected outcomes are derived from a specification, not from the code
c) expected outcomes include outputs to a screen and changes to files and databases
d) expected outcomes should be predicted before a test is run
e) expected outcomes may include timing constraints such as response times

35 The standard that gives definitions of testing terms is:
a) ISO/IEC 12207
b) BS7925-1
c) BS7925-2

d) ANSI/IEEE 829
e) ANSI/IEEE 729

36 The cost of fixing a fault:
a) Is not important
b) Increases as we move the product towards live use
c) Decreases as we move the product towards live use
d) Is more expensive if found in requirements than functional design
e) Can never be determined

37 Which of the following is NOT included in the Test Plan document of the Test Documentation Standard:
a) Test items (i.e. software versions)
b) What is not to be tested
c) Test environments
d) Quality plans
e) Schedules and deadlines

38 Could reviews or inspections be considered part of testing:
a) No, because they apply to development documentation
b) No, because they are normally applied before testing
c) No, because they do not apply to the test documentation
d) Yes, because both help detect faults and improve quality
e) Yes, because testing includes all non-constructive activities

39 Which of the following is not part of performance testing:
a) Measuring response time
b) Measuring transaction rates
c) Recovery testing
d) Simulating many users
e) Generating many transactions

40 Error guessing is best used
a) As the first approach to deriving test cases
b) After more formal techniques have been applied
c) By inexperienced testers

d) After the system has gone live
e) Only by end users

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 not 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. 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

8. 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 preconditions.

d. A goal of testing is to show that the software is defect free.

9. 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 fulfill all requirements for testing that are defined in the project plan.

10. 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

11. 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

12. 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

13. 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

 14. **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

15. **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

16. **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

17. **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

18. 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

19. 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

20. 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

21. A defect management system shall keep track of the status of every defect registered and enforce the rules about changing these states. If your task is to test the status tracking, which method would be best?

a. Logic-based testing

b. Use-case-based testing

c. State transition testing

d. Systematic testing according to the V-model

22. 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

23. Why can be tester dependent on configuration management?

a. Because configuration management assures that we know the exact version of the

Test-ware 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

24. 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 objects. The test cases need to be adapted during agile testing

d. The test object and the test material

25. 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

26. 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

27. 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

28. 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

29. 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 instructions on how to correct the fault

30. 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

31. 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

32. 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

33. 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.

Set 3

1. An input field takes the year of birth between 1900 and 2004
The boundary values for testing this field are
a. 0,1900,2004,2005
b. 1900, 2004
c. 1899,1900,2004,2005
d. 1899, 1900, 1901,2003,2004,2005

2. Which one of the following are non-functional testing methods?
a. System testing
b. Usability testing
c. Performance testing
d. b & c both

3. Which of the following tools would be involved in the automation of regression test?
a. Data tester
b. Boundary tester
c. Capture/Playback
d. Output comparator.

4. Incorrect form of Logic coverage is:
a. Statement Coverage
b. Pole Coverage
c. Condition Coverage
d. Path Coverage

5. Which of the following is not a quality characteristic listed in ISO 9126 Standard?
a. Functionality
b. Usability
c. Supportability
d. Maintainability

6. To test a function, the programmer has to write a _____, which calls the function to be tested and passes it test data.
a. Stub
b. Driver
c. Proxy
d. None of the above

7. Boundary value testing
a. Is the same as equivalence partitioning tests?
b. Test boundary conditions on, below and above the edges of input and output equivalence classes
c. Tests combinations of input circumstances
d. Is used in white box testing strategy

8. Pick the best definition of quality
a. Quality is job one
b. Zero defects
c. Conformance to requirements
d. Work as designed

9. Fault Masking is
a. Error condition hiding another error condition
b. creating a test case which does not reveal a fault
c. masking a fault by developer

d. masking a fault by a tester

10. One Key reason why developers have difficulty testing their own work is:
a. Lack of technical documentation
b. Lack of test tools on the market for developers'
c. Lack of training
d. Lack of Objectivity

