MCQs on Software Testing Principles

1. 1. Which of the following is NOT a principle of software testing?

* A. Testing shows the presence of defects
* B. **Exhaustive testing is possible**
* C. Early testing saves time and money
* D. Defect clustering

Answer: B

1. 2. The principle "Absence of errors fallacy" means:

* A. There are no bugs in the software
* B. Software is free from defects
* C. **Finding and fixing defects does not help if the system is unusable**
* D. All bugs have been fixed

Answer: C

1. 3. Which principle states that most defects are found in a small number of modules?

* A. Pesticide Paradox
* B**. Defect Clustering**
* C. Early Testing
* D. Testing shows the presence of defects

Answer:B

1. 4. What is the main reason for the "Pesticide Paradox" in testing?

* A. New features are not tested
* B**. Same set of test cases no longer find new bugs**
* C. Testers are not skilled
* D. Code is too complex to test

Answer:B

1. 5. Why is early testing important in the SDLC?

* A. It's cheaper to test at the end
* B**. It helps find defects early, saving cost and effort**
* C. Requirements are clear at the end
* D. Development is complete

Answer: B

1. 6. Which testing principle helps reduce the cost of fixing defects?

* A. Testing shows presence of defects
* B. Defect clustering
* C. **Early testing**
* D. Pesticide paradox

Answer: C

1. 7. Which principle highlights that testing can’t prove the software is bug-free?

* A. Complete testing is possible
* B. **Testing shows the presence of defects**
* C. Defect clustering
* D. Exhaustive testing is possible

Answer: B

1. 8. What is the implication of the "Pesticide Paradox" principle?

* A. Testing must be repeated frequently
* B. **Testers must write new tests to find more bugs**
* C. Developers must fix the bugs
* D. Regression testing is unnecessary

Answer: B

1. 9. Which of these testing principles says that 100% testing is not possible?

* A. Early testing
* B. Defect clustering
* C**. Exhaustive testing is impossible**
* D. Testing shows the presence of defects

Answer: C

1. 10. Which testing principle is closely related to Pareto Principle (80/20 rule)?

* A. Testing shows presence of defects
* B**. Defect clustering**
* C. Early testing
* D. Pesticide paradox

Answer: B

1. 11. Testing effort should be based on...?

* A. Developer’s skills
* B. Type of test cases
* C. **Risk and priorities**
* D. Size of application

Answer : C

1. Which principle stresses that software must satisfy user needs, not just be defect-free?

* A. Pesticide paradox
* B**. Absence-of-errors fallacy**
* C. Exhaustive testing
* D. Defect clustering

Answer: B

1. 13. According to testing principles, which of the following is not possible?

* A**. Find all defects**
* B. Execute multiple tests
* C. Automate testing
* D. Use test data

Answer: A

1. 14. What happens if the same tests are repeated over and over?

* A. More bugs are found
* B. Same bugs are found again
* C. Bugs are resolved
* D**. New bugs are unlikely to be found**

Answer: D

1. 15. Testing can only show...

* A. The software is error-free
* B. All possible inputs
* C**. That defects are present**
* D. The end of the development cycle

Answer: C

1. 16. The principle "Defect clustering" relates to...

* A. All modules are equally buggy
* B. Bugs are evenly distributed
* C. **Few modules contain most of the defects**
* D. Bugs occur randomly

Answer: C

1. 17. One of the testing principles states that testing should start:

* A. After development ends
* B. When the product is stable
* C**. As early as possible in the lifecycle**
* D. During deployment

Answer:C

1. 18. A well-known fallacy in software testing is:

* A. All bugs are found
* B. Testing assures quality
* C. No defects exist
* D. **Absence-of-errors fallacy**

Answer:D

1. 19. According to the principles, testing is most effective when:

* A. Done by developers only
* B. Performed at the end
* **C. Planned early and continuously**
* D. Performed manually

Answer:C

1. 20. Which principle focuses on updating test cases regularly?

* A. Early testing
* B. **Pesticide paradox**
* C. Absence-of-errors fallacy
* D. Risk-based testing

Answer:B