

1. Which of the following is NOT part of the Agile Manifesto?

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Following a plan over responding to change

2. Which of the following is NOT a benefit of using Kanban as software projects?

- It is a transparent means to depict the project progress
- It helps quick reprioritization to accommodate changes for software cycle
- It minimize waste by promoting automation
- It helps to meet the service level agreements in a realistic way

3. Roles in extreme programming (XP) are defined as

- Customer, programmers, coach, Tracker
- Customer, Developer, tester, vendor
- Customer, Team, Mentor, vendor
- Customer, Engineer, Quality Analyst, Coach

4. When can a story be considered as DONE in an agile project?

- The story authoring is completed by Business Analyst
- Developer has completed code and unit test on the story
- Tester has completed automation and manual testing and no defects are open
- Story has passed acceptance criteria

5. The agile project team members are giving a demo of the software to the stakeholders at end of the sprint What is this a meeting known as

- Sprint Review meeting
- Daily Stand up meeting
- Sprint Retrospective meeting
- Sprint planning meeting

6. For Release planning meeting _____ measure helps the product owner to predict completion of user stories over a period of time

- Velocity
- Defect density
- Affect variance
- Capability

7. ALM (Application life cycle Management tool in Agile projects can be used for

- Managing product backlog
- Sprint planning and tracking
- Managing project Artifacts
- All the above

8. During an estimation meeting, in case there is no agreement regarding the estimation of a given story among the team members the following action can be taken

- The Team contacts experts for guidance regarding the estimations
- The scrum master acts as moderate and helps to finding a solution
- The team discusses with the product owner to get clarifications on the exact requirements
- Any one or more of the above options

9 The Agile project team is doing estimation of user stories and they tag 8 points to one particular user story. As a developer, what will you infer from this?

- It will need 8 hrs to complete the user story
- It would take 8 days to complete the user story
- It would need 8 team members to work on this user story
- It is the relative size with respect to other user stories

10. One of the manager from client's end is auditing the Infosys way of executing an agile project. He found that out of 4 planned Sprints in a release, the detailed plan is available only for the first which is ongoing and high level plans are available for other three sprints He raises the concerns around the same and questions one of the Agile team member on why details plan for other sprint are not available. As a team member of this agile project, what would be your suitable response to the client manager in this situation?

- Take initiative and go head to create the detailed planned for remaining three sprints
- Explain him that detailed sprint plan would be done only at respective sprint planning stage
- Inform Scrum master to create detailed plans for remaining three sprints in the release upfront
- Convince him that the same plan would be applicable for all sprints in this release

11. What soft skills should be possess to avoid delays during sprint execution

- The team should be disciplined in all their activities
- Plan upfront to tackle any dependencies Internal/external)
- Speak out all the assumptions and impediments
- All of the above

12. What of the following soft skills are important while working in agile project?

- Analytical ability
- Listening and questioning
- Pro-activeness
- Delegation

13. What are the disadvantages if the apple team does not conduct a sprint Retrospective Meeting?

- a) Team would not get various perspective 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
- A and B only
 - A and C only
 - B and C only

14. While decomposing the user stories into tasks, which of the following is considered as good practice by an individual to identity the right task to complete the user story?

- Take inputs from the other team members
- Discuss with business users for every Task identified
- Communicate the tasks to product owner and take sign off
- Verify if these task are similar to any other similar projects

15. Soft skills of individuals matters in reducing the defects at the end of every sprint

- True, soft skills like articulating understanding the requirements and acceptance criteria, proactively identifying the risks and issues and communicating it to team etc. facilitates in reduction of defects
- False. Defects are primarily because of either inefficiency in technical competency of the team members or misinterpretation of requirements or any other similar cause but not related to soft skills at all

16. What is relevance of Mocking and stubbing while developing the code using the test driven development approach

- For creating simulated objects and for testing a class or method for deriving expected output
- Helps programmers to maintain a comprehensive set of repeatable tests to run them exhaustively
- Reduces the need for debugging the code
- Reduces the number of lines of code in functional implementation of the business problem

17. Which of the following is TRUE about acceptance Test driven development practice?

- Entire team brainstorms collaboratively focusing on capturing requirements and the acceptance criteria of the application and uses them to drive the development
- Entire team brainstorms collaboratively focusing on capturing requirements and the acceptance criteria of the application and uses them to perform the system and integration testing
- Entire team brainstorms collaboratively on the design of the application completes the code development and does acceptance testing based on the architectural design

18. Which of the following is a benefit of implementing Test Driven Development?

- Challenges the design at every step thus ensuring the design grows more stable
- Acts a safety net when programmer performs refactoring
- Delivers the work in a single way to avoid complexity
- All of the above

19. A programmer reads a requirement and understands what needs to be implemented. She adapts test driven development (TDD) approach for developing the code. She starts writing the tests, runs them, develops the code accordingly and makes all the tests pass. Which of the following activities should the programmer be recommended to do once all the tests are passed?

- Write code comments
- Measure the size of the code
- Refactor the code
- No action

20. One of the user cases to be implemented for the System under test (SUT) specifies that passing the zero as an input for an operation should result in an error. Which of the following is the best option when developing the SUT using Test driven development?