11. During the software development process, at what point can the test process start?
a. When the code is complete.
b. When the design is complete.
c. When the software requirements have been approved.
d. When the first code module is ready for unit testing

12. In a review meeting a moderator is a person who
a. Takes minutes of the meeting
b. Mediates between people
c. Takes telephone calls
d. Writes the documents to be reviewed

13. Acceptance test cases are based on what?
a. Requirement
b. Design
c. Code
d. Decision table

14. "How much testing is enough?"
a. This question is impossible to answer
b. This question is easy to answer
c. The answer depends on the risk for your industry, contract and special requirements
d. This answer depends on the maturity of your developers

15. A common test technique during component test is
a. Statement and branch testing
b. Usability testing
c. Security testing
d. Performance testing

16. Independent Verification & Validation is
a. done by the Developer
b. done by the Test Engineers
c. Done By Management
d. done by an Entity outside the Project's sphere of influence

17. Code Coverage is used as a measure of what?
a. Defects
b. Trends analysis
c. Test Effectiveness
d. Time Spent Testing

Set 4

1 We split testing into distinct stages primarily because:
a) Each test stage has a different purpose.
b) It is easier to manage testing in stages.
c) We can run different tests in different environments.
d) The more stages we have, the better the testing.

2 Which of the following is likely to benefit most from the use of test tools providing test capture and replay facilities?
a) Regression testing
b) Integration testing
c) System testing
d) User acceptance testing

3 Which of the following statements is NOT correct?
a) A minimal test set that achieves 100% LCSAJ coverage will also achieve 100% branch coverage.
b) A minimal test set that achieves 100% path coverage will also achieve 100% statement coverage.
c) A minimal test set that achieves 100% path coverage will generally detect more faults than one that achieves 100% statement coverage.
d) A minimal test set that achieves 100% statement coverage will generally detect more faults than one that achieves 100% branch coverage.

4 Which of the following requirements is testable?
a) The system shall be user friendly.
b) The safety-critical parts of the system shall contain 0 faults.
c) The response time shall be less than one second for the specified design load.
d) The system shall be built to be portable.

5 Analyze the following highly simplified procedure:
Ask: "What type of ticket do you require, single or return?"
IF the customer wants 'return'
Ask: "What rate, Standard or Cheap-day?"
IF the customer replies 'Cheap-day'
Say: "That will be £11:20"
ELSE
Say: "That will be £19:50"
ENDIF
ELSE
Say: "That will be £9:75"
ENDIF
Now decide the minimum number of tests that are needed to ensure that all
the questions have been asked, all combinations have occurred and all
replies given.
a) 3
b) 4
c) 5

d) 6

6 Error guessing:
a) supplements formal test design techniques.
b) Can only be used in component, integration and system testing.
c) Is only performed in user acceptance testing.
d) is not repeatable and should not be used.

7 Which of the following is NOT true of test coverage criteria?

a) Test coverage criteria can be measured in terms of items exercised by a test suite.
b) A measure of test coverage criteria is the percentage of user requirements covered.
c) A measure of test coverage criteria is the percentage of faults found.
d) Test coverage criteria are often used when specifying test completion criteria.

8 In prioritizing what to test, the most important objective is to:
a) find as many faults as possible.
b) Test high risk areas.
c) Obtain good test coverage.
d) Test whatever is easiest to test.

9 Given the following sets of test management terms (v-z), and activity descriptions (1-5), which one of the following best pairs the two sets?
v – test control
w – test monitoring
x - test estimation
y - incident management
z - configuration control

1 - calculation of required test resources
2 - maintenance of record of test results
3 - re-allocation of resources when tests overrun
4 - report on deviation from test plan
5 - tracking of anomalous test results

a) v-3,w-2,x-1,y-5,z-4
b) v-2,w-5,x-1,y-4,z-3
c) v-3,w-4,x-1,y-5,z-2
d) v-2,w-1,x-4,y-3,z-5

10 Which one of the following statements about system testing is NOT true?
a) System tests are often performed by independent teams.
b) Functional testing is used more than structural testing.
c) Faults found during system tests can be very expensive to fix.
d) End-users should be involved in system tests.

