Review Test Submission: Q6 - remainingTopics

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Course	COM_S 309 All Sections (Spring 2017)
Test	Q6 - remainingTopics
Started	4/27/17 5:06 PM
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Attempt Score	90 out of 90 points
Time Elapsed	17 minutes out of 1 hour
Results Displayed	All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

Question 1

2 out of 2 points

Which of the following is not a characteristic of scrum model

Selected Answer: Stable requirements

Answers:
- Stable requirements
- Agile nature
- Incremental development
- Time-boxed scheduling

Question 2

2 out of 2 points

Which of the following is the best integration technique and why ?

Selected Answer: c. Sandwich; It allows parallel testing of layers without stubs or drivers.

Answers:
- a. Big-Bang; It is easier to pin-point the source of errors as units are tested first.
- b. Top-Down; It is effective for finding high level design issues.
- c. Sandwich; It allows parallel testing of layers without stubs or drivers.
- d. Bottom-Up; No stubs are necessary.

Question 3

2 out of 2 points

What are the different steps (to try and make testing as automated as possible)?

- b. write an oracle to check if tests pass or fail
- c. write code to generate test inputs
- e. write code to run the tests
- f. write parameterized tests to allow test cases to be read from a file instead of creating separate functions for each test case.

Answers:
- a. generate expected results
- b. write an oracle to check if tests pass or fail
- c. write code to generate test inputs
- d. write whitebox tests to capture all errors
- e. write code to run the tests
- f. write parameterized tests to allow test cases to be read from a file instead of creating separate functions for each test case.

Question 4

2 out of 2 points

Mark all that apply.

A software engineer

Selected Answers:
- has to design for testability.
- has to design for maintainability.
- has to understand the importance of team work.
- has to understand the importance of soft skills (communication, negotiation etc) in addition to hard skills (or technical skills).
- has to understand the importance of project management.

Answers:
- has to design for testability.
- has to design for maintainability.
- has to understand the importance of team work.
- has to understand the importance of soft skills (communication, negotiation etc) in addition to hard skills (or technical skills).
- has to understand the importance of project management.

Question 5

2 out of 2 points

In software development, the waterfall process model is

Selected Answer: A suitable approach when requirements are well defined.

Answers: A suitable approach when requirements are well defined.

The best approach with large development teams.

An old fashioned approach that is no longer in use.

A good approach when a working program is quickly required.

Question 6

2 out of 2 points

Given isATriangle(a,b,c) method, where a, b, and c are values for a side and where the method prints isoceles, equilateral, scalene, and not a triangle based on values of a, b, and c.

Which of the following are valid equivalence classes for the problem?

Selected Answers:
- a. all values of a,b,c that form a scalene triangle
- d. all values of a,b, and c that form an isoceles triangle
- e. values of a, b, and c that do not form a triangle
- f. all values of a,b,c that form an equliateral triangle

Answers:
- a. all values of a,b,c that form a scalene triangle
- b. a, b, c such that a is not equal to b and b is not equal to c
- c. values of a and b and c such that a = b but not equal to c
- d. all values of a,b, and c that form an isoceles triangle
- e. values of a, b, and c that do not form a triangle
- f. all values of a,b,c that form an equliateral triangle

Question 7

2 out of 2 points

Which of the following statements about code coverage are true?

Answers:
- a. It is always possible to write tests so as to get 100% statement coverage.
- b. Decision coverage usually needs more test cases than statement coverage.
- c. 100% decision coverage means that the software does not have any bugs
- d. In decision coverage, enough test cases are needed so that each of the boolean conditions in if and loop statements evaluate to true at least once in some test case and to false at least once in some test case.
- e. Decision coverage usually needs more test cases than condition coverage.
- f. 100% statement coverage means the software meets all requirements

Question 8

2 out of 2 points

An example of Acceptance testing is

Selected Answer: Beta Testing

Answers:
- Gray box Testing
- Whitebox Testing
- Test Automation

Beta Testing

Question 9

2 out of 2 points

You have designed a software and have recently found a bug in one of the modules. After fixing it, you notice that several other modules are not working as they should. What is the probable cause for this behavior?