- Plan for specific type of exception to be thrown in this scenario and write and upfront automated unit test that passes in zero as an input value and checks for the specific exception type expected using the API by provided by the unit testing framework being use

21. Choose the set of test inputs that would be best suited for unit testing the code below:

Function WHICH HALF YEAR(integer month) Returns string

```
{  
    If ( month<1) or (month> 12))  
        Throw new exception  
    Else if( month <=6)  
        Return " Half1"  
    Else  
        Return Half2"  
}
```

- All integer values starting from 0 and up to 13
- All integer values starting from 1 and up to 12
- 1,6,7,12
- 0,1,4,6,7,9,12,13

22. Which of the following explains INVEST technique for defining requirements in agile?

- Independent-Non Functional -Verifiable- Evolving- Simple-Table
- Integrator -New Valid- Editable -Smart-Tangible
- Interdependent Negotiable Verifiable Explainable Small-Testable

- Independent- Negotiable -Verifiable- Explainable- Small- Testable
- Correct an independent-negotiable valuable estimable-small-testable

23 Which of the following artifacts is the outcome of the requirement workshop in an agile project?

- Sprint burn down
- Release burn down
- Sprint Back log
- Product back log

24. Which of the following is NOT a Requirement prioritization technique?

- Minimum Marketable Feature
- MoSCow
- Cost of delay
- Done Definition

25. You are a developer in the agile project which is getting started. What steps would you take to reduce the risk to architecture in agile projects?

- Perform quick Pocs (Proof of concepts)
- Identifying the dependencies between the components
- Ensure stakeholders agreement
- All of the above

26 Following other stories getting discussed in a sprint planning meeting "As a retailer 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?

- Good, no additional information required
- Good, But need clarification on quick and easy for UI testing and the search feature control

27. Which of the following may NOT be achieved by automation in agile context?

- Confidence in the system
- Time save for additional activity

- Complete removal of manual intervention
- Earlier detection of issues

28. The source version control tools should be able to determine and communicate to other tools on any new code changes This concept is known as

- Code sharing
- Continuous build
- Hooking and Polling
- Automated code check in

29. Find the correct 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-a, 2-b, 3-d, 4-c
- 1-a, 2-c, 3-b, 4-d o
- 1-b, 2-a, 3-d, 4-c
- 1-d, 2-b, 3-a, 4-c

30. Which of the following activities related to automation are necessary during course of agile project?

- A. Maintain the automation scripts in a repository
- B. Constantly updating the scripts based on changes done by development team
- C. Product owner reviewing all the scripts

- Both A and C
- Both B and C
- Both A and B
- All of the above

31. 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

- I only
- II only
- Both I and II
- Neither I nor II

32. Mala is a developer in a web application project. It takes 4 hrs. to deploy the code in test environment as it includes the following process

- I. Get all the latest files from clear case
- II. Generate the WAR file
- III. Export the WAR file to server
- IV. Stop and start the server

What could she do which would help the project to reduce the effort on test environment deployment

- Mala should ask for help from other team members so that the work load is shared
- Mala should continue with manual deployment as automating the process increases the risk of
- error and may not help the project
- Mala should suggest for automation at build level only if unit testing is automated
- Mala should work towards automating both build and deployment process

33. It is important to have existing test suite passed before the developer starts to refactor the code

Ans: True, existing test suite ensures that there is no change in the behavior of the code

34. Which of the following is achieved by database refactoring

- Structuring change to data base by changing the database schema
- Ensuring the data stored in database is normalized
- It is a method to improve quality of stored procedure or function
- All of the above

35. A programmer is performing refactoring on the source code which was just developed and tested. While performing refactoring, he is using "check cycle" tool, which is user for automatically checking certain kind of code smells. What is code smell means in this context?

- It indicates bugs in the source code
- It is a surface indication that corresponds to weakness in the source code
- It is for looking into areas in the source code which are technically incorrect
- It is checking for certain areas in the source code which prevents the program from functioning

36. Identify the refactoring technique that has been used in the following code Code before refactoring

```
Void printowning(double amount)
{
    Print banner,
    //print details
    System.out.println("name: " + name);
    System.out.println("amount: " + amount);
}
```

- Extract method
- Inline Method
- Replace Temp with Query
- Replace parameter with explicit method

37, In which of the following conditions) is the code considered to be bad and needs refactoring?

- a) There are numerous branches and loops as the function is complex
 - b) The depth of inheritance is very high
 - c) Code is very complex to debug
-
- A and B Only, as debugging complexity is not related to refactoring
 - B and C only as higher number of branches and loops are not related
 - B only because refactoring is done only when depth of inheritance very high
 - All ie.a.b.s are candidates for refactoring

38. In which of the following cases a developer should NOT use inline method while refactoring

- When function call is bottleneck in the performance
- When there are group of methods which are badly factored
- When too many delegations done in the code
- When the code long methods covering multiple logical flows

39. A method is written that works well, but is very long. Also it includes complex logic implementation along with many local variables. Which method of refactoring should be used in this case?

- Replace temp with query
- Replace method with method object
- Replace parameter with method
- Replace data value with object

40. Unit testing is recommended for agile project because practices the Build automation, Continuous integration, and Refactoring are needed

- True
- False

41 While testing in Agile projects, which of the following techniques are useful?

- a) Automation
 - b) Moscow
 - c) Exploratory
-
- B only
 - A only
 - A and C only
 - A, B and C

42 How is testing done in Agile projects?

- a) Development and testing and in hand in the same project
- b) Testing is recommended to be automated
- c) Testing is always done by different team in different points after completion of development

- Only B is connect
- Both A and B are correct
- Only C is correct
- Both and care correct

43. You are a tester in an agile project you find a major defect while running the integration test Sentry wit planned next day with the product POJWhat is appropriate action you should take

- inform the scrum master and make abandon the sprint
- inform the scrum master, go ahead with sprint review and inform PO on the defect

44. From below given option, identify the TRUE Statement regarding role of tester in agile project

- Tester are involved right from beginning of the agile project
- Tester are not required if automation is adopted in the agile project
- Tester are not required to attend the Daily Stand up meeting
- Testers are required only at the sprint review meeting

45. There is a telecom project which is getting executed in agile. Client has defined penalties in case any defects are found in production after every release As agile testing expert, what would be your advice to the team on the ideal time for stopping the testing activities for a release?