11 Which of the following is false?
a) Incidents should always be fixed.
b) An incident occurs when expected and actual results differ.
c) Incidents can be analyzed to assist in test process improvement.
d) An incident can be raised against documentation.

12 Enough testing has been performed when:
a) time runs out.
b) The required level of confidence has been achieved.
c) No more faults are found.
d) The users won't find any serious faults.

13 Which of the following is NOT true of incidents?
a) Incident resolution is the responsibility of the author of the software under test.
b) Incidents may be raised against user requirements.
c) Incidents require investigation and/or correction.
d) Incidents are raised when expected and actual results differ.

14 Which of the following is not described in a unit test standard?
a) Syntax testing
b) equivalence partitioning
c) stress testing

d) modified condition/decision coverage

15 which of the following is false?
a) In a system two different failures may have different severities.
b) A system is necessarily more reliable after debugging for the removal of a fault.
c) A fault need not affect the reliability of a system.
d) Undetected errors may lead to faults and eventually to incorrect behavior.

16 Which one of the following statements, about capture-replay tools, is NOT correct?
a) They are used to support multi-user testing.
b) They are used to capture and animate user requirements.
c) They are the most frequently purchased types of CAST tool.
d) They capture aspects of user behavior.

17 How would you estimate the amount of re-testing likely to be required?
a) Metrics from previous similar projects
b) Discussions with the development team
c) Time allocated for regression testing
d) a & b

18 Which of the following is true of the V-model?
a) It states that modules are tested against user requirements.
b) It only models the testing phase.
c) It specifies the test techniques to be used.
d) It includes the verification of designs.

19 The oracle assumption:
a) is that there is some existing system against which test output may be checked.
b) Is that the tester can routinely identify the correct outcome of a test.
c) is that the tester knows everything about the software under test.
d) Is that the tests are reviewed by experienced testers.

20 Which of the following characterizes the cost of faults?
a) They are cheapest to find in the early development phases and the most expensive to fix in the latest test phases.
b) They are easiest to find during system testing but the most expensive to fix then.
c) Faults are cheapest to find in the early development phases but the most expensive to fix then.
d) Although faults are most expensive to find during early development phases, they are cheapest to fix then.

21 Which of the following should NOT normally be an objective for a test?
a) To find faults in the software.
b) To assess whether the software is ready for release.
c) To demonstrate that the software doesn't work.
d) To prove that the software is correct.

22 Which of the following is a form of functional testing?
a) Boundary value analysis
b) Usability testing
c) Performance testing
d) Security testing

23 Which of the following would NOT normally form part of a test plan?
a) Features to be tested
b) Incident reports
c) Risks
d) Schedule

24 which of these activities provides the biggest potential cost saving from the use of CAST?
a) Test management

b) Test design
c) Test execution
d) Test planning

25 which of the following is NOT a white box technique?
a) Statement testing
b) Path testing
c) Data flow testing
d) State transition testing

26 Data flow analysis studies:
a) possible communications bottlenecks in a program.
b) The rate of change of data values as a program executes.
c) The use of data on paths through the code.
d) The intrinsic complexity of the code.

27 In a system designed to work out the tax to be paid:
An employee has £4000 of salary tax free. The next £1500 is taxed at 10%
the next £28000 is taxed at 22%
any further amount is taxed at 40%
to the nearest whole pound, which of these is a valid Boundary Value Analysis test case?
a) £1500
b) £32001
c) £33501
d) £28000

28 An important benefit of code inspections is that they:
a) enable the code to be tested before the execution environment is ready.
b) Can be performed by the person who wrote the code.
c) Can be performed by inexperienced staff.
d) Are cheap to perform.

29 Which of the following is the best source of Expected Outcomes for User Acceptance Test scripts?
a) Actual results
b) Program specification
c) User requirements
d) System specification

30 what is the main difference between a walkthrough and an inspection?
a) An inspection is lead by the author, whilst a walkthrough is lead by a trained moderator.
b) An inspection has a trained leader, whilst a walkthrough has no leader.
c) Authors are not present during inspections, whilst they are during walkthroughs.
d) A walkthrough is lead by the author, whilst an inspection is lead by a trained moderator.

