

QUIZ 1 SOFTWARE TESTING 1

YOUR NAME: _____

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

1. The *primary* definition of testing that we are using *in this course* is:
 - A. Testing is execution of the software with the intent of finding bugs.
 - B. Testing is the process of assuring quality through discovery and elimination of defects.
 - C. Testing is a technical investigation done to expose quality-related information about the product under test.
 - D. Testing is the quality control phase of software development.

The answer is (c)

2. An oracle is:
 - A. A principle or mechanism by which you recognize a problem.
 - B. A reference program that generates results that you compare with results from the program under test.
 - C. Neither A nor B
 - D. Both A and B

The answer is D

3. In the lecture, I demonstrated similar bugs in Open Office Writer and Microsoft WordPad. In both cases, the program displayed the size of letters incorrectly, for some sizes. I then argued that (choose one or two of the following):
 - A. We should consider this a serious error in Open Office because Open Office is marketed as a professional word processing product.
 - B. We should not consider this a serious error in Open Office because Open Office is available for free and no one expects free software to be free of minor bugs.
 - C. We should consider this a serious error in WordPad because WordPad is the primary text viewer that comes with the MS operating system.
 - D. We should not consider this a serious error in WordPad because WordPad is free and no one expects it to be a professional word processing product.

The answer is A and D

4. A program can operate incorrectly but still appear to pass your test because (choose one or two of the following):
- A. The test is automated and it is not programmed to compare the specific misbehavior to an expected result.
 - B. The test is manual (run by a human) but the human is paying attention to other aspects of the program's behavior and doesn't notice the misbehavior.
 - C. The tester knows how to run the test but doesn't know what to look for as a result.
 - D. All of the above

The answer is D

5. As described in the lecture, risk-based testing involves:
- A. Identifying tests that pose too much risk to be run, except under carefully controlled circumstances.
 - B. Designing tests that are optimized to expose serious problems.
 - C. Thorough documentation of high-risk attributes of the program under test.
 - D. Evaluation of a product's risks in the field.

The answer is B

6. As described in the lecture, a heuristic (choose one or two of the following):
- A. Is a fallible idea or method that may help you simplify and solve an otherwise unsolvable problem.
 - B. May conflict with another heuristic, and yet both can still be considered valid and useful.
 - C. Is something that you can use to justify a claim that the program is working or not working correctly, even though you can't otherwise prove your claim.
 - D. All of the above

The answer is D

7. Function equivalence testing is a type of automated testing that compares two different implementations of the same function. One is the program under test. The other is a program that we expect to provide correct results. Suppose that you feed the same input to both functions and get the same result (Choose one or two answers):
- A. The program passed the test and is operating correctly.
 - B. The program may have passed the test, but both programs may have given the same wrong answer.
 - C. We can conclude that both function's implementations are equivalent
 - D. All of the above.

The answer is B

(It is not C because we have either given the program one input or an unspecified amount of input. There is no indication that we have given it a sufficient sample for this conclusion.)