- When the test coverage is robust enough based on the neck, implementation and functionality
- When all the identified test cases are executed
- When all the user stories are completed and demonstrated to the stakeholders in sport
- All

46. Which of the few are the advantages of continuous integration

- Early warning of broken/incompatible code
- Immediate unit testing of all changes
- Automated build failure detection and notification
- All of the above

47. What are the benefits of having Continuous Integration (CI) infrastructure in the project environment?

- Identifies defects and helps in fixing up the defects faster
- Reduces human error by automating repetitive tasks
- Manages all the user stories tasks and defect los
- Constant availability of a current build for testing, demo, or release purposes

48. Which are the best practices in continuous Integration (CI) environment?

- Maintain a single code repository
- Fix broken builds immediately
- Maintain multiple code repositories
- Automated unit test case and linked with check in

49. A New Net agile project has been initiated The PM of the project wants to set up a continuous integration (CI) pipeline to automatically check coverage unit testing, Build Deploy obligation to Invoke functional test in MS (Microsoft) Coded UI Test And performance test. But his team lacks skills writing MS build scripts and working with CI tools They do not have bandwidth and infrastructure to create this pipeline.As a team member of this project which among follow solutions do you recommend to the PM

- Most procure commercially available Ci platform
- Should start creating the platform manually by reaching out the related SMEs
- PM should moVE ahead without a platform as there is no impact
- PM must utilize infosys continuous integration platform (ICIP).

50 Pavan team has created a continuous integration pipeline involving Jenkins, subversion, ANT.PMD, Cobertura, SonarQube, Hosting servers and HP load runner. Select the best set of operations which this pipeline can potentially automate

- Code check out - Build-Unit test-Code Coverage
- Code check out-Build - Code Analysis. Code Coverage-obfuscation-Deployment Performance testing
- Code check out-Build-Code Analysis - Unit Testing Code Coverage Deployment Performance testing
- Code check out- Build-Unit test Code Coverage Performance testing

51. The Major emphasis of Scrum is on

- a. Define, build test
- b. Discover, plan, Executive
- c. Focus, collaborate, Iterate
- d. Inspect, adapt, Transparent

52. What is the ideal time to conduct the sprint retrospective meeting by the Agile team?

- At the beginning of the Sprint to understand the overall plan
- In the middle of the sprint to find out the blockers
- Any time during the Sprint when product owner wants
- At the end of the sprint analyze how the sprint was

53. Which of the following Artifact is NOT referred in Agile project

- Sprint Backlog
- Sprint Vision Statement
- Sprint Burndown Chart
- Product Backlog

54. An Agile Project has sprint which are of 2 weeks duration. When should the team plan to start during the sprint?

- Towards the end of the sprint in last two days
- Once coding is half way, in the mid of the sprint
- Right from the beginning of the sprint
- Only After sprint is completed

55. Which of the following sequences are most appropriate for usage in planning poker estimate for story points?

- 12345678910
- 0,1,2,3,5,8,13,21,40,100
- 10,20,30,40,50,60,70,80,90,100
- XS,S,M,L,X,XXI, XXXL

56. The Story Point estimation is reflection of

- Complexity of the user story
- Commitment to user story
- Volume of work
- Validation Of work

57. During the release planning of an E-commerce development project, the product owner(PO) explaining a new user story to the project team. Po Says that there should be a shopping call feature available for the end user to select multiple items and do the purchase. In the previous release the team has done size estimation in story points for a similar user but with a limitation of selecting only one item at g instance of purchase On what basis can the team arrive at a particular estimation of story points for the new story which the PO has asked for?

- It has to be done relative to the similar feature and team would probably estimate higher story points considering the additional functionality
- It has to be twice the similar feature and team would probably estimate double story points considering the similar of the feature.
- It has to be broken down to multiple tasks and team would probably estimate the size based on the effort required to build the user story.
- It has to be based on the inputs from subject matter expert who has worked on similar story points and team would consider as expertise

58 The agile Manifesto "Customer Collaboration over contract negotiation means that

- Agile encourages team to focus on negotiating contracts
- Though contracts is important, Agile focuses more towards customer collaboration over contract negotiation
- Unless absolutely necessary, agile approaches prefer not to use contracts
- Agile recommended team to collaborate with customers without any contractual agreements

59. What are the Advantages of team being transparent in the Agile Projects)?

- Helps to achieve the goal by knowing the problems when they get introduced
- Each member knows the strength and weakness of the team
- Helps in understanding the progress and road blocks on a daily basis
- All of the Above

60, which of the following soft skills and mindset-related aspects can cause failure of Agile projects, if the team members are tracking it?

- Learnability (From retrospective meeting)
- Willingness to share knowledge and take additional responsibilities
- Ready to accept the change in between the releases
- Speaking about issues and road blocks during daily stand up meeting

61 in Sprint review meeting the end users of the product gave feedback to a user story just completed in the sprint. This leads to few changes to the user story. How should the team implement this feedback?

- Ask Scrum master to create a new story and add to the sprint backlog for the next immediate sprint to do these changes by team
- Ask project manager to create a new story and add to the product backlog for prioritization and planning
- Ask product owner to create new story and add to the product backlog for prioritization and planning
- Ask end user to create new story and add to the sprint backlog for next immediate sprint to do these changes by team.