31 Which one of the following describes the major benefit of verification early in the life cycle?
a) It allows the identification of changes in user requirements.
b) It facilitates timely set up of the test environment.
c) It reduces defect multiplication.
d) It allows testers to become involved early in the project.

32 Integration testing in the small:
a) Tests the individual components that have been developed.
b) Tests interactions between modules or subsystems.
c) Only uses components that form part of the live system.
d) Tests interfaces to other systems.

33 Static analysis is best described as:
a) The analysis of batch programs.

b) The reviewing of test plans.
c) The analysis of program code.
d) The use of black box testing.

34 Alpha testing is:
a) post-release testing by end user representatives at the developer's site.
b) The first testing that is performed.
c) Pre-release testing by end user representatives at the developer's site.
d) Pre-release testing by end user representatives at their sites.

35 A failure is:
a) found in the software; the result of an error.
b) Departure from specified behavior.
c) An incorrect step, process or data definition in a computer program.
d) A human action that produces an incorrect result.

36 In a system designed to work out the tax to be paid:
An employee has £4000 of salary tax free. The next £1500 is taxed at 10%
the next £28000 is taxed at 22%
any further amount is taxed at 40%
which of these groups of numbers would fall into the same equivalence class?
a) £4800; £14000; £28000
b) £5200; £5500; £28000
c) £28001; £32000; £35000
d) £5800; £28000; £32000

37 The most important thing about early test design is that it,
a) makes test preparation easier.
b) Means inspections are not required.
c) Can prevent fault multiplication.
d) Will find all faults.

38 Which of the following statements about reviews is true?
a) Reviews cannot be performed on user requirements specifications.
b) Reviews are the least effective way of testing code.
c) Reviews are unlikely to find faults in test plans.
d) Reviews should be performed on specifications, code, and test plans.

39 Test cases are designed during:
a) Test recording.
b) Test planning.
c) Test configuration.
d) Test specification.

40 A configuration management system would NOT normally provide:
a) linkage of customer requirements to version numbers.
b) Facilities to compare test results with expected results.
c) The precise differences in versions of software component source code.
d) Restricted access to the source code library.

Set 5

1. Software testing activities should start
a. as soon as the code is written
b. during the design stage
c. when the requirements have been formally documented
d. as soon as possible in the development life cycle

2.Faults found by users are due to:
a. Poor quality software
b. Poor software and poor testing
c. bad luck
d. insufficient time for testing

3.What is the main reason for testing software before releasing it?
a. to show that system will work after release
b. to decide when the software is of sufficient quality to release
c. to find as many bugs as possible before release
d. to give information for a risk based decision about release

4. Which of the following statements is not true,
a. performance testing can be done during unit testing as well as during the testing of whole system
b. The acceptance test does not necessarily include a regression test
c. Verification activities should not involve testers (reviews, inspections etc)
d. Test environments should be as similar to production environments as possible

5. When reporting faults found to developers, testers should be:
a. as polite, constructive and helpful as possible
b. firm about insisting that a bug is not a "feature" if it should be fixed
c. diplomatic, sensitive to the way they may react to criticism
d. All of the above

6.In which order should tests be run?
a. the most important tests first
b. the most difficult tests first(to allow maximum time for fixing)
c. the easiest tests first(to give initial confidence)
d. the order they are thought of

7. The later in the development life cycle a fault is discovered, the more expensive it is to fix. why?
a. the documentation is poor, so it takes longer to find out what the software is doing.
b. wages are rising
c. the fault has been built into more documentation, code, tests, etc
d. none of the above

8. Which is not true-The black box tester
a. should be able to understand a functional specification or requirements document
b. should be able to understand the source code.
c. is highly motivated to find faults
d. is creative to find the system's weaknesses

9. A test design technique is
a. a process for selecting test cases
b. a process for determining expected outputs
c. a way to measure the quality of software
d. a way to measure in a test plan what has to be done

10. Test-ware (test cases, test dataset)

a. needs configuration management just like requirements, design and code
b. should be newly constructed for each new version of the software
c. is needed only until the software is released into production or use
d. does not need to be documented and commented, as it does not form part of the released software system

11. An incident logging system
a only records defects
b is of limited value
c is a valuable source of project information during testing if it contains all incidents
d. should be used only by the test team.

