UKTB CTFL Practice Exam Commentary
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Question One K1 LO 4.2 Correct Answer C

This is a K1 question testing recall of which test case design techniques are white box (structure-based) and which are black box (specification-based) as defined in Sections 4.3 and 4.4 of the syllabus.

Use case testing (option A), state transition testing (option B), and equivalence partitioning (option D) are all black box techniques. Decision testing (option C) is a white box technique, so C is the correct answer.

Question Two K2 LO 1.1.4 Correct Answer C

Option A includes 'detecting and removing all the defects', which is an unreasonable expectation and is generally infeasible. The second part of this option 'ensuring that all tests adhere to the quality standards set for the project' is a reasonable expectation but that, on its own, does not contribute to the quality of the delivered code. This option is incorrect.

Option B includes 'measuring reliability', which is reasonable, but it also includes 'ensuring that it is always above 99.99%'. Measuring achievement of a level of reliability defined in the requirements would be a contribution to quality, but the question arbitrarily defines a reliability requirement of 99.99%, so this is incorrect.

Option C 'By identifying root causes of defects from past projects and using the lessons learned to improve processes and thus help to reduce the defect count' paraphrases a statement made in Section 1.1.4 of the syllabus, where it is identified as an aspect of quality assurance. This is a correct response.

Option D 'By detecting all deviations from coding good practice and ensuring that these are corrected' is a reasonable aim for quality assurance but software constructed according to coding good practice may still contain defects, so this is an incorrect option.

Question Three K2 LO 5.2.4 Correct Answer A

This is a K2 question exploring the relationship between test planning and test execution as defined in Section 5.2 of the syllabus.

Option A correctly identifies that test planning sets the level of detail in test procedures for test execution.

Option B incorrectly states that test planning does not assign test resources.

Option C incorrectly states that test planning does not schedule test execution.

Option D correctly states that test planning assigns resources but incorrectly states that it does not schedule test execution.

Question Four K2 LO 2.2.1 Correct Answer A

This is a K2 question that requires candidates to be able to correctly identify the test basis for Acceptance Testing as defined in Section 2.2.4 of the syllabus.

There are 5 statements from which the candidate must select the correct combination. Each statement identifies a possible component of the test basis

Statement a, system design, is not a component of the Acceptance Testing test basis

Statement b, system configuration is not a component of the Acceptance Testing test basis.

Statement c, risk analysis reports are a component of the Acceptance Testing test basis.

Statement d, system requirements are a component of the Acceptance Testing test basis.

Statement e, Business use cases are a component of the Acceptance Testing test basis.

Items c, d and e are correct and the option that includes these 3 components is option A, so this is the correct answer.

Note that even if a candidate was unsure about one component, say risk analysis reports, it would still be possible to eliminate option C if they were sure of the other two components.

Question Five K1 LO 1.2.1 Correct Answer C

This is a question requiring recall of the objectives of testing as defined in Section 1.2 of the syllabus.

Option A refers to the activity of debugging, which is done by developers.

Option B refers to a project management activity.

Option C is a valid objective of testing as defined in Section 1.2 of the syllabus.

Option D is not a feasible objective because it is not possible to confirm that no further defects are present.

Question Six Five K3 LO 5.6.2 Correct Answer D

This is a K3 question testing candidates' ability to write an incident report as described in Section 5.6 of the syllabus.

The question stem provides some details of a test failure scenario from which the incident report is to be generated.

Option A is an incomplete incident report because it omits important details such as the fact that the validation screen does not accept future dated transactions.

Option B incorrectly identifies the end of day process as failing. The failure of the end of day process was due to the transaction validation process failing to report a future dated transaction. The problem was in the transaction validation process.

Option C incorrectly reports that the failure is not reproducible. It also reports that the end of day process has run successfully but does not point out that the screen validation should not allow future dated transactions to reach the end of day processing. So the failure is incorrectly reported as an intermittent failure.

Option D correctly identifies the failure of the EOD 004 test script but does not assign the failure to end of day processing; it also identifies the fact that validation of transactions should not allow future dated transactions into end of day processing (including the specification reference) and includes a database query showing that that transaction was future dated. So the failure is correctly reported as a failure of the end of day script to complete, gives the reason why, and provides evidence. This is clearly the best option.

Question Seven K2 LO 1.2.2 Correct Answer D

This is a K2 question that requires an understanding of the objectives of Acceptance Testing. It requires the candidate to select which of 5 possible statements is valid.

The statements are labeled a – e

Statement a 'Finding defects – both in software and manuals' is a valid objective of testing but not at the acceptance stage because we expect to find few, if any defects at this stage and the main objective is to confirm that the system has met requirements.

Statement b 'Establish confidence in the system' is exactly what acceptance testing is about so it is a key objective.

Statement c 'Deal with incomplete/undocumented requirements' is inappropriate at acceptance testing because acceptance testing is concerned with testing against requirements; it would therefore be inappropriate to be dealing with incomplete requirements at that stage.

Statement d 'Ensuring that all related systems interact successfully' is an objective of systems integration testing, which may happen before or after acceptance testing but is not an objective of acceptance testing.

