1. While estimating the effort needed to complete an important user story, there are multiple views expressed by various members. As per a team member, it will take five days of effort, where as a subject matter Expert who has worked on similar stories in the past, thinks that three days of effort should be sufficient. The scrum master says it will take four days. Product owner wishes the story to be completed in one day because of its urgency. Whose estimate should be considered for sprint planning towards estimate effort?
   * 1. Product owner – since he/she has the control over the project
     2. Scrum master – since he/she plays a key role during sprint planning
     3. Subject Matter Expert – As he/she has complete knowledge of similar stories
     4. Team member – After arriving at cancerous by providing justification
2. One of the Infosys Projects in banking domain is about to transition in to agile methodology from waterfall. The team is working on the same project for past 3 years, but none of them have any experience on Agile way of project execution. As the project got started, they were very reluctant to accept any requirement changes during the release. For any such project moving to agile. What kind of shift in mindset is required for the team?
   * 1. Understanding the importance of continuous feedback in agile project
     2. Unlearn the practices of stages wise development and understand the practices of incremental delivery
     3. Both the above points will help
     4. Mindset shift is not in case they are completely conversant with project domain
3. What are the disadvantages if the agile team does not conduct a sprint Retrospective meeting? (a) Team would not get various perspectives of all the members regarding their insight on the project (b) Team would miss on the lessons learnt from the previous sprint mistakes (c) Team would miss the opportunity to collaborate with all the external stakeholders
   * 1. a and b only
     2. a and c only
     3. b and c only
     4. c only
4. While decomposing the user stories into task, which of the following is considered as good practice by an individual to identify the right task to complete the user story?
   * 1. Take inputs from the other team members
     2. Verify if those tasks are similar to any other similar projects
     3. Communicate the task to product owner and take sign-off
     4. Discuss with business users for every task identified
5. Which of the following soft skills are important while working in agile projects? (Options are in Check boxes)
   * 1. Analytical ability
     2. Listening and Questioning
     3. Pro-Activeness
     4. Delegation
6. James, the developer is using Test Driven development in his project. As he progress, he finds that he is unable to test a piece of code that requires a live Database object which is unavailable for continuous testing. Choose the option that could be adopted by James.
   * 1. Use Mocking frameworks to mock the Database object
     2. Stop using TDD for the particular piece of code
     3. Ignore the test cases for the piece of code that requires the database object
     4. Gain access to the production database object and continue tests inspite of risk involved
7. What is the relevance of mocking and stubbing while developing the code using Test Driven Development approach?
   * 1. For creating simulated objects and for testing a class or method for deriving expected output
     2. Helps programmers to maintain a comprehensive set of repeatable tests to run them exhaustively
     3. Reduces the need for debugging the code
     4. Reduces the number of lines of code in functional implementation of the business problem
8. What is the difference between Test Driven Development (TDD) and Acceptance Test Driven Development (ATDD)?
   * 1. TDD focuses on developing system level function correct and robust. ATDD focuses on testing the individual function of the system correct
     2. TDD focuses on developing individual function correct and robust. ATDD focuses on getting the functionality correct from end user perspective
     3. TDD focuses on testing the functional implementation. ATDD focuses on testing the non-functional requirements
     4. TDD focuses on testing system level function correction and robust. ATDD focuses on developing the individual function of the system correct
9. Which of these are best practices to be followed in writing unit tests using Test Driven Development? I. The number of Assertion in a single Unit test should be maximized for optimal effectiveness. II. Code should not be refactored if even a single existing test is failing. III. Write as many unit tests as possible in advance before beginning work on implementation code. IV. Avoid introducing inter-dependencies between unit tests, including on order of execution of tests.
   * 1. I and III only
     2. II and IV only
     3. III and IV only
     4. I,II,III and IV
10. Following user story is getting discussed in a sprint planning meeting. “As a retail consumer, I want an online search feature so that I can search my shopping cart items quickly and easily.” As a developer in this project, what inferences would you derive from this user story?
    * 1. Good. No additional information required
      2. Good, but need clarification on ‘quick and easy’ for UI testing and the search feature control
      3. Not Good, as it is at a very high level
      4. Not Good, as it is at task detail and not a user story
11. You are a developer working on an agile e-commerce project. During the execution of a sprint, one of the key stakeholders approaches you and asks to change a screen which improves the look and feel significantly. What will you do in this case?
    * 1. Implement the change immediately since it enhances the customer experience
      2. Inform the request to product owner and let him decide in which sprint this change will be taken
      3. Discuss this request in detail in the next Daily Stand-up Meeting
      4. Don’t do anything and focus on your current development for the sprint
12. The Agile project team has sprints with two weeks of duration. The release is of short duration which happens once in every three sprints. The team is facing challenges to align to the shorter release cycles. As a team member you have following options. I. Identify the bottlenecks and inefficiency in release process. II. Automate build and release process what should you plan to achieve?
    * 1. I only
      2. II only
      3. Both I and II
      4. Neither I nor II
13. The Agile project is getting started in a week’s time. Rajan and peter, the two developers in that project are discussing about the applicability of automation. While Rajan says automation can be done only at testing level, Peter is of the view that development and deployment can be automated in agile project along with testing. Which of the following is TRUE?
    * 1. Rajan is correct as only testing can be automated in Agile project
      2. Peter is correct as development, testing and deployment can be automated in Agile project
      3. Peter is partially correct as deployment can’t be automated in Agile project
      4. Peter is partially correct as development can’t be automated in Agile project
14. Samir, a developer in an agile project is trying to refactoring the source code which does not work and has several bugs in it. Should he go ahead and refactor the code?
    * 1. Yes, he should be refactoring the codes as it will help to fix the bugs
      2. No, he should not be refactoring the code as code has to work correctly before it is refactored
15. It is important to have existing test suite passes before the developer starts to refactor the code.
    * 1. True. Existing test suite ensures that there is no change in the behavior of the code.
      2. False. It is not important as they cannot be used once the code is refactored.
16. Peter, a tester in the agile team is suggesting about the usage of tool to ensure adequate test coverage is happening in the project. What should the team do about his suggestion?
    * 1. Ignore his suggestion as test coverage is not important for Agile projects
      2. Acknowledge his suggestion and should use the tool to ensure test coverage from the start of the project
      3. Ignore his suggestion as it will cause delay and would impact the sprint goal
      4. Acknowledge his suggestion and use it only towards the end of the project
17. There are frequent builds done in the agile projects in a day. Which of the following tests should be done to ensure functionality remains correct?
    * 1. End-to-End regression testing
      2. Integration Testing
      3. Smoke testing
      4. System testing

