

YOUR NAME: _____

IS THERE A REASON THAT I SHOULD NOT GRADE THIS TEST?

1. **Risk** means:

- A. The consequences of a failure
- B. A way the program actually fails
- C. The possibility of suffering harm or loss
- D. All of the above

The answer is C.

2. The reason we call it **risk-based domain testing** is that we (choose one or two of the following):

- A. Imagine the ways the program could fail (risk-based testing) and then for each way, partition the space of possible tests into error-revealing and not-error-revealing subspaces, picking the best representatives from the error-revealing sets (domain testing)
- B. Divide a space of possible tests into subspaces (domain testing) and then use the harshest test from each subspace (risk-based testing).
- C. Emphasize that domain testing is based on a theory of error (boundaries) and therefore is a type of risk-based testing in itself.
- D. All of the above

The answer is A. I will accept A and C.

3. **Failure Mode & Effects Analysis**

- A. Refers to the ways in which projects can fail (their project-level failure modes)
- B. Refers to the ways in which products can fail (product failure modes)
- C. Refers to a style of troubleshooting (analysis of reported failures)
- D. None of the above

The answer is B

4. **An example of a file system attack would be** (pick one or two)
- A. Forcing all error messages that involve missing or corrupted files
 - B. Attempting to write to a disk that is already writing another file
 - C. Attempting to overflow a field used to set disk permissions
 - D. Sending a file with corrupted data to a program that should reject it
 - E. A, B and D

The answer is

A is a Attack 1 in the book, a user interface attack, but it is also a file attack because we are forcing the program to deal with missing or corrupted files.

B is a media attack (which is a file system attack)

C is an input attack. It just happens that the field is about the disk. But you're not working with bad disk permissions. You're working with the field that sets bad disk permissions.

D is a file-based attack

I expect E

5. Suppose that Open Office can handle a table with at most 10,000 cells. You create a document that has a 100x100 row/column table and save it. Now you open the document and attempt to change this to a 101x100 row/column table and save it. This is an example of a (feel free to write a note to explain your answer):
- A. File system attack
 - B. Data attack
 - C. Computation attack
 - D. System-level attack

The answer is B (see Whittaker's attack 12)

6. Suppose that Open Office can handle a table with at most 10,000 cells. You create a document that has a 100x100 row/column table, fill the table with data and save it. Now you dramatically reduce the available amount of system memory and attempt to reopen the document. This is an example of a (feel free to write a note to explain your answer):
- A. File system attack
 - B. Data attack
 - C. Computation attack
 - D. User interface input attack
 - E. System-level attack

The answer is E (see p 107-111 on memory faults)

7. Suppose that Open Office writer can handle documents only 64K long. Suppose they add a feature that lets you track changes, like Word does. So you create a document that is almost 64K and then start making lots and lots of changes. You save a copy of the file

after each change. Your objective is to create a file that is longer than 64K even though it has the same amount of text as the shorter file. This is an example of a (feel free to write a note to explain your answer):

- A. File system attack
- B. Data attack
- C. Computation attack
- D. System-level attack

The answer is A (you're creating a corrupt file that should expose bugs when it is opened).

8. The difference between a generative taxonomy and a classification taxonomy is (pick one or two):

- A. You use the generative taxonomy to generate ideas (for example ideas of ways to test) whereas you use the classification taxonomy to sort ideas into categories
- B. You use the generative taxonomy to generate categories and the classification taxonomy to sort things into those categories
- C. Even though they are used differently, both sort things in non-overlapping ways
- D. In a generative taxonomy, you might see the same item in two different categories, whereas in a classification taxonomy, everything is strictly partitioned

The answer is A and D