Statement e 'Assessing readiness for deployment and use' is a standard objective of acceptance testing.

Only statements b and e are valid objectives of acceptance testing and this aligns with option D.

Question Eight K2 LO 1.2.3 Correct answer A

This is a K2 question that requires candidates to be able to differentiate between debugging and testing as defined in Section 1.2 of the syllabus.

Option A correctly identifies the role of testers as identifying defects and confirming correction after defects have been cleared.   Developers locate and correct defects.

Option B incorrectly assigns identification of defects and confirmation of correction to developers and location of defects to testers.

Option C incorrectly assigns location of defects to testers and confirmation of correction to developers.

Option D incorrectly assigns identifying defects to developers.

Question Nine K1 LO 1.4.1 Correct answer C

This is a test of recall of the activities of the fundamental test process.

Option A incorrectly assigns 'Verify the test process environment set up is correct' to the Planning and Control activity; it belongs in the Test Implementation and Execution activity.

Option B incorrectly assigns 'Verify the test process environment set up is correct' to Analysis and Design; it belongs in the Test Implementation and Execution activity.

Option C correctly assigns 'Verify the test process environment set up is correct' to the Implementation and Execution activity.

Option D incorrectly assigns 'Verify the test process environment set up is correct' to Evaluating Exit Criteria and Reporting activity; it belongs in the Test Implementation and Execution activity.

Question Ten K1 LO 1.5.1 Correct Answer A

This question requires recall of the characteristics that promote effective software testing as defined in Section 1.5 of the syllabus.

Option A correctly identifies independence from the development process as a key characteristic.

Option B incorrectly associates a belief that programmers always make mistakes with effectiveness of software testing. The belief that everyone makes mistakes is a reason for testing but not a characteristic of what makes testing effective.

Option C incorrectly suggests that knowledge of the number of defects typically found in a program promotes effective testing. Knowledge of the typical number of defects may be helpful in planning test resources and activities but it does not in itself promote effectiveness.

Option D incorrectly suggests that confidence that the next stage will find defects missed at this stage promotes effectiveness; in fact the reverse is true because the next stage will have different objectives, e.g. component testing should find defects in components, while the next phase, integration testing, will focus on interactions between components and not their internal functionality.

Question Eleven K1 LO 3.3 Correct Answer B

This is a K1 question requiring recall the kinds of defects that can be identified by static analysis tools as defined in Section 3.3 of the syllabus.

Option A is incorrect because error handling is a functional aspect of the software and would need a functional approach to testing.

Option B is correct because potential infinite loops are determinable by examining the code.

Option C is incorrect because memory leaks can only be identified by exercising the software.

Option D is incorrect because variable are only set at run time, so the value that a variable is set to at run time cannot be determined in a static test.

For candidates that are unsure, the word 'potential' in option B is a clue that might help to narrow down the correct answer.

Question Twelve K1 LO 2.1.2 Correct Answer C

This is a question requiring recall of the nature of software development models.

Option A incorrectly claims that the 4-stage V model is the best choice for any project. This is incorrect in that the V model is not always appropriate and where it is appropriate it may have more or less than 4 stages.

Option B claims that the agile model is usually most appropriate for short projects. Agile development uses short development cycles and many agile projects are short, but the length of the project is not a selection factor that favours agile development. The nature of the requirements will largely determine whether an iterative-incremental model such as agile is most appropriate.

Option C correctly identifies that the choice of software development model depends on product and project characteristics.

Option D incorrectly associates the 2-stage V model with development of simple products. The most appropriate model will depend on both product and project characteristics.

Question Thirteen K1 LO 2.1.3 Correct Answer C

This question requires recall of the characteristics of good testing as identified in Section 2.1.3 of the syllabus.

Option A suggests that testers should be involved in reviewing a UAT specification at the beginning of a project. This would not be possible because no UAT specification would exist at this stage.

Option B suggests that testers should be involved in reviewing a UAT specification as soon as requirements have been drafted. This would be the stage at which a UAT specification could be drafted but no review could be carried out until after a draft is available.

Option C correctly identifies that testers should be involved in reviewing a UAT specification as soon as the UAT specification has been drafted.

Option D incorrectly suggests that testers should be involved in reviewing a UAT specification at any time before UAT begins. Good practice requires that the UAT specification is reviewed as soon as it is available.

Question Fourteen K1 LO 5.3.1 Correct Answer C

This is a recall question about progress progress metrics as defined in Section 5.3.1 of the syllabus.

Option A - The number of testers used for test execution will not provide a metric of actual test progress (though it may help to determine expected progress).

Option B - Planned execution test date is an estimate and does not measure actual progress.

Option C - The failure rate of tests executed is a useful metric because it identifies work outstanding in retests and helps to predict any overrun against planned timescales. Option C is correct.

Option D – The number and severity of product risks is a factor in planning tests but not in measuring actual progress.

Question Fifteen K2 LO 2.2.1 Correct Answer A

This question requires candidates to be able to differentiate between the integration testing test level and other test levels as defined in Section 2.2 of the syllabus.