62 The quality of an Architectural design can be assessed based on the system

- Availability
- Data flow
- Usability
- Control flow

63. The Source version control tools should be able to determine and communicate to others on any new code changes This concept is known as

- Code sharing
- Continuous build
- Hooking and Pooling
- Automated code check-in

64, who all will be part of the product backlog grooming exercise meeting in an Agile project?

- Product owner and scrum master

- Product owner and the team
- Scrum master and the team
- Product owner scrum master and the team

65. Following user story is getting disgusted in a sprint planning meeting "As a retail consumer, want an online search feature so that can search my shopping cart items quickly and easily" As a developer in this project, what interferences would you derive from the user story?

- Good no additional information required
- Good, but need clarification on quickly and easily for UI testing and the search feature control
- Not good as it is high level
- Not good, as it is at task level detail and not a user story

66. Agile team uses INVEST technique to achieve which of the following objective?

- To create the product backlog
- To define and assess an user story
- To create the sprint backlog
- To prioritize requirements

67. Which of the following is true with respect to creation of automation test cases in an agile project context?

- Automate test cases are created during sprint planning
- Automate test cases are created towards the end of development of user stories just before sprint review
- Automate test cases are created in parallel with development of user stories in sprint execution
- None of the above

68. Agile project is getting started in a week's time. Ralan and peter, the two developers 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?

- Rajan is correct as only testing can be automated in agile project
- Peter is correct as development testing and deployment can be automated in Agile project.
- Peter is partially correct deployment can't be automated in Agile project
- Peter is partially correct as development can't be automated in Agile project

69. What is recommended practice for functional testing when the code is refactored?

- Testing is recommended only after the code is refactored
- Testing is recommended just before the code is refactored
- Testing recommended both before and after code is refactored
- All the above

70. Pair testing is done in agile projects by two members when one does the testing other analyze the testing Which among the following can form the agile testing pair?

- Only two testers
- A developer and a tester
- Business analyst and tester
- Any of the above

71. Samin a developer in an agile project is trying to refactor the source code which does not work and has several bugs. Should go ahead and refactor the code?

- Yes, he should refactoring the code it will help to fix te bug.
- No, he should not be refactoring the code has to work correctly before it is refactored

72. In the Agile project the defects are treated in the similar manner like requirements and added to product backlog for estimation and prioritization

- True
- False

73. 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 this suggestion?

- Ignore his suggestion as test coverage is not important for agile projects
- Acknowledge his suggestion
- Ignore his suggestion as it will cause delay and would Impact the sprint goal
- Acknowledge his suggestion and use it only towards the end of the project

74. Why exploratory testing is required for Agile projects?

- It is ad hoc and easy to accomplish by any team member
- It can replace any other testing need of the Agile project

- It can be easily automated in agile projects scenarios
- To understand hidden risk and where the team held focus for test coverage

75. Continuous Integration practice is not implemented in an Agile project, what is the impact on the team?

- Unknown issues could pop up at the end of the sprint and the team may not be able to achieve the sprint goal
- It could involve code rework at the later part of the sprint or release
- Team cannot execute any agile project without implementing CI practice.
- Project has no impact if the team is aware of other agile projects

76. To Improve the effectiveness and cycle time in integration testing, silos teams looking for a service virtualization tool 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 Continuous Integration server?

- Maven
- Rational team concert
- Parasoft SOA test
- Clear Case

77. Which of the following tasks are/NOT performed by a tester in an agile projects?

- updating the product backlog with user stories
- updating the defect tracker
- updating the test cases and scripts as the release progresses
- updating the testing tasks of the user stories for the entire team

78. James, the developer is using test driven development in his project. As he progresses, 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.

- Use mocking frameworks to mock the database project
- Stop using TDD for the particular piece of code
- Ignore the test cases for the piece of code that requires the database project
- Gain access to the production database object and continue tests in spite of risks involved.

79. what is the difference between Test Driven Development (TDD) and Acceptance Test Driven Development (ATDD)?

- TDD focuses on developing system level function correct and robust ATDD focuses on testing and individual function of the system correct
- TDD focuses on developing individual function correct and robust. ATDD focuses on getting the functionality correct from end user perspective.
- TDD focuses on testing the functional implementation ATDD focuses on testing the non-functional requirements
- TDD focuses on testing system level function correct and robust ATDD focuses on developing the individual function of the system

80. Continuous integration is all about

- Identifying and fixing integration and regression issues later
- reducing risk by getting early feedback.
- monitoring the tasks for user stories for each sprint
- identifying the issues at early stages and fixing them at the end of the release

81 The Functionality of continuous integration server includes

- Automating the process of integration by monitoring the source code repository
- Simulating the process of integration by monitoring the source code
- Helping team integrate the software builds throughout the development issues repository.
- Tracking the product backlog items and the sprint backlog items for every release

82. An Agile team is getting started with a new project and plans to adopt test driven development approach for the first time in which of the areas the team will have the challenge ability?

- It will be a paradigm shift in the way team think about developing the code.
- Team will find it difficult to write test cases before implementing the functionality
- The team will perceive that they are not able to progress quickly as they are writing the test cases first
- All of the Above

83. which of the following is a characteristic of a good agile team

- The team members should not take task outside their respective areas of specialization

- The team members are self-organizing and disciplined
- Work location is done by project manager
- Scrum master and product owner roles are interchangeable

84 During one the release planning meeting of an agile project the entire project team along with the product owner And release stakeholders are participating in this activity The team is trying to come up with the probable date of the rest What are the inputs that would be considered to make a final decision of this aspect?