1. Which of the following are TRUE about types of testing done in agile testing?
   * 1. Only unit and Integration testing are done in Agile projects
     2. Only Integration and system testing are done in Agile projects
     3. Only Regression Testing is done in Agile projects
     4. There is no difference in types of testing done in traditional and Agile projects
2. How is testing done in agile projects? A. Development and Testing go hand in hand in the same sprint B. Testing is recommended to be automated C. Testing is always done by different team in different sprints after completion of development
   * 1. Only ‘b’ is correct
     2. Both ‘a’ and ‘b’ are correct
     3. Only ‘c’ is correct
     4. Both ‘b’ and ‘c’ are correct
3. Pavan’s team has created a continuous integration pipeline involving Jenkins, Subversion, ANT, PMD, XUnit, Cobertura, SonarQube, Hosting Servers and HP Load Runner. Select the best set of operations which this pipeline can potentially automate.
   * 1. Code checkout – Build – Unit test – Code Coverage
     2. Code checkout – Build – code Analysis – code coverage – obfuscation – deployment – performance testing
     3. Code checkout – Build – code Analysis – Unit Testing – code coverage – deployment – performance testing
     4. Code checkout – Build – Code Coverage – Performance testing
4. To improve effectiveness and cycle time in integration testing cycle, Shilpa’s team is looking for service virtualization tools that can virtualize service Oriented Architecture layers of the application. Which of the below mentioned tool suites would fit the requirement which can also be integrated in CI (Continuous Integration) server?
   * 1. Maven
     2. Rational team Concert
     3. Parasoft SOA Test
     4. Clear case
5. Which of the following are the advantages of Continuous Integration?
   1. Early warning of broken/compatible code
   2. Immediate unit testing of all changes
   3. Automation build failure detection and notification
   4. All the above
6. Which of the following may not be achieved by automation in agile context?
   1. Confidence in the system
   2. Time saved for additional activity
   3. Complete removal of manual intervention
   4. Earlier detection issues
7. Find the correct match for tools/frameworks and their usage.
   * 1. Cucumber a. Continuous Integration
     2. Jenkins b. Automated Acceptance Testing
     3. Fxcop c. Unit testing
     4. Xunit d. Code Analysis
   1. i-a,ii-b,iii-d,iv-c
   2. i-a,ii-c,iii-b,iv-d
   3. i-b,ii-a,iii-d,iv-c
   4. i-d,ii-b,iii-a,iv-c
8. Identify the following tool that may be used for TDD?
   1. Junit
   2. Nunit
   3. Raciual Application
   4. Selenium

5. In agile project defects are treated like requirements and added to product refactoring for estimation and prioritation

a) True b)False

6) Unit testing is not recommended for agile project because practices like build automation, continuous integration and refactoring are needed

a) True

b) False

7) How is software design done in agile projects?

a) Software design are done in agile projects when scrum master ask for it, otherwise it will not needed.

b) Just enough design is done in upfront, which gives you good foundation to start.

c) Design is done towards the end of the sprint, if it is part of Definition of Done Criteria.

d) Design is not done in agile projects, developer starts coding directly from user stories.

8) What soft skills should the team possess to avoid ‘Delays’ during the sprint execution?

a) The team should be disciplined in all their activities.

b) Upfront to tackle any dependencies.

c) Speak out all the assumptions and impediments.

d) All the above

9) In which of the following cases, a developer should not use inline method while refactoring?

a) When function call is bottleneck in the performance

b) When there are group of methods which are badly factored.

c) When too many delegations are done in the code

d) When the code consists of long methods covering multiple logical flows.

10) Which of the following key benefits from refactoring?

a) It helps to remove long methods and long classes.

b) It helps to improve the design of existing code.

c) It helps to modularize the code.

d) It improves the non functional attribute of the code

11) Which of the following is true about SONAR tool?

a) It is a build tool.

b) It is a Test Automation tool.

c) It is a Static code Analysis tool.

d) It is a CI server.

12) In the automation test strategy meeting, the team members are discussing the areas for automation of regression testing. Which among the following is correct?

a) Functionality which are business critical

b) Functionality which are used by very few users.

c) Functionality which are used by many users.

d) All functionalities should be automated from beginning