Option A correctly identifies that the test basis should include software and system design, test objects should include interfaces, and tests should concentrate on the interactions between different parts of a system. (Section 2.2.2)

Option B incorrectly associates integration testing with component requirements, database modules, and tests that concentrate on the behavior of the system as a whole. Component requirements and database modules are associated with component testing (Section 2.2.1). The integration testing test level takes place before the system as a whole can be tested. This level of testing would be more appropriate to system testing. (Section 2.2.3)

Option C incorrectly associates integration testing with business processes, system configuration and configuration data, and tests that concentrate on establishing confidence in the system. These tests would be more appropriate to acceptance testing, while system configuration and other configuration data are associated mainly with system testing.

Option D incorrectly associates integration testing with use cases, user procedures and tests that concentrate on a high level model of system behavior. This would be appropriate to user acceptance testing.

Question Sixteen K1 LO 6.2.2 Correct Answer C

This is a recall question related to special considerations for the use of static analysis tools as defined in Section 6.2.2 of the syllabus.

Option A is incorrect; static analysis tools can be used on any code.

Option B is incorrect; static analysis tools are ideal for enforcing coding standards.

Option C is correct; static analysis tools can generate large numbers of warning messages, even if the code meets coding standards, because the warnings are related to features of the programming language in use.

Option D is incorrect because warning messages are related to features of the programming language in use.

Question Seventeen K1 LO 5.1.1 Correct Answer C

This is a recall question about the importance of independent testing as defined in Section 5.1.1 of the syllabus.

Option A is not necessarily true and independent testers may make assumptions of their own.

Option B is not true; everyone is prone to making errors.

Option C is true and this is a valid reason for independence in that it enables the testers to detect errors arising from assumptions.

Option D is not true.

Question Eighteen K1 LO 2.3.2 Correct Answer B

At which test level(s) can structural and functional test types be used together?

This question requires the candidate to recall that either or both of functional and structural test types can be used at any level. Section 2.3 of the syllabus confirms that both test types can be used at all test levels.

Options A and C are clearly incorrect. Option D is true but it would be an incomplete answer, so option B is the correct answer.

Question Nineteen K3 LO 4.3 Correct Answer D

This question tests the candidates' ability to read and interpret a state transition diagram as defined in Section 4.3.4 of the syllabus. The state transition diagram is shown in Figure 1.
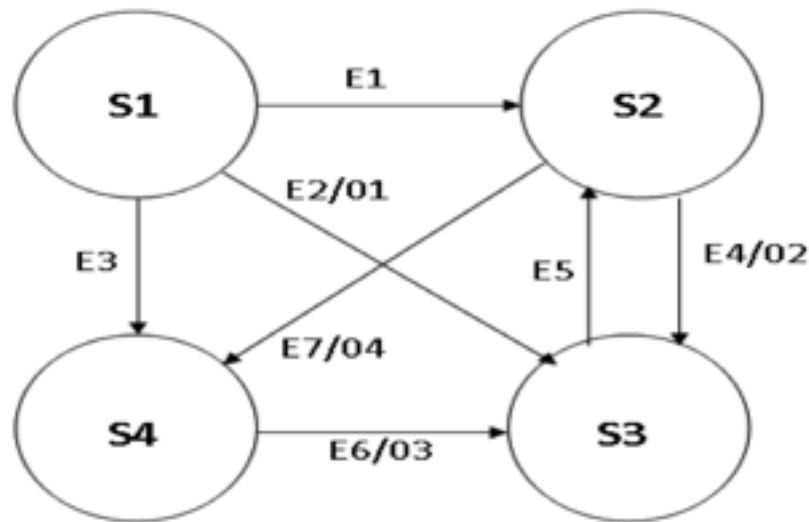
Figure 1 – Q22 State Transition Diagram

The question defines a starting point at S1 and then triggers 4 events: E1, E4, E5, E7.

From S1 event E1 will transition to state S2; event E4 will then transition to state S3 and create action O2; event E5 will return to state S2; E7 will transition to S4 and create action O4. The finishing state will therefore be state S4 and the final action will be O4.

Option A identifies the wrong end state and omits action O2
Option B identifies the correct actions but the wrong end state
Option C is the correct answer, with the correct end state and both actions.
Option D has the correct end state but omits action O4.

Question Twenty K2 LO 2.4.1 Correct Answer A

This K2 question considers pairs of statements about maintenance testing as defined in Section 2.4 of the syllabus.

Option A is correct because it identifies maintenance testing as applicable to delivered software and is triggered by changes; it also correctly identifies the role of impact analysis in defining the extent of testing needed to cover a particular set of changes.

Option B incorrectly associates maintenance testing with changes to software under development.

Option C incorrectly identifies changes to the test environment as a trigger for maintenance testing, and testing tools are not necessarily used for regression testing.

Option D is incorrect because it identifies structural testing as the mechanism for ensuring changes function correctly; functional testing would be required.

Question Twenty One K1 LO 2.4.2 Correct Answer A

The question relates to Section 2.4 of the syllabus.

Option A is correct; migration of software to a new platform should trigger maintenance testing to ensure the software functions correctly in the new environment.

Option B is incorrect; maintenance testing does not apply to software under development.

