

# **Foundation Certificate in Software Testing Practice Exam**

**Time allowed: 1 hour**

**40 QUESTIONS**

**NOTE: Only one answer per question**

Q1

**A deviation from the specified or expected behaviour that is visible to end-users is called:**

- a) an error
- b) a fault
- c) a failure
- d) a defect

Q2

**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, y & 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 & z are false

Q3

**IEEE 829 test plan documentation standard contains all of the following except**

- a) test items
- b) test deliverables
- c) test tasks
- d) test specifications

Q4

**When should testing be stopped?**

- a) when all the planned tests have been run
- b) when time has run out
- c) when all faults have been fixed correctly
- d) it depends on the risks for the system being tested

Q5

**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, 50000, 99999
- b) 9999, 50000, 100000
- c) 10000, 50000, 99999
- d) 10000, 99999, 100000

Q6	<p><b>Consider the following statements about early test design:</b></p> <ul style="list-style-type: none"> <li>i. early test design can prevent fault multiplication</li> <li>ii. faults found during early test design are more expensive to fix</li> <li>iii. early test design can find faults</li> <li>iv. early test design can cause changes to the requirements</li> <li>v. early test design normally takes more effort</li> </ul> <ul style="list-style-type: none"> <li>a) i, iii &amp; iv are true; ii &amp; v are false</li> <li>b) iii &amp; iv are true; i, ii &amp; v are false</li> <li>c) i, iii, iv &amp; v are true; ii is false</li> <li>d) i &amp; ii are true; iii, iv &amp; v are false</li> </ul>
Q7	<p><b>Non-functional system testing includes:</b></p> <ul style="list-style-type: none"> <li>a) testing to see where the system does not function correctly</li> <li>b) testing quality attributes of the system including performance and usability</li> <li>c) testing a system function using only the software required for that function</li> <li>d) testing for functions that should not exist</li> </ul>
Q8	<p><b>Which of the following is NOT part of configuration management?</b></p> <ul style="list-style-type: none"> <li>a) auditing conformance to ISO 9000</li> <li>b) status accounting of configuration items</li> <li>c) identification of test versions</li> <li>d) controlled library access</li> </ul>
Q9	<p><b>Which of the following is the main purpose of the integration strategy for integration testing in the small?</b></p> <ul style="list-style-type: none"> <li>a) to ensure that all of the small modules are tested adequately</li> <li>b) to ensure that the system interfaces to other systems and networks</li> <li>c) to specify which modules to combine when, and how many at once</li> <li>d) to specify how the software should be divided into modules</li> </ul>
Q10	<p><b>What is the purpose of a test completion criterion?</b></p> <ul style="list-style-type: none"> <li>a) to know when a specific test has finished its execution</li> <li>b) to ensure that the test case specification is complete</li> <li>c) to set the criteria used in generating test inputs</li> <li>d) to determine when to stop testing</li> </ul>

Q11	<p><b>Consider the following statements:</b></p> <ul style="list-style-type: none"> <li>i. an incident may be closed without being fixed.</li> <li>ii. incidents may not be raised against documentation.</li> <li>iii. the final stage of incident tracking is fixing.</li> <li>iv. the incident record does not include information on test environments.</li> </ul> <ul style="list-style-type: none"> <li>a) ii is true, i, iii and iv are false</li> <li>b) i is true, ii, iii and iv are false</li> <li>c) i and iv are true, ii and iii are false</li> <li>d) i and ii are true, iii and iv are false</li> </ul>
Q12	<p><b>Given the following code, which statement is true about the minimum number of test cases required for full statement and branch coverage?</b></p> <pre> Read p Read q IF p+q &gt; 100 THEN     Print "Large" ENDIF IF p &gt; 50 THEN     Print "p Large" ENDIF </pre> <ul style="list-style-type: none"> <li>a) 1 test for statement coverage, 3 for branch coverage</li> <li>b) 1 test for statement coverage, 2 for branch coverage</li> <li>c) 1 test for statement coverage, 1 for branch coverage</li> <li>d) 2 tests for statement coverage, 2 for branch coverage</li> </ul>
Q13	<p><b>Consider the following statements:</b></p> <ul style="list-style-type: none"> <li>i. 100% statement coverage guarantees 100% branch coverage.</li> <li>ii. 100% branch coverage guarantees 100% statement coverage.</li> <li>iii. 100% branch coverage guarantees 100% decision coverage.</li> <li>iv. 100% decision coverage guarantees 100% branch coverage.</li> <li>v. 100% statement coverage guarantees 100% decision coverage.</li> </ul> <ul style="list-style-type: none"> <li>a) ii is True; i, iii, iv &amp; v are False</li> <li>b) i &amp; v are True; ii, iii &amp; iv are False</li> <li>c) ii &amp; iii are True; i, iv &amp; v are False</li> <li>d) ii, iii &amp; iv are True; i &amp; v are False</li> </ul>
Q14	<p><b>Functional system testing is:</b></p> <ul style="list-style-type: none"> <li>a) testing that the system functions with other systems</li> <li>b) testing that the components that comprise the system function together</li> <li>c) testing the end to end functionality of the system as a whole</li> <li>d) testing the system performs functions within specified response times</li> </ul>

