

Exam Code: PSD

Exam Name: Professional Scrum Developer

Exam A

QUESTION 1

What is the definition of done good for? Choose all that apply.

- A. This way documentation is obligated and cannot be skipped
- B. It creates a shared understanding of what done means
- C. Management knows what the work of the developer needs to be checked for
- D. It helps the developers know how much work to select during the sprint planning

Correct Answer: B, D

Section:

Explanation:

The DoD helps the developers know how much work needs to be done, and therefore they can decide what should be part of the sprint. It also creates a shared understanding of what done means. This is likely to include documentation, but that depends on the decisions of the organization and team. Scrum does not dictate this.

QUESTION 2

How much time will there be after a sprint before the next one starts?

- A. Enough to deploy the increment and update the product backlog based on the outcome of the sprint review
- B. Enough to clean up lingering definition of done points
- C. None, a new sprint starts immediately after the end of the previous one
- D. At most a week for a one-month sprint

Correct Answer: C

Section:

Explanation:

The scrum guide says: 'A new Sprint starts immediately after the conclusion of the previous Sprint.'

QUESTION 3

What do scrum artifacts represent?

- A. Work that needs to be done
- B. Flow and feedback
- C. Work or value
- D. Visual representation of the progress

Correct Answer: C

Section:

Explanation:

The scrum artifacts are: product backlog, sprint backlog and the increment. They represent work or value.

QUESTION 4

Improvements that are outcome of the sprint retrospective can be added to the sprint backlog for the next sprint.

- A. True
- B. False

Correct Answer: A

Section:

Explanation:

The scrum guide says: 'The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.'

QUESTION 5

What are two responsibilities of testers in the scrum team? (choose two)

- A. Finding bugs
- B. Tracking quality metrics
- C. All developers are responsible for quality
- D. Verifying the work of the programmers
- E. Scrum has no tester role

Correct Answer: C, E

Section:

Explanation:

Specific roles don't exist in scrum, developers are creating the value.

QUESTION 6

Which three describe TDD?

- A. An incremental and emergent approach to software design
- B. A software development technique based on automated tests
- C. A predictable way to develop working well-organized code
- D. Creating a manual test script before writing code
- E. Having testers involved in the development process

Correct Answer: A, B, C

Section:

Explanation:

TDD stands for test driven development. It makes developers think before starting to code. This leads to better organized code. It requires the developer to write the code for the test first, this means that it's based on automated tests. There are no testers in scrum, they are called developers as well.

QUESTION 7

When does the development team show their work to the product owner?

- A. All of these
- B. Anytime the developers need feedback from the product owner
- C. Whenever the product owner asks
- D. During the sprint review

Correct Answer: A

Section:

Explanation:

All of these would good moments to update the PO with the work done.

QUESTION 8

Who writes tests in a scrum team?

- A. Most junior developer
- B. Product owner
- C. QA specialists
- D. Scrum master
- E. The tester
- F. Developers

Correct Answer: F

Section:

Explanation:

Tests are part of the development, and the development is done by the developers. There are no specific roles in scrum, even though members of the scrum team can have their own expertise.

QUESTION 9

What is test first development?

- A. The continuous restructuring of software to retain flexibility
- B. Having the tester in the development team write the test plans before coding
- C. Creating tests before satisfying them
- D. Testing existing code before adding more code to it

Correct Answer: B

Section:

Explanation:

Test first development is a different way of saying TDD.

QUESTION 10

How do you know that the developers are cross-functional?

- A. Every member can do every task
- B. They work with TDD
- C. They never argue
- D. They do pair programming
- E. Developers have the combined skills to create a usable increment

Correct Answer: E

Section:

Explanation:

Cross-functional is on team level and not on individual level.

QUESTION 11

The practice of decomposing a requirement into failing tests is called:

- A. Behavior driven development
- B. Scrum testing
- C. Regression testing
- D. Acceptance test driven development

Correct Answer: D

Section:

Explanation:

In ATDD you start with writing tests to represent the requirement. Since you start with this, there is no production code to satisfy the test which is why the tests will fail.

QUESTION 12

Scrum demands code review

- A. True
- B. False

Correct Answer: B

Section:

Explanation:

There are no concrete development guidelines demanded by scrum, even though code review is an excellent idea. Scrum is also not only about developing software.

QUESTION 13

What are three of the best ways to address non-functional requirements?

- A. Handle them during a risk mitigation phase before development
- B. Scrum is for functional, frontend development only
- C. Include them in the Product Backlog
- D. Before the release, they should be tested and validated in a hardening sprint
- E. Specific expectations can be used as acceptance criteria to specific product backlog items
- F. Important, recurring non-functional requirements can be added to the definition of done

Correct Answer: A, E, F

Section:

Explanation:

There is no hardening sprint, there are only regular sprints. If it's an ever recurring non-functional requirement, it can be added to the definition of done. If it's not it can be added (as a criteria) in the product backlog (item).