Option C is incorrect because purchase of a new testing tool has no impact on software in service

Option D is incorrect because change to a regression testing suite has no impact on software in service.

Question Twenty Two K1 LO 3.1 Correct Answer D

This question relates to Section 3.1 of the syllabus.

Option A is incorrect because static techniques are carried out without executing the software under test.

Option B is incorrect because static testing can involve both manual examination and automated analysis of both code and software documentation.

Option C is incorrect because both manual and automated analysis may be used on code and software documentation.

Option D correctly identifies static techniques as applying manual or automated analysis to code or software documentation.

Question Twenty Three K1 LO 3.2 Correct Answer B

This K1 question requires recall of the roles in a formal review as defined in Section 3.2.2 of the syllabus.

Option B correctly identifies moderator as a role title for formal reviews.

Options A, C and D all suggest incorrect role titles.

Syllabus section 3.2.2 identifies the roles used in reviews.

Question Twenty Four K3 LO 4.3.1 Correct Answer A

This question tests the candidates' understanding of decision tables. The decision table given in the question is to be interpreted for two specific test cases:

    i.   Carol, who has a student railcard and is travelling on a Flexible Standard Class ticket;
    ii. James, who has a senior railcard and is travelling on a super saver ticket.

The decision table is shown in Figure 2.

Conditions	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 7
First class ticket	Y	N	N	N	Y	N	N
Std class flexible ticket	N	Y	N	N	N	Y	N
Std class day return	N	N	Y	N	N	N	N
Std class super saver	N	N	N	Y	N	N	Y
Railcard holder	N	N	N	N	Y	Y	Y
Actions							
OK to travel	Y	N	N	N	Y	N	N
Eligible for upgrade	N	Y	N	N	N	Y	N
Concessionary fare	N	N	N	N	Y	Y	N

Figure 2 – Q23 Decision Table

Test case i triggers rule 6 (standard class flexible ticket and rail card holder) so generates the actions eligible for upgrade and concessionary fare but does not authorize the holder to travel.

Test case ii triggers rule 7 because James holds a railcard but has a super saver ticket, so is not eligible to use the service.

Option A represents these two outcomes.

All other options are incorrect:

Option B suggests James is eligible for an upgrade but no rule allows a super saver ticket holder to upgrade, so this is incorrect.

Option C suggests James and Carol are both eligible for upgrade, but no rule allows a super saver ticket holder to upgrade, so this is incorrect.

Option D suggests Carol is eligible to travel, but rule 6 does not allow the ticket holder to travel, so this is incorrect.

Question Twenty Five K2 LO 3.2 Correct Answer C

This roman style question provides 6 statements about reviews and requires the candidates to select three that enable the review process to be successful as defined in Section 3.2.4 of the syllabus.

Item a is correct as defined in Syllabus Section 3.2.4.

Item b is incorrect; the quality of the review process does not influence the number of defects present in software presented for review; effectiveness of a review would be more appropriately judged by the number of defects it finds.

Item c is correct as defined in Syllabus Section 3.2.4.

Item d is correct as defined in Syllabus Section 3.2.4.

Item e is incorrect because management will be involved in setting up a review and ensuring reviewers are available as identified in Syllabus Section 3.2.4.

Item f is incorrect because checklists can make the process more effective as recognised in Syllabus Section 3.2.4.

Items a, c and d are correct and this combination points to option C as the only correct answer.

Question Twenty Six K3 LO 4.1.4 Correct Answer D

This K3 question requires a candidate to be able to recognise an effective test procedure as identified in Section 4.1 of the syllabus: 'The test execution schedule will take into account such factors as regression tests, prioritization and technical and logical dependencies.

The question lists 10 test cases and provides a brief scenario to enable the candidate to determine the correct sequencing of the test cases.

The most effective approach to this question would be to look for inconsistencies in the options.

The scenario identifies the main sequence: A master user must create other account users, who set up accounts against which invoices can be raised. So the correct sequence must begin with item f.

This eliminates options B and C, both of which incorrectly begin with item e.

Options A and D both begin with f followed by g. Option A then identifies item a (create an invoice), as the third item in sequence, but this would require an account to be set up first. Option D sets up an account and so is the only possible correct answer.

A candidate with time available should check the remainder of the sequence to ensure option D is in fact correct, but under time pressure a candidate could mark option D as the correct answer and move on.

Option D first of all creates a user and checks that an account user can be amended, then it sets up an account and checks that an account can be amended, then it creates an invoice, checks that it can be amended and then processes the invoice, and deletes the invoice, the account and the account user in that order. This correctly fits the description of the way the system is meant to work, and confirms that option D is correct.

Question Twenty Seven K2 LO 4.2 Correct Answer D

This K2 question tests the candidates' awareness of the differences between experience-based techniques, specification-based techniques and structure-based techniques as identified in Section 4.2 of the syllabus.

The list of 4 items contains statements that characterize different types of technique.

Item a relates to specification-based testing.

Item b relates to experience-based testing.

Item c relates to experience-based testing.

Item d relates to structure-based testing.

Items b and c together apply to experience-based testing, so option D is correct.

