Assignment 12

Due date for submitting this assignment has passed. As per our record you have not submitted this assignment.

1. Which of the following is not a factor contributing to the increased difficulty in software reliability measurement, as compared to hardware reliability measurement?
   - [ ] The reliability improvement due to fixing a single bug depends on where the bug is located in the code.
   - [x] The permanent reliability of software products is observer-dependent.
   - [ ] The reliability of a software product keeps changing as errors are detected and fixed.
   - [ ] Software is more likely to be based on the same framework.

No. the answer is incorrect. Score: 0

2. Which one of the following can be said about the overall reliability behavior of a typical software during its life-time?
   - [ ] Initially increases, but later decreases
   - [x] Initially decreases, but later increases
   - [ ] Decreasing trend throughout the life cycle
   - [ ] Increasing trend throughout the life cycle

No. the answer is incorrect. Score: 0

3. After a software is maintained, which one of the following types of testing involves repeating execution of tests that were already performed to ensure that the code modifications carried out during maintenance have not introduced additional faults?
   - [ ] Regression testing
   - [x] Function testing
   - [ ] System testing
   - [ ] Integration testing

No. the answer is incorrect. Score: 0

4. Which of the following statements is not an objective of software verifiability?
   - [x] Ensuring that the software development steps are carried out correctly.
   - [ ] Ensuring that the software environment has been developed correctly.
   - [ ] Ensuring that the software is produced at a development stage conforming to the outputs of the previous phase.
   - [ ] Ensuring that the software is capable of producing correct outputs.

No. the answer is incorrect. Score: 0

5. Which of the following is a practical use of reliability growth modeling?
   - [ ] Determine the operational life of an application software.
   - [x] Determine what to stop testing.
   - [ ] Provide feedback to stop testing.
   - [ ] Incorporate reliability growth information into design.

No. the answer is incorrect. Score: 0

6. What is the reliability of a software with the following reliability figures? Mean Time Between Failure (MTBF) = 45 days, Mean Time To Repair (MTTR) = 4 hours.
   - [ ] 75%
   - [x] 85%
   - [ ] 95%
   - [ ] 100%

No. the answer is incorrect. Score: 0

7. On-Call service invocations, a software failed on 15 occasions. What is its POFCC (Probability Of Failure On Demand)?
   - [x] 4%
   - [ ] 8%
   - [ ] 12%
   - [ ] 16%

No. the answer is incorrect. Score: 0

8. On a bug fix, the reliability of a software may actually decrease, either increases. Which one of the following explains this phenomenon?
   - [ ] The fix is a component of the same bug.
   - [x] The fix is to the core part.
   - [ ] The fix to another component.
   - [ ] The fix is not proper.

No. the answer is incorrect. Score: 0

9. On a bug fix, the reliability of a software may actually decrease, either increases. Which one of the following explains this phenomenon?
   - [ ] The fix is to the core part.
   - [x] The fix is to the core part.
   - [ ] The fix to another component.
   - [ ] The fix is not proper.

No. the answer is incorrect. Score: 0

10. Which one of the following statements is FALSE?
   - [ ] A failure is caused due to a fault.
   - [ ] A fault is a common for a bug.
   - [x] An error may or may not cause a failure.
   - [ ] Every rationale compiled by a programmer shows up as a failure.

No. the answer is incorrect. Score: 0