- Prioritize the user stories
- User story estimates in size
- Split up of tasks for the user stories
- Team velocity choose the right answer from the following options

- a,b and d only
- a and c only
- b and c only
- a,b,c and d

85. which of the following skills MOST useful for a Scrum master?

- Planning
- Organizing
- Negotiating
- Managing

86. Who determines HOW much of the product backlog items can be delivered in upcoming sprint?

- Product owner - Mandates it in requirements planning meeting
- Scrum Master Decides it in daily stand up meeting
- Sam estimates based on the capacity and commits in the sprint planning meeting
- Project Manager-determines based on team capacity in the release planning meeting

87. Which of the following Role is NOT required during the task estimation activity of sprint backlog meeting?

- Testers
- Scrum Master
- Developers
- Product owner

88. The Agile project is getting Started and the team plans to spend first few sprints to complete the design of the system and started with the development is it right approach to do the agile project?

- a. Yes design should be completed and signed off before development is started
- b. No, design evolved along with the requirements throughout the project execution.

89. You are a developer working on an agile e commerce project During the execution of sprint one of the client asks you and asks to change screen which improves the look and feel significantly. What will you do in this?

- Implement the change immediately
- Inform this request to product owner and let him decide in which sprint this change will be taken
- Discuss this request in details in the next daily stand up meeting
- Don't do anything and focus on your current development of the sprint

90. The Agile project has an upcoming release for 2 months duration and team is expected to deliver 25 user stories prioritized by the product owner

- a) Team must ensure that they get the right information and clarity on scope of the release and prioritization of those features
 - b) Since the scrum master is closely associated with the team. The team members should discuss internally with the scrum master and take his/her agreement
 - c) All the team members must participate in the release planning meeting and provide their inputs on the interpretations and implementation.
- A only

- A and C only
- A and B only
- B and C only

91. Why is requirement prioritization important in an Agile project?

- It reduces the work of the development teams
- It reduces the cost of the project
- It helps in team focusing on core requirement items which make business sense
- None of the above

92. Which of the following elements are encompassed through Architectural

- Set of components that perform a function by a system
 - Set of connectors that enable communication, coordination and cooperation among components
 - Define how components can be integrated to form the system
 - Semantic models that enable a designer to understand properties of the system
- A only
 - A and B only
 - A, B and C only
 - A,B,C and D only

93. In an agile project, the deployment to multiple servers need to be automated. What should the team do to achieve

- The team can use the automation tool like udeploy, puppet
- The team can configure the continuous integration servers like Jenkins/Hudson to automate the deployment
- Either of the above
- None of the above will help for auto deployment in multiple servers

94 In a sprint retrospective meeting while discussing the quality of code. The team finds that they have been writing long method: , duplicate code and big classes Which of the following corrective steps is the team likely to take?

- The team should not take any corrective step
- The team should adopt refactoring technique from the subsequent sprint
- The team should engage a technical head to change all the code

95 which of the following options best describes the support systems required to achieve an ideal build automation environment

- Source version control tool, Build tool, Build repositories, static code analysis tool and CI server
- Static code analysis tool, build tool. build repositories
- Source control tool, build tool and static code analysis tool
- Build tool, Build repositories, and CI(Continuous integration Server)

96. In the Automation testing strategy meeting the team members are discussing the areas of automation of regression testing which among the following is correct?

- Functionality which are business critical
- Functionality which are used by very few users
- Functionality which are used by many users
- All functionality should be automated from beginning

97 (sample Code Snippet)

- Extract method
- Inline method
- Replace temp with query
- Replace parameter with explicit method

98. Identify from the given options which represents a set of class libraries that help write test class while doing test driven development?

- Integrated development environment
- nunit test framework
- analytics framework
- continuous integration framework

99. Code Snippet

```
String got number() {  
  
Void setnumber(String arg)  
{  
    _number = arg  
}  
}
```

- Extract interface
- Extract class
- Move method
- Inline method

100. Requirement Categorization is of order

Theme > Epic > User Story > Task

102. Which of the following is critical success factor while adopting continuous integration?

- Automation
- Testing
- Code quality analysis
- Refactoring

103. Which of the following tools is related to continuous integration?

- Hudson
- Erwin
- NANT
- Jasmine
- All the above

104. Which of the following is correct regarding testers participation in the sprint retrospective meeting?

- Testers must participate sprint retrospective meeting and provide input and feed back on all aspects not only testi

105. a programmer is performing refactoring on the source code which was just developed and tested. While performing refactoring the code using Checkstyle" tool, which is used for automatically checking certain kind of code smells. What does 'Code smells mean in this context?

- It indicates bugs in the source code.
- It is a surface indication that corresponds to weakness in the source code.
- It is for looking into areas in the source code which are technically support.
- It is checking for certain areas in the source code which prevents the program from functioning

106. Testing team has automated the testing process at the start of the project. During the course of the project many requirements have changed. What should testing team do?

- Maintenance of the automation scripts on a regular basis.
- Stop the automation process and perform manual testing till requirement is stable
- Increase the strength of testing team to manage the change
- Ask development team to make changes to the scripts

107. Which of the following relates to code smell named "feature envy"?

- A class that has grown too large
- A class that uses methods of another class excessively
- A class that has become too complex to debug
- All of the above

108. 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 the project, what inferences would you derive from the user story?

- Good, no additional information required.
- Good, but need clarification on 'quickly and easy for UI testing and search feature control
- Not good, as it is at a very high level
- Not good, as it is at risk level details and not a story.