Question Twenty Eight K1 LO 6.2.2 Correct Answer B

This is a recall question related to special considerations for test execution tools as defined in Section 6.2.2 of the syllabus.

Option A is incorrect; data-driven testing can be and typically is used with test execution tools.

Option B is correct. Recording manual tests will become unstable if any aspect of the test set up or the behaviour of the software under test changes from the time the test was recorded.

Option C is incorrect for the same reason as option A.

Option D is not correct because tests do still need expected results when a test execution tool is used.

Question Twenty Nine K1 LO 5.2.7 Correct Answer C

This is a recall question about test estimation as defined in Section 5.2.5 of the syllabus.

Option A – the number of testers used for test execution might affect time scales but not test effort. Effort is the total number of person hours needed to complete the tests and this is not affected by the number of testers available, so A is an incorrect response.

Option B - planned test execution completion date is a planning assumption and is not related to the test effort required (though the effort required and number of testers available may make the planned completion infeasible).

Option C - requirements for reliability and security in the product will affect test effort because they will drive how much testing is needed to achieve the required level of confidence in the product. So option C is true.

Option D The test estimation method used will not affect the testing effort (though it may affect the estimate).

Question Thirty K3 LO 4.4.3 Correct Answer B

This question tests the candidates' understanding of decision test case design as defined in Section 4.4.2 of the syllabus.

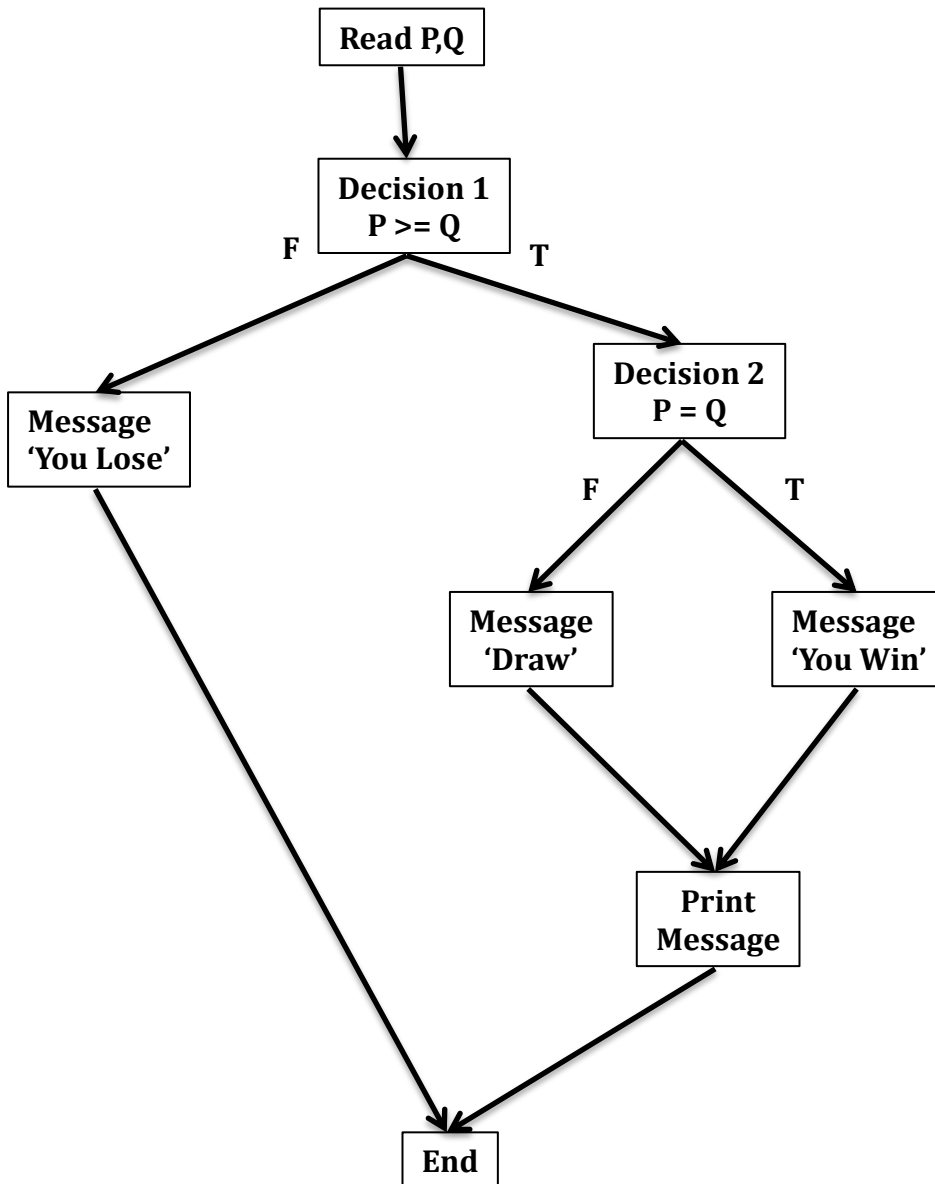The control flow given in the question is reproduced in Figure 3.

