

1. Which of the following is NOT a goal of a Pilot Project for tool evaluation?
 - A. To reduce the defect rate in the Pilot Project**
 - B. To assess whether the benefits will be achieved at reasonable cost
 - C. To determine use, management, storage, and maintenance of the tool and test assets
 - D. To evaluate how the tool fits with existing processes and practices
2. Which of the following is a true statement about test automation scripts that are captured using a capture/replay tool?
 - A. The scripts may be unstable**
 - B. The scripts are created by experienced automators
 - C. The scripts are data-driven
 - D. The scripts are easy to maintain
3. What is a potential risk in using tools to support testing?
 - A. The tool will repeat exactly the same thing it did the previous time
 - B. Unrealistic expectations, expecting the tool to do too much**
 - C. Insufficient reliance on the tool, i.e. still doing manual testing when a test execution tool has been purchased
 - D. The tool may find defects that aren't there
4. A typical commercial test execution tool would be able to perform all of the following except:
 - A. comparison of expected outcomes with actual outcomes
 - B. Replaying inputs according to a programmed script
 - C. reading test values from a data file
 - D. Generating expected output**
5. If a test tool is causing a probe effect, what does this mean?
 - A. The tester will require special training to be able to effectively use the tool
 - B. The tool is used to continuously probe the software for defects
 - C. The tool is used primarily to assist with exploratory testing
 - D. The outcome of the test may be influenced by the use of the tool**
6. Which of the following are the major objectives of a pilot project for a tool introduction?
 - A. Learn, evaluate, decide, assess**
 - B. Monitor, support, revise, implement
 - C. Roll out, adapt, train, implement
 - D. Evaluate, adapt, monitor, support
7. Which of the following tools would be involved in the automation of regression tests?
 - A. Boundary Tester
 - B. Capture/playback**
 - C. Data tester
 - D. Output comparator

8. Below is a list of test efficiency improvement goals a software development and test organization would like to achieve. Which of these goals would best be supported by a test management tool?
- A. To automate selection of test cases for execution
 - B. To resolve defects faster
 - C. To optimize the ability of tests to identify failures
 - D. To build traceability between requirements, tests, and bugs**
9. Which of the following is the purpose of a proof-of-concept for a new tool?
- A. To verify that the return on investment will be sufficient
 - B. To verify that the vendor will provide adequate support
 - C. To verify that the licensing cost is affordable
 - D. To verify that the tool will work effectively within the current infrastructure**
10. What is the primary purpose of a test execution tool?
- A. It tracks test cases, defects and requirements traceability
 - B. It analyzes code to determine if there are any coding standard violations
 - C. It executes test objects using automated test scripts**
 - D. It automatically records defects to the defect tracking system
11. Which of the following are advanced scripting techniques for test execution tools ?
- A. Data-driven and keyword-driven**
 - B. Capture-driven and keyhole-driven
 - C. Playback-driven and keyword-driven
 - D. Data-driven and capture-driven
12. Which one of the following best describes a characteristic of a keyword driven test execution tool?
- A. A table with test input data, action words, and expected results, controls execution of the system under test**
 - B. Actions of testers recorded in a script that is rerun several times
 - C. The ability to log test results and compare them against the expected results, stored in a text file
 - D. Actions of testers recorded in a script that is run with several sets of test input data
13. What are the potential benefits from using tools in general to support testing?
- A. Greater quality of code, reduction in the number of testers needed, better objectives for testing
 - B. Greater responsiveness of users, reduction of tests run, objectives not necessary
 - C. Greater repeatability of tests, reduction in repetitive work, objective assessment**
 - D. Greater quality of code, reduction in paperwork, fewer objections to the tests
14. From the list below, select the recommended principles for introducing a chosen test tool in an organization?

1. Roll the tool out to the entire organization at the same time

2. Start with a pilot project
3. Adapt and improve processes to fit the use of the tool
4. Provide training and coaching for new users
5. Let each team decide their own standard ways of using the tool
6. Monitor that costs do not exceed initial acquisition cost
7. Gather lessons learned from all teams

- A. 2, 3, 4, 7
- B. 1, 4, 6, 7
- C. 3, 4, 5, 6
- D. 1, 2, 3, 5

15. If you are looking for a tool that will verify if the code complies with coding standards, what type of tool are you seeking?