109. What is the role of continuous integration in automated build process?

- Compile and deploy new build repository
- Deploy build frequently
- Compile build in continuous manner
- Compile, deploy and provide feedback about latest changes.

110. which of the following is true with respect to creation of automation test cases in an agile project context?

- Automated test cases are created during sprint planning
- Automated test cases are created towards the end of development of user stories just before sprint review
- Automated test cases are created in parallel with development of user stories in sprint execution
- None of the above

111. Which of the following is recommended to be followed by the agile team towards development of user stories each day during sprint execution?

- By having dedicated time of approx. 6 hours of committed user stories and the remaining time for issue resolution or unplanned meetings, etc.
- By completing the daily stand up meeting in 15 minutes and remaining 9 hours of the day on user story development as per Sprint backlog.
- My meticulously working all 9 hours of the day on story development and then additional time for issue resolution, planned and unplanned meetings
- By having dedicated time of approx., 6 hours for issue resolution or planned meeting etc and the remaining time for committed user stories.

112. Every team member in Agile project should require soft Skills(Like listening, Cues- tioning, proactive) in taking up the work collaborating with team members etc. and an understanding of how to apply those skills in a more malleable way?

- True
- False

113. For a seven member scrum team who are working on a three-week sprint, what would be the IDEAL duration for the sprint planning meeting?

Thumb rule- No of weeks of Sprint x 2 hours= Total sprint planning length.

- Less than one hour
- Four to six hours
- Ten to fourteen hours
- Three days

114. Which of the following is NOT an extreme Programming(XP) practices?

- Refactoring
- Pair programming
- Test driven development
- Feature Driven Development

115. The following are the steps in the test driven development. Please choose the option that represents the correct sequence

- Choose an epic(High level feature) to implement
- Write enough code to pass the failing tests
- break it down into functions
- select a unit function to work on
- run the test to fail
- write a test case to test the function
- refactor the code.

- A-c-d-f-e-b-g
- A-d-c-e-t-b-g
- A-b-f-c-e-d-g
- A-e-g-f-c-d-b

116. One of the Infosys projects in banking domain is about to transition into agile methodology from waterfall. The team is working for same project for last 3 years. But none of them have experience on agile way of project execution. As per the project were very reluctant to accept any requirement changes during the release. For any such project moving to agile, mindset is required?

- Understanding the importance of continuous integration feedback in agile project
- Unlearn the practices of stage wise development and understand the practices of incremental delivery
- Both of the above

117. Out of the below options, choose the types of jobs that can be performed using Ci(Continuous integration) server

- a. Do compilation and run all the tests
 - b. Perform static code analysis and report code quality metrics
 - c. Execute integration tests
 - d. Deployment into test servers or production
-
- A,b and c only
 - A,b and d only
 - A,c And d only
 - All the above jobs can be performed

118. Testers will have minimal role in the projects where test driven development is adopted as the programmer write the test cases in the approach.

- true
- false

119.what are the challenges faced by the testers who has newly joined in agile project?

- a. Difficult in creating test cases as requirements are captured in limited documentation
- b. Adopting to 'One team' mindset instead of demarcation of developer and testers
- c. Starting the testing activities early in the sprint with limited set of software source code.
- d. All of the Above.

120. Which are the key benefit(s) of refactoring?

- It helps to remove long methods and long class
- It helps to improve the design of existing code
- It helps to modularize the code
- It improves the non-functional attribute of code:

121. While testing a scenario/user story you find that you need to take input from a server/application where you don't have access. What would you do?

- Create A simulated object of the server/application and take input from that(mocking)
- Take the unauthorized access as this is critical for project

122. You have a very long method having complicated logic implementation done inside with many local variables which refactoring method will you chose it

- Replace method with method object.

123. Which of the following activities related to automation are necessary during course of agile project?

- a) Maintain the automation scripts in a repository
- b) Constantly updating the scripts based on changes done by development team
- c) Product owner reviewing all the scripts

- A only
- B only
- A&B
- All

124. You have a sprint which last for 3 weeks how many hours will be your sprint planning meeting

- Less than an hour
- 3-4 hours
- 3-4 weeks

125. The agile project team members are giving a demo of the software to the stake holders at end of the sprint. What is this a meeting known as

- Sprint Review meeting
- Daily Stand up meeting
- Sprint Retrospective meeting
- Sprint planning meeting

126. Suma's suggestions and ideas goes unnoticed during the sprint meetings even though she is technically brilliant. What would you suggest her to do.

- Articulate ideas in better way
- Ask her to stop commenting/speaking in meetings

127. Following user story is getting discussed in a sprint planning meeting. "As retailer consumer, I want an online search feature so that I can search my shops ping cart items quickly and easily" As a developer in this project, what inferences would you derive from this user story?

- Good, no additional information required
- Good, But need clarification on quick and easy for UI testing and the search feature control

128. Team had done estimation on adding the feature of shopping cart for adding one product. Now the user story says we want to add more than one item in the cart. What would be the team's way of giving estimate.

- Relative to the earlier estimation made.
- Appoint a new expert to get an answer on this.