Selected Answer: b. Your modules have high coupling (i.e. are tightly coupled).

Answers:
a. The source files are not segregated into correct directories.
b. Your modules have high coupling (i.e. are tightly coupled).
c. The measure of cohesion in your code is high.
d. You have probably reused a module in the wrong place.

Question 10

2 out of 2 points

Given that a variable must have values between 10 and 20, what are correct choices below for boundary value tests?

9 10 11 15 19 20 21
10 15 20

Answers: 5 11 12 13 21

9 10 11 15 19 20 21
10 15 20

MIN_VALUE 10 20 MAX_VALUE

Question 11

2 out of 2 points

This type of testing includes how well the user will be able to understand and interact with the system?

Selected Answer: Usability Testing

Answers:
Alpha Testing
Installation Testing
Usability Testing
Beta Testing

Question 12

2 out of 2 points

If module A makes calls to module B,

which of the following are true?

Selected Answers: To test B, we can fake A by creating driver codes for B

To test A, we can create driver codes for A.

To test A, we can fake B by creating stubs for B.

Answers: To test B, we can fake A by creating driver codes for B

To test A, we can create driver codes for A.

To test B, we need driver code for A

To test B, we can fake A by creating stubs for B

To test A, we can fake B by creating stubs for B.

Question 13

2 out of 2 points

An application has a lot of interconnections between its modules. Would you consider it to be well designed?

Selected Answer: c. No; Because change in one module can affect other modules.

Answers:

a.
Yes; Because higher the number of interactions, higher is the modularity of the software.

b.
Yes; Because more interactions between modules means data can flow easily between layers.

c. No; Because change in one module can affect other modules.

d.
No; Because any sort of interactions between modules compromises data privacy.

Question 14

2 out of 2 points

Alpha Testing is

Selected Answer:
Performed by other teams in the organization (i.e. not the team that developed it)

Answers:

Performed as early as possible in the lifecycle.

Performed by customers.

Performed by an independent test team

Performed by other teams in the organization (i.e. not the team that developed it)

Question 15

2 out of 2 points

Unit Testing is done by

Selected Answer: Developers

Answers: Customers

Developers

Testers

End Users

Question 16

2 out of 2 points

Which of the following statements about regression testing are correct?

c.
Large software has many modules with lots of dependencies. It is easy for developers making changes to one module to affect results of other modules. After making changes to code, it is important to run tests to make sure that what used to work before still works the same way. This is known as regression testing.

d.
Failure to do regression testing is expensive because new bugs in code that used to work will erode customer trust and are hard to find and fix.

Answers: a. Re-running unit tests is sufficient for regression testing.

b. Aggressive testing during initial development prevents the need for regression tests.

c.
Large software has many modules with lots of dependencies. It is easy for developers making changes to one module to affect results of other modules. After making changes to code, it is important to run tests to make sure that what used to work before still works the same way. This is known as regression testing.

d.
Failure to do regression testing is expensive because new bugs in code that used to work will erode customer trust and are hard to find and fix.

Question 17

2 out of 2 points

Mark all that apply.

Which are examples of agile models?

XP

Scrum

TDD

Answers: RUP

XP

Prototyping

Scrum

TDD

Question 18

2 out of 2 points

Mark all statements that are correct about White Box Testing.

Selected Answers: a. You have access to the source code and also the specifications.

Answers: a. You have access to the source code and also the specifications.

b. you do not have access to the source code or the specifications.

c. You have access to source code but do not have access to specifications.

d.
You do not have access to the specifications but have access to the specifications.