Q15	<b>Incidents would not be raised against:</b> <ul style="list-style-type: none"> <li>a) requirements</li> <li>b) documentation</li> <li>c) test cases</li> <li>d) improvements suggested by users</li> </ul>
Q16	<b>Which of the following items would not come under Configuration Management?</b> <ul style="list-style-type: none"> <li>a) operating systems</li> <li>b) test documentation</li> <li>c) live data</li> <li>d) user requirement documents</li> </ul>
Q17	<b>Maintenance testing is:</b> <ul style="list-style-type: none"> <li>a) updating tests when the software has changed</li> <li>b) testing a released system that has been changed</li> <li>c) testing by users to ensure that the system meets a business need</li> <li>d) testing to maintain business advantage</li> </ul>
Q18	<b>What can static analysis NOT find?</b> <ul style="list-style-type: none"> <li>a) the use of a variable before it has been defined</li> <li>b) unreachable ("dead") code</li> <li>c) memory leaks</li> <li>d) array bound violations</li> </ul>
Q19	<b>Which of the following techniques is NOT a black box technique?</b> <ul style="list-style-type: none"> <li>a) state transition testing</li> <li>b) LCSAJ</li> <li>c) syntax testing</li> <li>d) boundary value analysis</li> </ul>
Q20	<b>Beta testing is:</b> <ul style="list-style-type: none"> <li>a) performed by customers at their own site</li> <li>b) performed by customers at the software developer's site</li> <li>c) performed by an Independent Test Team</li> <li>d) performed as early as possible in the lifecycle</li> </ul>

Q21	<p><b>Given the following types of tool, which tools would typically be used by developers, and which by an independent system test team?</b></p> <ul style="list-style-type: none"> <li>i. static analysis</li> <li>ii. performance testing</li> <li>iii. test management</li> <li>iv. dynamic analysis</li> </ul> <p>a) developers would typically use i and iv; test team ii and iii  b) developers would typically use i and iii; test team ii and iv  c) developers would typically use ii and iv; test team i and iii  d) developers would typically use i, iii and iv; test team ii</p>
Q22	<p><b>The main focus of acceptance testing is:</b></p> <p>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 from a business perspective</p>
Q23	<p><b>Which of the following statements about component testing is FALSE?</b></p> <p>a) black box test design techniques all have an associated test measurement technique  b) white box test design techniques all have an associated test measurement technique  c) cyclomatic complexity is not a test measurement technique  d) black box test measurement techniques all have an associated test design technique</p>
Q24	<p><b>Which of the following statements is NOT true?</b></p> <p>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</p>
Q25	<p><b>A typical commercial test execution tool would be able to perform all of the following, EXCEPT:</b></p> <p>a) calculating expected outputs  b) comparison of expected outcomes with actual outcomes  c) recording test inputs  d) reading test values from a data file</p>