12. Increasing the quality of the software, by better development methods, will affect the time needed for testing (the test phases) by:
a. reducing test time
b. no change
c. increasing test time
d. can't say

13. Coverage measurement
a. is nothing to do with testing
b. is a partial measure of test thoroughness
c. branch coverage should be mandatory for all software
d. can only be applied at unit or module testing, not at system testing

14. When should you stop testing?
a. when time for testing has run out.
b. when all planned tests have been run
c. when the test completion criteria have been met
d. when no faults have been found by the tests run

15. Which of the following is true?
a. Component testing should be black box, system testing should be white box.
b. if u find a lot of bugs in testing, you should not be very confident about the quality of software
c. the fewer bugs you find, the better your testing was
d. the more tests you run, the more bugs you will find.

16. What is the important criterion in deciding what testing technique to use?
a. how well you know a particular technique
b. the objective of the test
c. how appropriate the technique is for testing the application
d. whether there is a tool to support the technique

17. If the pseudo code below were a programming language, how many tests are required to achieve 100% statement coverage?

1. If x=3 then
2. Display_messageX;
3. If y=2 then
4. Display_messageY;
5. Else
6. Display_messageZ;
7. Else
8. Display_messageZ;

a. 1
b. 2
c. 3
d. 4

18. Using the same code example as question 17, how many tests are required to achieve 100% branch/decision coverage?
a. 1
b. 2
c. 3
d. 4

19 which of the following is NOT a type of non-functional test?
a. State-Transition
b. Usability
c. Performance
d. Security

20. Which of the following tools would you use to detect a memory leak?
a. State analysis
b. Coverage analysis
c. Dynamic analysis
d. Memory analysis

21. Which of the following is NOT a standard related to testing?
a. IEEE829
b. IEEE610
c. BS7925-1
d. BS7925-2

22.which of the following is the component test standard?
a. IEEE 829
b. IEEE 610
c. BS7925-1
d. BS7925-2

23 which of the following statements are true?
a. Faults in program specifications are the most expensive to fix.
b. Faults in code are the most expensive to fix.
c. Faults in requirements are the most expensive to fix
d. Faults in designs are the most expensive to fix.

24. Which of the following is not the integration strategy?
a. Design based
b. Big-bang
c. Bottom-up
d. Top-down

25. Which of the following is a black box design technique?
a. statement testing
b. equivalence partitioning
c. error- guessing
d. usability testing

26. A program with high Cyclo-metric complexity is almost likely to be:
a. Large
b. Small
c. Difficult to write
d. Difficult to test

27. Which of the following is a static test?
a. code inspection
b. coverage analysis
c. usability assessment

d. installation test

28. Which of the following is the odd one out?
a. white box
b. glass box
c. structural
d. functional

29. A program validates a numeric field as follows:
values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected

which of the following input values cover all of the equivalence partitions?
a. 10,11,21
b. 3,20,21
c. 3,10,22
d. 10,21,22

30. Using the same specifications as question 29, which of the following covers the MOST boundary values?
a. 9,10,11,22
b. 9,10,21,22
c. 10,11,21,22
d. 10,11,20,21

Set 6

1. COTS is known as
A. Commercial off the shelf software
B. Compliance of the software
C. Change control of the software
D. Capable off the shelf software

2. From the below given choices, which one is the 'Confidence testing'
A. Performance Testing
B. System testing
C. Smoke testing
D. Regression testing

3. 'Defect Density' calculated in terms of
A. The number of defects identified in a component or system divided by the size of the component or system

B. The number of defects found by a test phase divided by the number found by that test phase and any other means after wards
C. The number of defects identified in the component or system divided by the number of defects found in a test phase,
D. The number of defects found by a test phase divided by the number found by the size of the system,