- A. Test automation
- B. Test management
- C. **Static analysis**
- D. Keyword-driven

16. Which of the following are benefits and which are risks of using tools to support testing?

- 1 Over-reliance on the tool
- 2 Greater consistency and repeatability
- 3 Objective assessment
- 4 Unrealistic expectations
- 5 Underestimating the effort required to maintain the test assets generated by the tool
- 6 Ease of access to information about tests or testing
- 7 Repetitive work is reduced

- A. **Benefits: 2,3,6 and 7. Risks: 1,4 and 5**
- B. Benefits: 1,2,3 and 7, Risks: 4,5 and 6
- C. Benefits: 3,4,6 and 7. Risks: 1,2 and 5
- D. Benefits: 2,3,5 and 6. Risks: 1,4 and 7

17. A tool that supports traceability, recording of incidents or scheduling of tests is called

- A. **Test management tool**
- B. Debugging tool
- C. Dynamic analysis tool
- D. Test execution tool

18. Which success factors are required for good tool support within an organization?

- A. **Adapting processes to fit with the use of the tool and monitoring tool use and benefits**
- B. Setting ambitious objectives for tool benefits and aggressive deadlines for achieving them
- C. Adopting practices from other successful organizations and ensuring that initial ways of using the tool are maintained
- D. Acquiring the best tool and ensuring that all testers use it

19. The place to start if you want to use a new test tool is

- A. Find out what your budget would be for the tool
- B. Attend a tool exhibition
- C. **Analyze your needs and requirements**
- D. Invite a vendor to give a demo

20. What is the main goal of a proof of concept for a new tool?

- A. To see if people find it usable
- B. To see if management is happy with the licensing structure
- C. **To see if it works with the organization's infrastructure**
- D. To see if the vendor will supply adequate support

21. Which of the following tools would be most appropriate for managing defects throughout the software lifecycle?

- A. Failure management tools
- B. Requirements management tools
- C. Configuration management tools
- D. **Incident management tools**

22. Given the following types of tool, which tools would typically be used by developers and which by an independent test team:

- i. static analysis
- ii. performance testing
- iii. test management
- iv. dynamic analysis
- v. test running
- vi. test data preparation

- A. developers would typically use i, ii, iii and iv; test team v and vi
- B. developers would typically use i, iv and vi; test team ii, iii and v
- C. developers would typically use ii, iv and vi; test team I, ii and v
- D. **developers would typically use i and iv; test team ii, iii, v and vi**

23. Which of the following would NOT be done as part of selecting a tool for an organization?

- A. Roll out the tool to as many users as possible within the organization**
- B. Assess organizational maturity, strengths and weaknesses
- C. Identify internal requirements for coaching and mentoring in the use of the tool
- D. Evaluate the tool features against clear requirements and objective criteria

24. Why is it important to define usage guidelines for a new tool?

- A. Because management needs to understand the details of the tool usage
- B. Because this will ensure the licensing restrictions are enforced
- C. Because this will provide the information needed for the cost/benefit analysis
- D. Because this is a proven success factor in tool development**

25. Which one of the following is MOST likely to be a benefit of test execution tools?

- a) It is easy to create regression tests.
- b) It is easy to maintain version control of test assets.
- c) It is easy to design tests for security testing.
- d) It is easy to run regression tests.**

26. Which test tool (A-D) is characterized by the classification (1-4) below?

- 1. Tool support for management of testing and testware.
- 2. Tool support for static testing.
- 3. Tool support for test execution and logging.
- 4. Tool support for performance measurement and dynamic analysis.
- A. Coverage tools.
- B. Configuration management tools.
- C. Review tools.
- D. Monitoring tools.
- a) 1A, 2B, 3D, 4C.
- b) 1B, 2C, 3D, 4A.
- c) 1A, 2C, 3D, 4B.
- d) 1B, 2C, 3A, 4D**

27. Given the following test activities and test tools:

- 1. Performance measurement and dynamic analysis.
- 2. Test execution and logging.
- 3. Management of testing and testware.
- 4. Test design.
- A. Requirements coverage tools.
- B. Dynamic analysis tools.
- C. Test data preparation tools.
- D. Defect management tools.

Which of the following BEST matches the activities and tools?

- a) 1 – B, 2 – C, 3 – D, 4 – A
- b) 1 – B, 2 – A, 3 – C, 4 – D

- c) 1 – B, 2 – A, 3 – D, 4 – C
- d) 1 – A, 2 – B, 3 – D, 4 – C

28. Which of the following is MOST likely to be used as a reason for using a pilot project to introduce a tool into an organization?
- a) **The need to evaluate how the tool fits with existing processes and practices and determining what would need to change.**
 - b) The need to evaluate the test automation skills and training, mentoring and coaching needs of the testers who will use the tool.
 - c) The need to evaluate whether the tool provides the required functionality and does not duplicate existing test tools.
 - d) The need to evaluate the tool vendor in terms of the training and other support they provide