Question 19

2 out of 2 points

Verification is:

Selected Answer: ✓ Checking that we are building the system right

Answers:
Checking that we are building the right system

✓ Checking that we are building the system right

Performed by an independent test team

Making sure that it is what the user really wants

Question 20

2 out of 2 points

Suppose in a credit card application, you have three modules -

1) Calculate_Monthly_Interest

2) Calculate_Monthly_Principal

3) Display_Total_Amount_Payable

The third module calls the first two modules to calculate the amount a customer needs to pay. What would be the sequence of testing, if you had to use a bottom up approach?

Selected Answer: ✓ d. Test Module 1, Test Module 2, Test Module 3

Answers:
a. Test Module 3, Test Module 2, Test Module 1

b. Test Module 2, Test Module 3, Test Module 1

c. Test Module 1, Test Module 3, Test Module 2

✓ d. Test Module 1, Test Module 2, Test Module 3

Question 21

2 out of 2 points

We can segregate code into distinct modules by creating

Selected Answer: ✓ c. packages

Answers:
a. classes

b. methods

✓ c. packages

d. projects

Question 22

2 out of 2 points

Exhaustive Testing is

Selected Answer: is impractical and impossible

Answers:
Is practically possible
is impractical and impossible
is always possible
Is similar to regression testing

Question 23

2 out of 2 points

Which of the following statements are true about Random Testing

Selected Answers:
a.
an operational profile is often used to generate random tests so that the number of tests generated correspond to the use of the unit under test.
c. It is important to write oracles when using random testing.

Answers:
a.
an operational profile is often used to generate random tests so that the number of tests generated correspond to the use of the unit under test.
b.
The structure of the code for the unit under test must be visible to allow random testing.
c. It is important to write oracles when using random testing.
d.
Since millions of random tests can be generated easily, the confidence that these tests find bugs is really high.

Question 24

2 out of 2 points

Which of the following does agile practices avoid?

Selected Answers:
Lengthy development time (more than a year) before each release.
Wasteful mandated documentation practices including documentation that may never be needed.

Answers:
Lengthy development time (more than a year) before each release.
prototyping effort
Wasteful mandated documentation practices including documentation that may never be needed.
continuous customer involvement

Question 25

2 out of 2 points

You are designing a software which carries out x logically distinct operations. How many modules should you have to achieve high cohesion?

Selected Answer: d. Try to implement x different modules.

Answers:
a.
Approximately half of the number of operations as that would ensure optimal performance.

b.
Try to keep the number of modules as low as possible to increase interconnections between them.

c.
Try to have as many modules as possible so that interconnections are kept to a minimum.

d. Try to implement x different modules.

Question 26

2 out of 2 points

Match likely origin of defect to type of testing where defect caught.

Question	Correct Match	Selected Match
Requirements Phase	D. Acceptance Testing	D. Acceptance Testing
Architecture Phase	A. System and Performance Testing	A. System and Performance Testing
Design	C. Integration Testing	C. Integration Testing
Coding Phase	B. Unit Testing	B. Unit Testing

All Answer Choices

A. System and Performance Testing

B. Unit Testing

C. Integration Testing

D. Acceptance Testing

Question 27

2 out of 2 points

Testing done to ensure that existing feature are not affected by new changes is known as

Selected Answer: Regression Testing

Answers:
Whitebox Testing

Unit Testing

Recursive Testing

Regression Testing

Question 28

2 out of 2 points

Suppose you and your friend are working on a project. Your friend is the developer and you are the tester. What feature must your design have in order to let you test modules even before the software is completely built?

Selected Answer: a. The code should be modular. Stubs and Drivers would be used to test each module.

Answers: a. The code should be modular. Stubs and Drivers would be used to test each module.

b. The modules must have high interaction to make data flow easier.

c. Testing should never start before the build is complete.

d. Cohesion must be kept low so that modules do not have high interaction.

Question 29

2 out of 2 points

Mark all that apply.

A family of software development methods that produce software in short iterations and allow for greater changes.