Figure 3 – Control Flow for Q24

In the control flow, decision 1 exercises P >= Q and Decision 2 exercises P =Q

The quick way to the solution is as follows:

For decision 2 to be exercised in both directions we will need P > Q for one pair of inputs and P = Q for the other pair. These conditions hold for option B only, so option B is correct.

A slower route will still get the correct answer. Taking each option in turn:

Option A. The first pair of inputs will make decision 1 true and decision 2 false; the second pair of inputs will make decision 1 false, so will not exercise decision 2. Decision 2 is therefore not exercised in both directions.

Option B. The first pair of inputs will make decision 1 true and decision 2 true; the second pair will make decision 1 true and decision 2 false. Decision 2 is exercised in both directions and this is therefore the correct answer.

As a check:

Option C. The first pair of inputs will make decision 1 false, so decision 2 cannot be exercised in both directions.

Option D. The first pair of inputs will make decision 1 true and decision 2 false; the second pair of inputs will make decision 1 false. Decision 2 therefore cannot be exercised in both directions.

Question Thirty One K3 LO 4.4.3 Correct Answer C

This question tests the candidates' understanding of statement testing as defined in section 4.4.1 of the syllabus. The control flow given in the questions is reproduced in Figure 4.
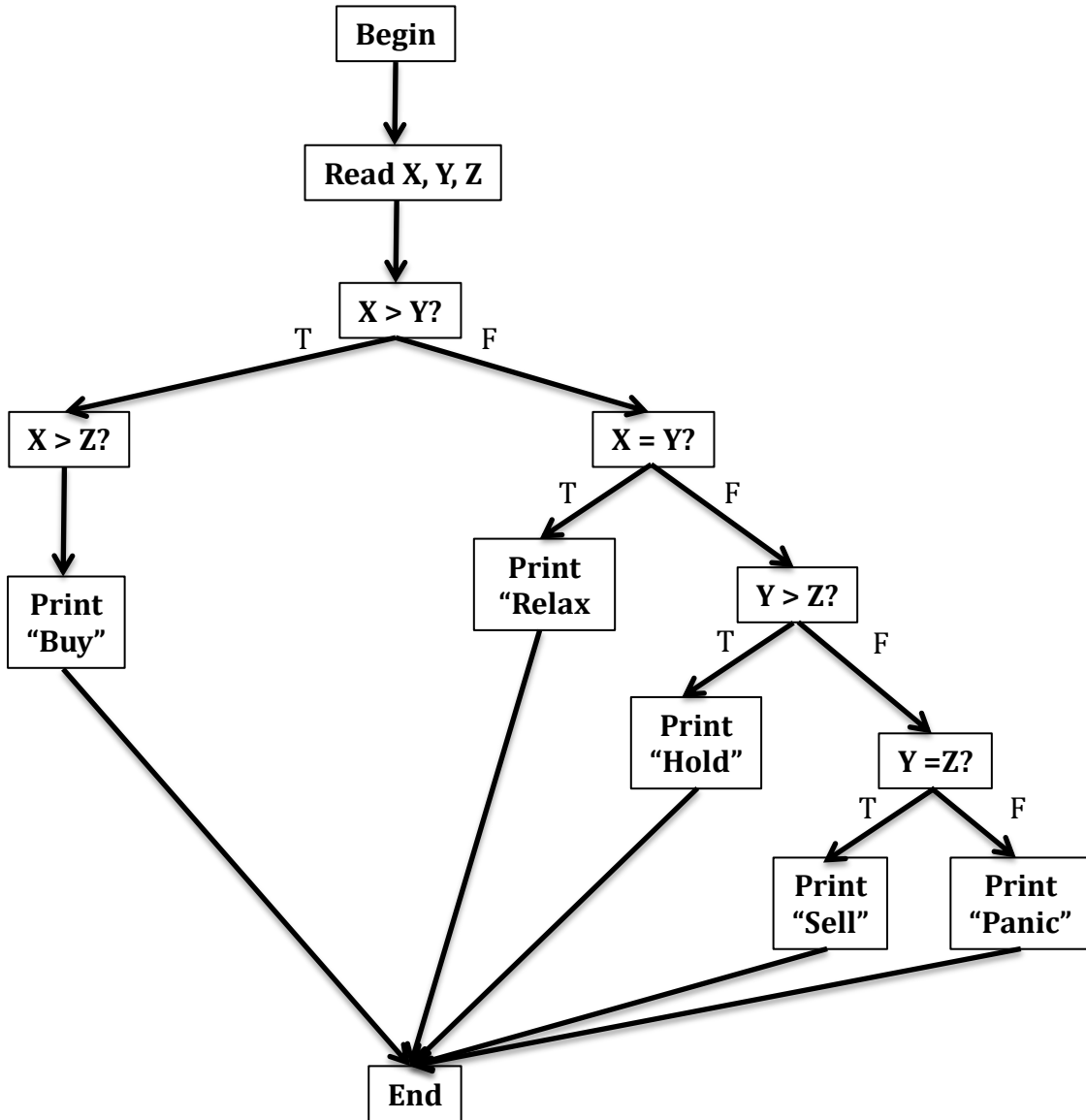

Figure 4 – Control Flow for Q25

For 'Print 'Hold'' to be exercised the inputs must satisfy:

X <= Y to make the first decision false, X < Y to make the second decision false, and Y > Z to make the third decision true.