129. Which of the following is true on sprint planning and estimation

- Only developer should prepare estimate for both dev and testing
- Tester and dev have to prepare separate estimates
- Both together have to sit and discuss as a team

130. During the sprint One stakeholder comes to you and asks you for a change in UI, What would you do?

- Discuss with Product Owner and see on which sprint we can take this change
- Discuss with scrum master only
- Discuss among team

131. SONAR is a tool for which of the following

- Build tool
- Static code analysis tool
- Build repositories
- CI server

132. You have not auth to buy a commercial tool for Automating your deployment. Which one will you use

- Jenkins /Hudson
- TFS

133. While testing in Agile projects, which of the following techniques are useful?

- a. Automation
- b. Moscow
- c. Exploratory

- B only
- A only
- A and C only
- A, B and C

134. ALM (Application life cycle Management tool in Agile projects can be used for

- Managing product backlog
- Sprint planning and tracking
- Managing project Artifacts
- All the above

135. Roles in extreme programming (XP) are defined as

- Customer, programmers, coach, Tracker
- Customer, Developer, tester, vendor
- Customer, Team, Mentor, vendor
- Customer, Engineer, Quality Analyst, Coach

136. Which of the following is a benefit of implementing Test Driven Development?

- Challenges the design at every step thus ensuring the design grows more stable
- Acts a safety net when programmer performs refactoring
- Delivers the work in a single way to avoid complexity
- All of the above

137.customer collaboration over Contract negotiations what does it mean

Giving more preference to the customer interactions/involvement than contracts

138.Unit testing is NOT recommended for agile project because it practices the Build automation, Continuous integration, and Refactoring

- True
- False

139. Which of the following is not an unit testing Tool

- Nunit
- Junit
- ClearCases

Test Driven Development practice

1. Test Driven Development practice is originated from which of the following Agile

- SCRUM
- XP (eXtreme Programming)
- DSDM (Dynamic System Development Methodology)
- KANBAN

2. Which of the following is a true statement for TDD?

- I. It is done by testing team personals.
- II. It is done after the design is complete
- III. It is done by the developer in parallel to writing the code.
- IV. The tests once written are good for always. They need not be changed in future

- Only i
- Only ii and iii
- Only iii
- Only iii and iv

3. What is TDD?

- It is a Development method
- It is a Testing method
- It is a subset of feature driven development approach
- All of the above

4. What does ATDD stands for?

- Agile Test Driven Development
- Application Test Driven Development
- Adaptive Test Driven Development
- Acceptance Test Driven Development

5. Which of the following Step is NOT applicable while implementing TDD?

- Requirements prioritization
- Refactoring
- Running Test
- Adding Test

Agile overview

1. What do most of the Agile methodologies have in common?

- Focus on iterative and incremental development
- Early feedback is key for the project success
- Ensure transparency for the work in progress
- All of the above

2. Which of the following are not Scrum values?

- Vision
- Respect
- Motivation
- Commitment
- Focus
- Openness
- Courage

3. What should an Agile project do in order to communicate well?

- Keep team-size large, to avoid stakeholders from feeling left out
- Split the Agile project team into small, mixed-skill, self-organizing teams
- Operate with one team of less than 10 people
- Have separate Daily Standup meetings for the Developers and Testers

4. _____ is decided during the first half of the Sprint planning meeting and a _____ is created during the second half of the Sprint planning meeting

- Sprint Backlog, Collection of tasks
- Product Backlog, Collection of tasks
- User stories to be delivered, Sprint Backlog
- Product Backlog, Sprint Backlog

5. What does incremental delivery mean?

- Team delivers non-functional increments in the Sprint retrospectives
- Team deploys functional increments over the course of the project

- Team does testing only after completing the entire development at the end of the Release
- Team follows the same Agile process throughout the Project without any alterations

Automation

1. Where can automation be applied in an agile project?

- Only in development
- Only in testing
- Only in deployment
- All of the above

2. Which of the following is NOT an advantage of automation in a project?

- Reduces manual effort
- Helps in frequent releases
- Frees team time so that they can focus on other features
- None of the above

3. Ram is working as a QA analyst in a research project Client has already be frequent enhancements to the ratings screen To avoid testing the old features again and again what should Ram do?

- Automate the testing scenarios at the end of the project
- Test all the feature manually whenever the enhancement request is sent
- Automate the testing scenarios and keep enhancing whenever the new request is sent
- None of the above

4. JUnit is a tool used for

- Unit testing for Java component
- To check the code quality
- Unit testing for database components
- JUnit is a UI development framework

5. Which of the following can be used for code quality?

- SONAR

- Clear case
- XUnit
- OTP

Refactoring

1. Key benefits of Refactoring in Agile include

- Reduce maintenance cost
- Architecture improvement without impacting software behavior
- Increase readability and modularity of code
- All of the above

2. Refactoring is

- A practice to change functional behavior of the code
- A practice of continuously improving the design of existing code
- A exercise to increase business revenue by meeting customer requirements
- A exercise to modify application architecture drastically to improve performance

3. What is the correct sequence of steps for Database refactoring? (Concept to be tested Database Refactoring in Agile)

- Write Test → Apply DB refactoring > Refactor external application Run Test
- Write Test Refactor external application Run Test Apply DB refactoring
- Write Test → Run Test > Apply DB refactoring > Refactor external application
- Write Test → Apply DB refactoring → Run Test → Refactor external application

4. Replace array with Object technique belongs to which of the following Refactoring technique?

- Composing methods
- Moving features between Objects
- Organizing data
- Simplifying Conditional Expression

5. Cyclomatic Complexity is an indicator to smell the bad code TRUE FALSE?

- TRUE
- FALSE

Agile Planning and estimation

1. Planning and Estimation in Agile projects is NOT done at which of the following stages of the project?

- a) Project Initiation
- b) Release Initiation
- c) Project Closure
- d) Sprint Planning

2. An absolute number assigned to each User Story based on the complexity in Relative to other User Stories is known as

- a) Quick Function Points
- b) Use Case Points
- c) User Story Points
- d) Cosmic Function Points