Answers: agile process models
evolutionary process models
agile process models
traditional process models
extreme programming

Question 30

2 out of 2 points

Match the following

Question	Correct Match	Selected Match
Boundary Value Test Generation Technique	A. Easy to automate. Good confidence in ability of tests to detect bugs.	A. Easy to automate. Good confidence in ability of tests to detect bugs.
Equivalence Class Test Generation Technique	B. Hard to automate. Very good confidence in ability of tests to detect bugs.	B. Hard to automate. Very good confidence in ability of tests to detect bugs.
Random Test Generation Technique.	C. Easiest to automate. Lowest confidence in ability to detect bugs.	C. Easiest to automate. Lowest confidence in ability to detect bugs.

All Answer Choices

A. Easy to automate. Good confidence in ability of tests to detect bugs.

B. Hard to automate. Very good confidence in ability of tests to detect bugs.

C. Easiest to automate. Lowest confidence in ability to detect bugs.

Question 31

2 out of 2 points

Mark all that apply.

- The spiral process model works best for risky projects.
- The best process model for a project depends on the type of the project.

Answers: The waterfall process model works very well for all projects.

- The spiral process model works best for risky projects.

The scrum process model works well for all software projects.

- The best process model for a project depends on the type of the project.

The RUP process model, developed by IBM is the most widely used process model in the world.

Question 32

2 out of 2 points

Mark all that apply for spiral model of development.

- Includes project risks evaluation during each iteration.
- Works well on internal projects.

Answers: Milestones are clear.

- Includes project risks evaluation during each iteration.

Works well for customer projects.

- Works well on internal projects.

Question 33

2 out of 2 points

Which of the following actions below use lessons learned from the V Model?

Selected Answers:
- a. Requirements and Architecture documents are inspected.
- b. Screen sketches (or screen prototypes) are shown to the customer during requirements phase to get their feedback.
- c. Top down integration practices are put in place (i.e. Build Early, Build Often).

Answers:
- a. Requirements and Architecture documents are inspected.
- b. Screen sketches (or screen prototypes) are shown to the customer during requirements phase to get their feedback.
- c. Top down integration practices are put in place (i.e. Build Early, Build Often).
- d. The software is beta tested before release.

Question 34

2 out of 2 points

Which of the following statements about code and document inspection are true?

Inspections are a great way to catch defects.

Usually many persons are involved in an inspection.

It is important to come to inspection meetings AFTER having reviewed the code or document being inspected.

Answers: The purpose of inspections are to find solutions to defects that are discovered during the inspection meeting.

Inspections are a great way to catch defects.

Usually many persons are involved in an inspection.

It is important to come to inspection meetings AFTER having reviewed the code or document being inspected.

Question 35

2 out of 2 points

Which of the following statements about Black Box Testing are true?

Selected Answers: a.
The specifications are given. The source code of the unit being tested may or may not be available.

Answers: a.
The specifications are given. The source code of the unit being tested may or may not be available.

b.
The intent of black box testing is to find what is wrong with the code, whereas the intent of white box testing is to find what parts work correctly.

c.
The specifications are not given; however, the source code of the unit being tested is available.

d.
Knowledge of the internal working and structure of the code is really useful in black box testing.

Question 36

2 out of 2 points

Which of the following is not a testing tool

Selected Answer: IntelliJ

Answers: jUnit

Mockito

BugZilla

IntelliJ

Question 37

2 out of 2 points

Which of the following concerns are important for a project manager in selecting a process model?

Risks handling.

Rapidity.

Project visibility.

Answers: Availability of best developers.

Risks handling.

TDD (Test Driven Development)

Rapidity.

Project visibility.

Question 38

2 out of 2 points

Which of the following statements are true?

b.
Since many tests need to be rerun (due to regression testing), it is important to automate as many tests as possible.

d.
Manual testing is expensive. However, there are many cases where automated testing is not possible - and so manual testing must often be used.