S o X < Y and Y > Z are both required.

Option A has X = Y, so this cannot be correct
Option B has X < Y and Y < Z so this cannot be correct
Option C has X < Y and Y > Z, so this is correct
Option D has X > Y, so this cannot be correct

Option C is the correct answer.

As with Question 24, it is possible to work through each set of values in turn to reach the same answer, but this will take longer. The quickest route to a solution is to identify the requirements for X, Y and Z values.

Question Thirty Two K4 LO 4.4.4 Correct Answer D

This question tests the candidates' ability to assess decision coverage as defined in Section 4.4.2 of the syllabus. The control flow is reproduced in Figure 5.
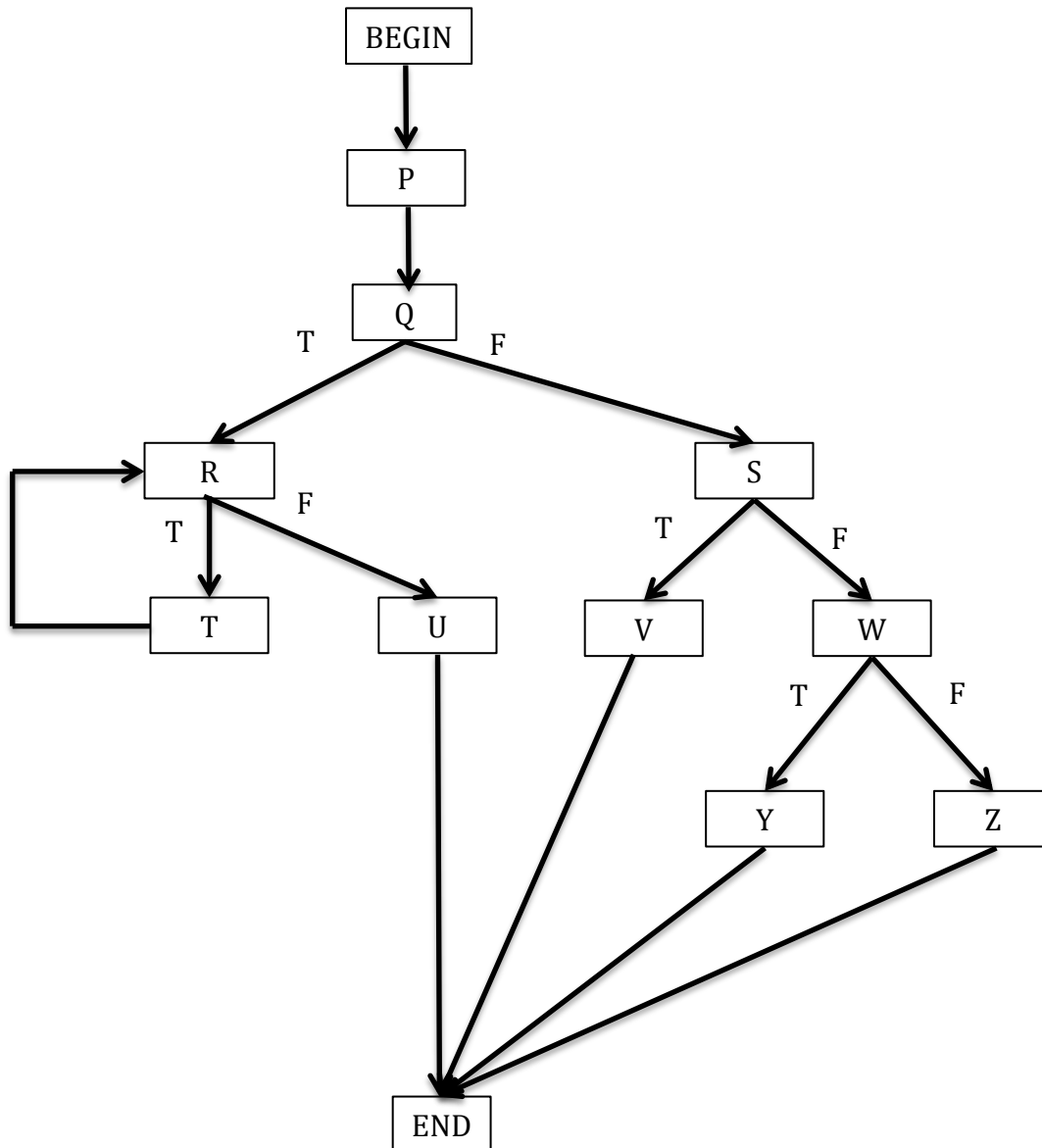

Figure 5 – Control Flow for Q26

The question states that the following test cases have been run:

Test Case 1 covering P, Q, R, U
Test Case 2, covering P, Q, S, V
Test Case 3, covering P, Q, S, W, Z
Test Case 4 covering P, Q, S, W, Y

P, Q R, S, U, V, W, Y, Z have been covered
T has not been covered.