Q26	<p><b>The difference between re-testing and regression testing is:</b></p> <ul style="list-style-type: none"> <li>a) re-testing ensures the original fault has been removed; regression testing looks for unexpected side-effects</li> <li>b) re-testing looks for unexpected side-effects; regression testing ensures the original fault has been removed</li> <li>c) re-testing is done after faults are fixed; regression testing is done earlier</li> <li>d) re-testing is done by developers; regression testing is done by independent testers</li> </ul>
Q27	<p><b>Expected results are:</b></p> <ul style="list-style-type: none"> <li>a) only important in system testing</li> <li>b) only used in component testing</li> <li>c) most useful when specified in advance</li> <li>d) derived from the code</li> </ul>
Q28	<p><b>What type of review requires formal entry and exit criteria, including metrics:</b></p> <ul style="list-style-type: none"> <li>a) walkthrough</li> <li>b) inspection</li> <li>c) management review</li> <li>d) post project review</li> </ul>
Q29	<p><b>Which of the following uses Impact Analysis most?</b></p> <ul style="list-style-type: none"> <li>a) component testing</li> <li>b) non-functional system testing</li> <li>c) user acceptance testing</li> <li>d) maintenance testing</li> </ul>
Q30	<p><b>What is NOT included in typical costs for an inspection process?</b></p> <ul style="list-style-type: none"> <li>a) setting up forms and databases</li> <li>b) analysing metrics and improving processes</li> <li>c) writing the documents to be inspected</li> <li>d) time spent on the document outside the meeting</li> </ul>
Q31	<p><b>Which of the following is NOT a reasonable test objective:</b></p> <ul style="list-style-type: none"> <li>a) to find faults in the software</li> <li>b) to prove that the software has no faults</li> <li>c) to give confidence in the software</li> <li>d) to find performance problems</li> </ul>

Q32	<p><b>Which expression best matches the following characteristics of the review processes:</b></p> <ol style="list-style-type: none"> <li>1. led by the author</li> <li>2. undocumented</li> <li>3. no management participation</li> <li>4. led by a moderator or leader</li> <li>5. uses entry and exit criteria</li> </ol> <p>s) inspection t) peer review u) informal review v) walkthrough</p> <p>a) s = 4 and 5, t = 3, u = 2, v = 1 b) s = 4, t = 3, u = 2 and 5, v = 1 c) s = 1 and 5, t = 3, u = 2, v = 4 d) s = 4 and 5, t = 1, u = 2, v = 3</p>
Q33	<p><b>Which of the following is NOT part of system testing?</b></p> <p>a) business process-based testing b) performance, load and stress testing c) usability testing d) top-down integration testing</p>
Q34	<p><b>Which statement about expected outcomes is FALSE?</b></p> <p>a) expected outcomes are defined by the software's behaviour b) expected outcomes are derived from a specification, not from the code c) expected outcomes should be predicted before a test is run d) expected outcomes may include timing constraints such as response times</p>
Q35	<p><b>The standard that gives definitions of testing terms is:</b></p> <p>a) ISO/IEC 12207 b) BS 7925-1 c) ANSI/IEEE 829 d) ANSI/IEEE 729</p>
Q36	<p><b>The cost of fixing a fault:</b></p> <p>a) is not important b) increases the later a fault is found c) decreases the later a fault is found d) can never be determined</p>



Q37	<p><b>Which of the following is NOT included in the Test Plan document of the Test Documentation Standard?</b></p> <ul style="list-style-type: none"> <li>a) what is not to be tested</li> <li>b) test environment properties</li> <li>c) quality plans</li> <li>d) schedules and deadlines</li> </ul>
Q38	<p><b>Could reviews or inspections be considered part of testing?</b></p> <ul style="list-style-type: none"> <li>a) no, because they apply to development documentation</li> <li>b) no, because they are normally applied before testing</li> <li>c) yes, because both help detect faults and improve quality</li> <li>d) yes, because testing includes all non-constructive activities</li> </ul>
Q39	<p><b>Which of the following is not part of performance testing?</b></p> <ul style="list-style-type: none"> <li>a) measuring response times</li> <li>b) recovery testing</li> <li>c) simulating many users</li> <li>d) generating many transactions</li> </ul>
Q40	<p><b>Error guessing is best used:</b></p> <ul style="list-style-type: none"> <li>a) after more formal techniques have been applied</li> <li>b) as the first approach to deriving test cases</li> <li>c) by inexperienced testers</li> <li>d) after the system has gone live</li> </ul>

Self Marking Tick Sheet	
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Question number	Correct answer
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