QUESTION 14

Cyclomatic complexity is a metric for:

- A. Measuring branching structures and nesting levels in code
- B. Assessing if code is written in as few lines as possible
- C. Determining the number of unit tests required to ensure correctness
- D. Demonstrating code is well structured and cleanly implemented

Correct Answer: A

Section:

Explanation:

Cyclomatic complexity is a number expressing the number of different paths that can be taken throughout the code. Higher means complex code.

QUESTION 15

What would not be considered refactoring?

- A. Extracting methods
- B. Reordering method parameters to improve readability
- C. Changing external interfaces or APIs
- D. Renaming things to be more logical
- E. Extracting interfaces

Correct Answer: C

Section:**Explanation:**

Refactoring is only about the own code, so not about changing an external interface or api.

QUESTION 16

What is the step to take in TDD after the tests have failed?

- A. Meet with the team to see why it fails
- B. Change the test in a way that is passes
- C. Run it again to verify it fails.
- D. Write the code to satisfy the test

Correct Answer: D

Section:**Explanation:**

In TDD you start with writing the test before the code. This test cannot pass. If it does, the test is wrong. When the tests are written, the production code to satisfy the test will be written. Once all the tests succeeds, the product code is done.

QUESTION 17

When do the developers participate in the product backlog refinement?

- A. Never, it is the sole responsibility of the Product owner to refine the backlog
- B. Only during the sprint planning
- C. Anytime during the sprint
- D. Only during the refinement meetings planned by the PO

Correct Answer: C

Section:**Explanation:**

There is no set time for product backlog refinement.

QUESTION 18

What is not a desirable characteristics of a unit test?

Test code is as small as possible

- A. Execution is fast
- B. Independent of others
- C. Includes exercising the persistence layer
- D. Makes assertions about only one logical concept

Correct Answer: C

Section:

Explanation:

you don't want your unit test to really make changes so it cannot exercise the real persistence layer.

QUESTION 19

What is pair programming?

- A. Managers doing performance reviews by comparing one programmer's code to another's
- B. Two developers writing code together, providing constant peer review
- C. Two programmers writing code separately, but always review each other's pull requests
- D. Developer and tester work together to write and test code

Correct Answer: A

Section:

Explanation:

Pair programming means that two developers are coding together and performing live peer review. This will enhance the affectivity as it leads to increased code quality.

QUESTION 20

Your team is one of seven teams working on a product. All teams use the same version control system. Which is the best approach to deliver high-quality increments?

- A. Each team's automated build is integrated toward the end of the sprint
- B. Developers should perform a combination of local and private builds
- C. Each team should have its own automated build
- D. There is one automated build for all teams

Correct Answer: D

Section:

Explanation:

This way there are no surprises near the end of the sprint or during delivery and the increment will be most stable as possible.

QUESTION 21

Who is responsible for the system architecture of a product developed using Scrum?

- A. The architect chosen by the developers
- B. The architect chosen by the developers
- C. The assigned architect
- D. The developers

Correct Answer: D

Section:

Explanation:

Scrum doesn't know any other role than developer. The developers are cross-functional and have all the skills needed to create a usable increment. They are doing the work and responsible for the architecture.

QUESTION 22

What is the commitment for the sprint backlog?

- A. Definition of done
- B. Sprint goal
- C. Sprint planning outcome
- D. Product goal

Correct Answer: B

Section:

Explanation:

If you are not sure, please review the section scrum artifacts in the scrum guide.

QUESTION 23

What are the scrum values?

- A. commitment, empiricism, focus, respect
- B. commitment, focus, respect, transparency and courage
- C. transparency, inspection, adaptations
- D. commitment, focus, openness, respect and courage

Correct Answer: D

Section:

QUESTION 24

Who is responsible for engaging the stakeholders?

- A. The business analyst
- B. The sales manager
- C. The scrum master
- D. The developers
- E. The project manager
- F. The product owner

Correct Answer: F

Section:

Explanation:

The product owner is responsible for engaging the stakeholders.

QUESTION 25

Which are obligatory scrum events?

- A. sprint retrospective
- B. sprint goal meeting
- C. backlog refinement

- D. sprint planning
- E. sprint review
- F. daily scrum

Correct Answer: A, D, E, F

Section:

Explanation:

If you are not sure, please review the Scrum events section in the scrum guide

QUESTION 26

Which phrase best describes a product owner?