The quick way to a solution is to recognise that T requires the decision at R to be True. If T is not exercised then R has not been set to True, so decision coverage cannot be 100%. T is a statement or block of statements, so statement coverage cannot have been achieved. This points to option D as the correct answer.

It is possible to trace each of the given test case outcomes to come to the same conclusion but this would take longer, so an analysis of the achieved outputs is the quickest route to a solution.

Question Thirty Three K1 LO 4.5.1 Correct Answer C

This is a question to test candidates' recall of the reasons behind experience-based testing as explained in Section 4.5 of the syllabus.

Option A may or may not be true but it is not a reason for using experience-based testing.

Option B is not true; formal testing is more efficient and effective when a specification exists.

Option C is true and relevant because experience-based tests can find defects that formal testing will not discover, so they are a useful addition to formal testing.

Option D is not true.

Question Thirty Four K1 LO 4.2.1 Correct Answer D

This is a recall question about which test case design techniques are white box as defined in Section 4.4 of the syllabus.

Option A is experience-based.

Option B is specification-based (but a distracter because decision testing is a white box technique).

Option C is specification-based.

Option D is the only white box test case design technique, so option D is correct.

Question Thirty Five K1 LO 5.2.1 Correct Answer D

This is a recall question about test planning as defined in Section 5.2.1 of the syllabus.

Option A is partially true, in that initial test planning generates a Master Test Plan, but planning is a continuous activity.

Option B also does not take account of the continuous nature of test planning.

Option C also does not take account of the continuous nature of test planning.

Option D is correct.

Question Thirty Six K3 LO 5.2.5 Correct Answer C

This is a test of the candidates' ability to construct a test execution schedule.

The priorities are set out in the question stem as:

Priority 1. Run any re-tests in priority order
Priority 2. Run regression tests in priority order
Priority 3. Run any other tests in priority order.

There are 2 retests (a and c), of which c is the higher priority, so c must be the first test run. This enables options A, B and D to be eliminated and C must therefore be the correct answer.

As a check, the first two tests will be c, a followed by d because it is a regression test. After that the sequence must be b (High Priority), e (because it must be run before g), g (high priority), i, h, f (or f,h because both are low priority).
So the complete sequence would be:

c, a, d, b, e, g, I, h, f   which is option C .

Note that under time pressure the checks could be deferred until the end of the exam if time permitted and option C could be selected on the basis of eliminating all options that do not begin with c.

Question Thirty Seven K2 LO 5.3.2 Correct Answer A

This is a K2 question requiring candidates to be able to compare test metrics as defined in Section 5.3.1 of the syllabus.

The question stem identifies completion of outstanding defect correction as an objective, and regression testing is required following defect correction.

The question provides a list of items, each of which is a proposed test metric.

Item a (number of regression tests run versus those passed) will be useful in determining outstanding regression testing.

Item b (incidents closed at all levels) does not help with assessing defect correction progress.

Item c (tests run versus passed in System Test) is not related to defect correction.

Item d (tests run versus passed at all levels) is not related to defect correction.

Item e (incidents raised versus closed at all levels) is an indicator of status of defect correction.

So items a and e are relevant and this points to option A as the correct answer.

Question Thirty Eight K2 LO 6.1.1 Correct Answer D

This is a K2 question to test candidates' awareness of test tool categories as defined in Section 6.1 of the syllabus. It involves selecting 2 items from a list of 5 that belong to the category of test execution tools.

Item a (test data preparation tools) is, as its name implies, a tool used before test execution to prepare test data.

Item b (test harness) is used at test execution to enable tests to be run on code that offers no convenient input/output interface and/or that is incomplete in some way that might prevent a test from running successfully.

Item c is a tool to support the review process and is not related to test execution.

Item d is used to compare test results with expected results and is therefore part of the test execution suite of tools.

Item e is a tool for managing software configurations and is not directly part of test execution.

So items b and d are the only correct items and this corresponds to option D, which is the correct option.

Question Thirty Nine K1 LO 6.3.1 Correct Answer C

This is a recall question related to the idea of using a pilot project to introduce a test tool into an organization as described in Section 6.3 of the syllabus.

Option A is incorrect; requirements needed to be part of the selection process.

Option B is incorrect because a pilot project would be carried out only on the selected tool.

Option C is correct and the pilot will assess cost effectiveness in use.

Option D is incorrect because tools are not expected to fit existing processes; the pilot project is partly about identifying any process changes that may be necessary to implement the tool.

Question Forty K2 LO 1.1.5 Correct Answer A

This is a question about differentiating between errors (mistakes), defects (faults, bugs) and failures as defined in Section 1.1.2 of the syllabus.

Option A correctly identifies the failure in the overall application, which was the result of a defect in on of the modules (it functioned incorrectly) and the root cause of that was either an error in the specification or a mistake by a programmer.

Option B incorrectly identifies the defect in the purchase identification module as a mistake.

Option C incorrectly identifies the failure of the application as an error.

Option D confuses error and fault. The specification could have contained a defect but not a mistake, while the module could have contained a fault but not an error.

The question is testing the candidate's awareness of the differences between the key terms and the relationship between errors (mistakes), faults (defects, bugs) and failures.