Answers: a. If an algorithm can be proven, then the corresponding code will not need to be tested.

b.
Since many tests need to be rerun (due to regression testing), it is important to automate as many tests as possible.

c. Testing thoroughly proves that the code will always work correctly.

d.
Manual testing is expensive. However, there are many cases where automated testing is not possible - and so manual testing must often be used.

Question 39

2 out of 2 points

Match the tool with its functionality

Question	Correct Match	Selected Match
jUnit	C. run tests	C. run tests
Mockito	B. integration testing using stubs	B. integration testing using stubs
Stan4J	E. structural static analysis of code (giving data such as complexity of code)	E. structural static analysis of code (giving data such as complexity of code)
bugzilla	A. defect tracking	A. defect tracking
selenium	D. web testing	D. web testing

All Answer Choices

A. defect tracking

B. integration testing using stubs

C. run tests

D. web testing

E. structural static analysis of code (giving data such as complexity of code)

Question 40

2 out of 2 points

Which of the following statements are correct?

b.
An oracle takes away the need for a human being to provide expected results for each test case.

c.
Generally, it is easier to write code to check answers than write code to solve problems.

d.
When generating hundreds of test case inputs automatically, it becomes more important to write oracles.

Answers: a.
In context of automated testing, an oracle is a human being that decides if a result is correct or wrong.

b.
An oracle takes away the need for a human being to provide expected results for each test case.

c.
Generally, it is easier to write code to check answers than write code to solve problems.

d.
When generating hundreds of test case inputs automatically, it becomes more important to write oracles.

Question 41

2 out of 2 points

Which of the following statements are true?

The V Model is derived from the waterfall model

Answers: The W Model of development is better than the V Model of development.

It shows that errors in the detailed design phase will show up in acceptance tests.

The V Model is derived from the waterfall model

Scrum model is derived from the V-Model.

The Spiral model is derived from the V Model.

Question 42

2 out of 2 points

What is regression testing?

Selected Answer: Running Tests after changes are made to an application.

Answers: Running unit tests again after integration tests are done.

Tests written during gathering requirements to ensure customer conditions will be met.

Running Tests after changes are made to an application.

Performed during stress testing to detect if the application is slowing down under excessive load.

Question 43

2 out of 2 points

When you write automated tests, what are the inputs to an oracle?

Selected Answer: a. inputs to the unit being tested and actual results from the unit being tested

Answers:
a. inputs to the unit being tested and actual results from the unit being tested
b. actual results from the unit being tested and the expected results
c. inputs to the unit being tested
d. inputs to the unit being tested and the expected results

Question 44

2 out of 2 points

Which of the following statements about V Model are correct?

Selected Answers:
a.
V Model shows where in a development phase (such as requirements) defects found in a specific testing phase (such as acceptance testing) would most likely have been created,

b.
V Model shows that in traditional development methodologies, the most expensive bugs (to fix) are caught last.

e.
V Model shows that testing should be incorporated from the beginning of development process rather than after coding is done.

Answers:
a.
V Model shows where in a development phase (such as requirements) defects found in a specific testing phase (such as acceptance testing) would most likely have been created,

b.
V Model shows that in traditional development methodologies, the most expensive bugs (to fix) are caught last.

c. V Model shows that requirements phase takes the most time.

d. V Model shows that unit tests catch the most expensive (to fix) bugs.

e.
V Model shows that testing should be incorporated from the beginning of development process rather than after coding is done.

Question 45

2 out of 2 points

In a software development project, would you recommend involvment of testers when the solution is being designed?

Selected Answer: b.
Yes; Preventing errors early can prevent them from flowing downstreamand saves time and money.

Answers: a.
No; Testing and Solution design should be strictly distinct activities to conserve software modularity.

b.
Yes; Preventing errors early can prevent them from flowing downstreamand saves time and money.

c.
Yes; Very few errors occur in upstream processes, so they can be prevented easily by testers.

d. No; It goes against our motive of 'Build on Budget'.

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← OK