4. 'Be bugging' is known as
A. Preventing the defects by inspection
B. Fixing the defects by debugging
C. Adding known defects by seeding
D. process of fixing the defects by the tester

5. Expert based test estimation is also known as
A. Narrow band Delphi
B. Wide band Delphi
C. Bespoke Delphi
D. Robust Delphi

6. When testing a grade calculation system, a tester determines that all scores from 90 to 100 will yield a grade of A, but scores below 90 will not. This analysis is known as:

A. Equivalence partitioning
B. Boundary value analysis
C. Decision table
D. Hybrid analysis

7. All of the following might be done during unit testing except

A. Desk check
B. Manual support testing
C. Walkthrough
D. Compiler based testing

8. Which of the following characteristics is primarily associated with software reusability?

A. The extent to which the software can be used in other applications
B. The extent to which the software can be used by many different users,

C. The capability of the software to be moved to a different platform,
D. The capability of the system to be coupled with another system

9. Which of the following software change management activities is most vital to assessing the impact of proposed software modifications?
A. Baseline identification

B. Configuration auditing
C. Change control

D. Version control

10. Which of the following statements is true about a software verification and validation program?

I. It strives to ensure that quality is built into software.
II. It provides management with insights into the state of a software project.
III. It ensures that alpha, beta, and system tests are performed.
IV. It is executed in parallel with software development activities.

A. I, II&III

B.II, III&IV

C.I, II&IV

D.I, III&IV

 11. Which of the following is a requirement of an effective software environment?

I. Ease of use
II. Capacity for incremental implementation,
III. Capability of evolving with the needs of a project,
IV. Inclusion of advanced tools

A.I, II &III

B.I, II &IV

C.II, III&IV

D.I, III&IV

12. A project manager has been transferred to a major software development project that is in the implementation phase. The highest priority for this project manager should be to
A. Establish a relationship with the customer
B. Learn the project objectives and the existing project plan
C. Modify the project' s organizational structure to meet the manager' s management style
D. Ensure that the project proceeds at its current pace

13. Which of the following functions is typically supported by a software quality information system?
I. Record keeping
II. System design
III. Evaluation scheduling
IV. Error reporting

A.I, II&III

B.II, III &IV

C.I, III &IV

D.I, II & IV

14. During the testing of a module tester 'X' finds a bug and assigned it to developer. But developer rejects the same, saying that it's not a bug. What 'X' should do?

A. Report the issue to the test manager and try to settle with the developer.
B. Retest the module and confirm the bug
C. Assign the same bug to another developer
D. Send to the detailed information of the bug encountered and check the reproducibility

15. The primary goal of comparing a user manual with the actual behavior of the running program during system testing is to

A. Find bugs in the program
B. Check the technical accuracy of the document
C. Ensure the ease of use of the document
D. Ensure that the program is the latest version

16. A type of integration testing in which software elements, hardware elements, or both are combined all at once into a component or an overall system, rather than in stages.
A. System Testing

B. Big-Bang Testing
C. Integration Testing

D. Unit Testing

17. Which technique can be used to achieve input and output coverage? It can be applied to human input, input via interfaces to a system, or interface parameters in integration testing.
A. Error Guessing

B. Boundary Value Analysis
C. Decision Table testing

D. Equivalence partitioning

18. There is one application, which runs on a single terminal. There is another application that works on multiple terminals. What are the test techniques you will use on the second application that you would not do on the first application?

A. Integrity, Response time

B. Concurrency test, Scalability
C. Update & Rollback, Response time

D. Concurrency test, Integrity

19. You are the test manager and you are about the start the system testing. The developer team says that due to change in requirements they will be able to deliver the system to you

for testing 5 working days after the due date. You can not change the resources(work hours, test tools, etc.) What steps you will take to be able to finish the testing in time. (

A. Tell to the development team to deliver the system in time so that testing activity will be finish in time.
B. Extend the testing plan, so that you can accommodate the slip going to occur
C. Rank the functionality as per risk and concentrate more on critical functionality testing
D. Add more resources so that the slippage should be avoided

