

Status Finished**Started** Thursday, 12 December 2024, 11:30 PM**Completed** Thursday, 12 December 2024, 11:33 PM**Duration** 2 mins 50 secs**Grade** 10.00 out of 10.00 (100%)**Question 1**

Correct

Mark 1.00 out of 1.00

For a legacy system with high quality but low business value, ____ .

Select one:

- ☒ a. replace with commercial off-the-shelf (COTS), remove it completely or maintain.
- ☐ b. re-engineer or replace by another software with higher quality and the same or more functionalities, if any.
- ☐ c. simply replace it by another higher quality software even though the new software has less functionalities.
- ☐ d. Any of the other answers.

Correct

Marks for this submission: 1.00/1.00.

Question 2

Correct

Mark 1.00 out of 1.00

When to do refactoring?

Select one:

- ☐ a. Long methods.
- ☐ b. Duplicate code.
- ☐ c. Data clumping: a group of data (parameters, variables) is used multiply can be replaced by an object consists of all the data.
- ☒ d. All of that of the other answers.

Correct

Marks for this submission: 1.00/1.00.



Question 3

Correct

Mark 1.00 out of 1.00

What do we do when a serious system fault in our software causes the system failure?

Select one:

- ☐ a. Skip the fault and hope that it will appear no more.
- ☐ b. All of that of the other answers.
- ☒ c. Analyze the source code then modify it without going through all stage of software engineering process.
- ☐ d. Analyze the fault and submit an upgrade proposal for changing the software.

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

When would we stop the testing period?

Select one:

- ☐ a. 100% of test-cases has been tested.
- ☐ b. Reach the end of testing period.
- ☒ c. All of the other answers are correct, depended on the testing strategy.
- ☐ d. Reach the stoping criteria, for example at 95% statement coverage or 99% defects have been discovered.

Correct

Marks for this submission: 1.00/1.00.



Question 5

Correct

Mark 1.00 out of 1.00

For the following requirement, which test-case(s) are good to use in testing? "If a patient is known to be allergic to any particular medication, then prescription of that medication shall result in a warning message being issued to the system user."

Select one:

- ☒ a. All test-cases from the other answers are good.
- ☐ b. Set up a patient record in which allergies to two drugs are recorded. Prescribe both of these drugs separately and check that the correct warning for each drug is issued.
- ☐ c. Set up a patient record with a known allergy. Prescribe the medication to that the patient is allergic to, and check that the warning is issued by the system.
- ☐ d. Set up a patient record with no known allergies. Prescribe medication for allergies that are known to exist. Check that a warning message is not issued by the system.

Correct

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

What do we do when refactoring for a piece of code that developers put in the software for future requirements?

Select one:

- ☐ a. All of that of the other answers.
- ☒ b. Remove it for simplify the current code.
- ☐ c. Change the name of the method into futureRequirementMethod().
- ☐ d. Duplicate the code to make it stronger.

Correct

Marks for this submission: 1.00/1.00.



Question 7

Correct

Mark 1.00 out of 1.00

In white-box testing method, ____ .

Select one:

- ☐ a. One can only need to run all test-cases to guarantee 100% decision coverage.
- ☒ b. One can only need to cover all statements in testing to guarantee 100% statement coverage.
- ☐ c. All of the other answers are correct.
- ☐ d. One only need to guarantee the 100% statement coverage and 100% decision coverage to confirm that there is no more defect/error of a software.

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

For a legacy system with low quality but important, ____ .

Select one:

- ☐ a. simply replace it by another higher quality software even though the new software has less functionalities.
- ☐ b. keep it when any modification affects the organization.
- ☐ c. Any of the other answers.
- ☒ d. re-engineer or replace by another software with higher quality and the same or more functionalities, if any.

Correct

Marks for this submission: 1.00/1.00.



Question 9

Correct

Mark 1.00 out of 1.00

Which of the following is correct in use-case testing?

Select one:

- ☐ a. One only needs to generate all test-data randomly.
- ☒ b. One only need to generate test-cases using all flows (normal, exception, alternative) in the use-case scenario.
- ☐ c. One only needs to execute the main flow of the use-case to confirm the correctness of the use-case.
- ☐ d. All of the other answers are correct.

Correct

Marks for this submission: 1.00/1.00.

Question 10

Correct

Mark 1.00 out of 1.00

In which of the following case, the while-box testing approach cannot reach 100% decision coverage?

Select one:

- ☐ a. A piece of code that has many branches (if then else, for example).
- ☒ b. A piece of code that has a loop/recursion.
- ☐ c. A piece of code that has only sequential statements.
- ☐ d. A piece of code that has many functions/methods.

Correct

Marks for this submission: 1.00/1.00.