- A. Team manager
- B. Project manager
- C. Requirements engineer
- D. Mediator for the developers and customers
- E. Value optimizer

Correct Answer: E

Section:

Explanation:

The scrum guide says: 'The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team.' The key here is the value maximizing part. Of course, he also comes up with requirements and acts as a go-between between developers and customers, but that is definitely not the best answer here.

QUESTION 27

How long should the sprint review take? Choose the best answer

- A. Until everyone is done.
- B. Max two hours for a one month sprint
- C. Max two hours
- D. Max four hours
- E. Max four hours for a one-month sprint

Correct Answer: E

Section:

Explanation:

The scrum guide says: 'The Sprint Review is the second to last event of the Sprint and is timeboxed to a maximum of four hours for a one-month Sprint.'

QUESTION 28

If multiple teams are working on the same product, each team should have its own product owner

- A. False
- B. True

Correct Answer: A

Section:

Explanation:

One product owner per product backlog, one product backlog per product

QUESTION 29

The product owner determines how many product backlog items the developers select for the sprint in the sprint planning.

- A. False, the scrum master does that
- B. True
- C. True, in line with what was promised to the stakeholders
- D. True, if the developers have enough capacity
- E. False, the project manager does that
- F. False

Correct Answer: F

Section:

Explanation:

It is false, the developers select the items, because they will have to commit to it.

QUESTION 30

Several scrum teams share the scrum master. Developers of multiple teams approach the scrum master, because they need fulltime commitment from the same technical specialist for the next sprint. What should the scrum master consider for the response to this problem? Choose the two best answers.

- A. The need for a stable velocity
- B. The benefit of the teams figuring it out themselves
- C. The need to have all developers busy with work
- D. The ability of the scrum teams to produce integrated increments

Correct Answer: B, D

Section:

Explanation:

The working increment is the goal of the sprint and should be kept in mind. The self-managing aspect of the teams is also crucial to take in mind. Stable velocity and optimally used developers are not the scrum master's concern.

QUESTION 31

Which are three attributes of a bad bug report?

- A. Vague statements or untested assumptions
- B. Assigning blame
- C. Generic titles
- D. Simple and repeatable reproduction steps
- E. One bug per report

Correct Answer: A, B, C

Section:

Explanation:

you don't want to blame anyone, have vague titles or make vague statements. It needs to be clear and constructive, and focussed on one specific problem. It should also not contain feature requests.

QUESTION 32

How much time does Product backlog refinement take?

- A. 25% of the sprint capacity
- B. As much as needed without endangering the Sprint goal
- C. 10% of the senior developers

Correct Answer: B

Section:

Explanation:

The refinement is very important and can take quite some time for that reason, however, it should not endanger the sprint goal.

QUESTION 33

Why does a test written using TDD always fail?

- A. Because testers are terrible coders
- B. Because the tests are checked in before the code exists
- C. Because the product code to satisfy the test doesn't exist yet
- D. Because the test needs to be refactored

Correct Answer: C

Section:

Explanation:

TDD stands for test driven development. It makes developers think before starting to code. This leads to better organized code. It requires the developer to write the code for the test first, the test fails because the code it's testing doesn't exist yet.

QUESTION 34

What is a sprint burn down chart?

- A. Visual representation of work that is still to do and time that is left
- B. A chart showing progress towards the product goal
- C. A chart that shows whether bugs came up
- D. Visual representation of the product backlog items left

Correct Answer: A

Section:

QUESTION 35

While developing new functionality, you find a bug that has already been delivered to the customer. What do you do?

- A. Fix the bug
- B. Revise the tests to hide the bug from the tests reports
- C. Talk to the product owner
- D. Stub out the code that causes the bug

Correct Answer: C

Section:

Explanation:

The product owner knows what creates most value. Since this is already delivered, it is not part of the current sprint.

QUESTION 36

What does code coverage show?

- A. The ratio of the number of tests to lines of code in the system being tested
- B. The quality of unit tests being written
- C. Code being exercised by tests
- D. The absence of defects in code
- E. When a feature is done

Correct Answer: C

Section:

Explanation:

The ratio answer is wrong, because it doesn't say anything about the number of tests to lines of code, but it does say the percentage of lines of code that is being tested. Hence, the correct answer is code being exercised by tests.

QUESTION 37

Which four are benefits of TDD?

- A. It promotes good design and separation of concerns
- B. It causes you to construct a test harness that can be automated
- C. It improves quality and reduces bugs
- D. It reduces the cost of maintenance over time
- E. It ensure there will be no bugs in the code

Correct Answer: A, B, C, D

Section:

Explanation:

Nothing can really ensure it will be bug free.