20. Item transmittal report is also known as

A. Incident report

B. Release note
C. Review report

D. Audit report

21. Testing of software used to convert data from existing systems for use in replacement systems
A. Data driven testing

B. Migration testing
C. Configuration testing

D. Back to back testing

22. Big bang approach is related to

A. Regression testing

B. Inter system testing
C. Re-testing

D. Integration testing

23. "The tracing of requirements for a test level through the layers of a test documentation" done by

A. Horizontal traceability

B. Depth traceability
C. Vertical traceability

D. Horizontal & Vertical traceability

24. A test harness is a
A. A high level document describing the principles, approach and major objectives of the organization regarding testing
B. A distance set of test activities collected into a manageable phase of a project
C. A test environment comprised of stubs and drives needed to conduct a test
D. A set of several test cases for a component or system under test

25. 'Entry criteria' should address questions such as

I. Are the necessary documentation, design and requirements information available that will allow testers to operate the system and judge correct behavior.
II. Is the test environment-lab, hardware, software and system administration support ready?

III. Those conditions and situations that must prevail in the testing process to allow testing to continue effectively and efficiently.
IV. Are the supporting utilities, accessories and prerequisites available in forms that testers can use

A. I, II and IV

B. I, II and III

C. I, II, III and IV

D. II, III and IV.

26. "This life cycle model is basically driven by schedule and budget risks" This statement is best suited for
A. Water fall model

B. Spiral model
C. Incremental model

D. V-Model

Set 7

1. _____ Testing will be performed by the people at client own locations
    A. Alpha testing
    B. Field testing
    C. Performance testing
    D. System testing

2. System testing should investigate
    A. Non-functional requirements only not Functional requirements
    B. Functional requirements only not non-functional requirements
    C. Non-functional requirements and Functional requirements
    D. Non-functional requirements or Functional requirements

3. Which is the non-functional testing
    A. Performance testing
    B. Unit testing
    C. Regression testing
    D. Sanity testing

4. Who is responsible for document all the issues, problems and open point that were identified during the review meeting
    A. Moderator
    B. Scribe
    C. Reviewers
    D. Author

5. What is the main purpose of Informal review?
    A. Inexpensive way to get some benefit
    B. Find defects
    C. Learning, gaining understanding, affect finding
    D. Discuss, make decisions, and solve technical problems.

6. Purpose of test design technique is
    A. Identifying test conditions only, not Identifying test cases
    B. Not Identifying test conditions, Identifying test cases only
    C. Identifying test conditions and Identifying test cases
    D. Identifying test conditions or Identifying test cases

7. _____ technique can be used to achieve input and output coverage
    A. Boundary value analysis
    B. Equivalence partitioning
    C. Decision table testing
    D. State transition testing

8. Use cases can be performed to test
    A. Performance testing
    B. Unit testing
    C. Business scenarios
    D. Static testing.

9. _____ testing is performed at the developing organization's site
    A. Unit testing
    B. Regression testing
    C. Alpha testing
    D. Integration testing

10. The purpose of exit criteria is
    A. Define when to stop testing

B. End of test level
C. When a set of tests has achieved a specific pre-condition
D. All of the above

11. Which is not the project risk?
    A. Supplier issues
    B. Organization factors
    C. Technical issues
    D. Error-prone software delivered

12. Poor software characteristics are
    A. Only Project risks
    B. Only Product risks
    C. Project risks and Product risks
    D. Project risks or Product risks

13. _____ and _____ are used within individual workbenches to produce the right output products.
    A. Tools and techniques
    B. Procedures and standards
    C. Processes and walkthroughs
    D. Reviews and update

14. The software engineer's role in tool selection is
    A. To identify, evaluate, and rank tools, and recommend tools to management
    B. To determine what kind of tool is needed, then find it and buy it
    C. To initiate the tool search and present a case to management
    D. To identify, evaluate and select the tools

15. A _____ is the step-by-step method followed to ensure that standards are met
    A. SDLC
    B. Project Plan
    C. Policy
    D. Procedure

16. Which of the following is the standard for the Software product quality?
    A. ISO 1926
    B. ISO 829
    C. ISO 1012
    D. ISO 1028

17. Which is not the testing objective?
    A. Finding defects
    B. Gaining confidence about the level of quality and providing information
    C. Preventing defects.
    D. Debugging defects

18. Bug life cycle
    A. Open, Assigned, Fixed, Closed
    B. Open, Fixed, Assigned, Closed
    C. Assigned, Open, Closed, Fixed
    D. Assigned, Open, Fixed, Closed

19. Which is not the software characteristic?
    A. Reliability
    B. Usability
    C. Scalability

D. Maintainability

20. Which is not a testing principle?
A. Early testing
B. Defect clustering
C. Pesticide paradox
D. Exhaustive testing

21. 'X' has given a data on a person age, which should be between 1 to 99. Using BVA which is the appropriate one
A. 0, 1, 2, 99
B. 1, 99, 100, 98
C. 0, 1, 99, 100
D. −1, 0, 1, 99

22. Which is not the fundamental test process?
A. Planning and control
B. Test closure activities
C. Analysis and design
D. None

23. Which is not a Component testing?
A. Check the memory leaks
B. Check the robustness
C. Check the branch coverage
D. Check the decision tables

24. PDCA is known as
A. Plan, Do, Check, Act
B. Plan, Do, Correct, Act
C. Plan, Debug, Check, Act
D. Plan, Do, Check, Accept

25. Contract and regulation testing is a part of
A. System testing
B. Acceptance testing
C. Integration testing
D. Smoke testing

26. Which is not a black box testing technique?
A. Equivalence partition
B. Decision tables
C. Transaction diagrams
D. Decision testing

27. Arc testing is known as
A. Branch testing
B. Agile testing
C. Beta testing
D. Ad-hoc testing

28. A software model that can't be used in functional testing
A. Process flow model
B. State transaction model
C. Menu structure model
D. Plain language specification model

29. Find the mismatch
A. Test data preparation tools – Manipulate Data bases
B. Test design tools – Generate test inputs

C. Requirement management tools – Enables individual tests to be traceable
D. Configuration management tools – Check for consistence

30. The principle of Cyclomatic complexity, considering L as edges or links, N as nodes, P as independent paths
A. L-N +2P
B. N-L +2P
C. N-L +P
D. N-L +P

31. FPA is used to
A. To measure the functional requirements of the project
B. To measure the size of the functionality of an Information system
C. To measure the functional testing effort
D. To measure the functional flow

32. Which is not a test Oracle
A. The existing system (For a bench mark)
B. The code
C. Individual's knowledge
D. User manual

33. Find the correct flow of the phases of a formal review
A. Planning, Review meeting, Rework, Kick off
B. Planning, Individual preparation, Kick off, Rework
C. Planning, Review meeting, Rework, Follow up
D. Planning, Individual preparation, Follow up, Kick off

34. Stochastic testing using statistical information or operational profiles uses the following method
A. Heuristic testing approach
B. Methodical testing approach
C. Model based testing approach
D. Process or standard compliant testing approach

35. A project that is in the implementation phase is six weeks behind schedule. The delivery date for the product is four months away. The project is not allowed to slip the delivery date or compromise on the quality standards established for this product. Which of the following actions would bring this project back on schedule?
A. Eliminate some of the requirements that have not yet been implemented.
B. Add more engineers to the project to make up for lost work.
C. Ask the current developers to work overtime until the lost work is recovered.
D. Hire more software quality assurance personnel.

36. One person has been dominating the current software process improvement meeting. Which of the following techniques should the facilitator use to bring other team members into the discussion?
A. Confront the person and ask that other team members be allowed to express their opinions.
B. Wait for the person to pause, acknowledge the person's opinion, and ask for someone else's opinion.
C. Switch the topic to an issue about which the person does not have a strong opinion.
D. Express an opinion that differs from the person's opinion in order to encourage others to express their ideas.

37. Maintenance releases and technical assistance centers are examples of which of the following costs of quality?
A. External failure
B. Internal failure
C. Appraisal
D. Prevention