3. In the Sprint Planning the team decides on how many user stories they will be able to commit for completion in the upcoming Sprint

- a) True
- b) False

4. The Project level estimate will give details about

- a) Approximate staffing plan
- b) Approximate date of project
- c) Approximate number of Releases/Sprints required before
- d) All of the above

5. Which of the following is/are INCORRECT about the activities involved in Release level planning?

- a) Prioritization of the User Stories is done
- b) Retrospective of previous Sprint is conducted
- c) Determines the objective of the Release
- d) Estimation for each individual Task is performed

Soft skills

1. How are the Agile Project Teams managed?

- a) Agile project Teams are self-organized and self managed
- b) Agile Project Teams are managed by the Project Manager
- c) Every Agile Project Team has a Product owner who manages the Team
- d) A dedicated Scrum Master manages the Agile Team

2. In Agile projects, the team members should have their Soft Skills because

- These skills are vital for the success of Agile projects
- It helps the project team to eliminate waste (or at least reduce their impact in Agile software development)
- To learn adopt the Agile methods by having a shift in the mindset away from traditional approach
- All of the above

3. In Agile projects the Team members are expected to be more disciplined Why?

- a) The sprints are time boxed and non-negotiable, so Team member must complete all activities on a time bound manner
- b) The Team is self-organized and must work towards meeting the commitments as per Sprint Planning
- c) Scrum master monitors the project on hourly basis and hence Team need to be disciplined
- d) Both 'a' and 'b'

4. Agile Teams can resolve the conflict among themselves by discussion and questioning each other before approaching Scrum master or Agile coach

- a) TRUE
- b) FALSE

5. Which of the following is not considered as Waste as per Lean principle perspective?

- a) Starting with more work than that can be completed within time
- b) Extra functionality
- c) Slow or ineffective communication
- d) Updating ALM daily

Agile requirements and architecture design

1. In Agile projects, how are the non-functional Requirements captured?

- a) As a Theme
- b) As a separate User Story
- c) As a Task
- d) Depends upon the Product Owner

2. Certainty and Feasibility' are related to which of the following techniques?

- a) Keep it Simple
- b) Design Pattern
- c) Requirement Prioritization
- d) No Big Design Up Front

3. Identify the Design principle from the below options which is not related to SOUD principles?

- a) Simple Responsibility Principle
- b) Open Closed Principle
- c) Liskov Substitution Principle
- d) Interface Segregation Principle
- e) Dependency Inversion Principle

4. Which of the following is not an essential part for describing a Design Pattern?

- a) Problem
- b) Pattern Name
- c) Solution
- d) Benefit

5. Continuous Code Refactoring and Test Driven Development helps the Agile project Team to keep design simple

- a) True
- b) False

Agile testing techniques

1. Which of the following is FALSE about Defect Management in Agile?

- a) Defects are logged in a tool when identified
- b) Defects are analyzed fixed sed on
- c) Defects are re-tested before closure
- d) All of the above
- e) None of the above

2. When is Integration Testing done in Agile projects

- a) Integration Testing is done once all the user stories are completed and accepted by the Product Owner
- b) Integration Testing is only done during the hardening sprint of the Release
- c) Integration Testing is done within every Sprint of the Release as the functionality gets developed
- d) Integration Testing is done once at the mid of the Release and then the end of the Release

3. Why is Smoke Testing needed in Agile projects?

- a) To ensure that the bad code is not dropped into the testing production environment
- b) To save time within the Sprint so that effort is diverted towards the development of the stories
- c) To bypass system testing whenever there is a time constraint before demonstrating the incremental software
- d) Smoke testing is not needed in Agile projects as it is just an additional testing activity

4. Which of the following is NOT a challenge while Testing in Agile projects?

- a) Identifying the Sprint for starting the automation of Test cases
- b) Frequent builds breaking the existing features
- c) Environment availability for Performance testing
- d) Analyzing the effectiveness of automation

5 In Agile both testing and development is carried out in same Sprint duration TRUE FALSE?

- a) TRUE
- b) FALSE

Continuous Integration Tools

1. Which of the following is NOT a stage in Continuous

- Requirement Analysis
- Build and Unit Testing
- Integration Testing and Quality check
- System Testing

2. The main purpose of Continuous Integration (CI) Server is

- a. To manage all the source code changes and other software artifacts
- b. To stabilize and monitor coding conventions
- c. To run an integration build by retrieving the source files whenever a change is committed
- d. To deploy the software into the production

3. Which of the following is NOT a Unit Testing tool

- a. NUH
- b. JUnit
- c. JTest
- d. Jenkins

4. Identify the right sequence of Continuous Integration activities from the below given options

- Checkin/Checkout->Email Notification Build and Packaging-Functional/Performance Testing
- Checkin/CheckOut>Build and Packaging Functional/Performance Testing Email Notification
- Email Notification Build and Packaging>Functional/Performance Testing->Checkin/CheckOut
- Build and Packaging>Checkin/CheckOut->Functional/Performance Testing Email Notification

5. One of the basic principles of Continuous Integration is that a build should

- a. TRUE
- b. FALSE

AGILE OVERVIEW AND METHODOLOGIES

1. Commitment to delivery and prioritization in Agile projects are usually part of:

- a)Daily Stand-up Meetings
- b)Frequent Demos
- c)Sprint Planning
- d)Retrospective Meeting

2. Choose the correct Extreme Programming (XP)practice names from the following options:

- a)Test-driven design, refactoring, pair programming
- b)Test-driven development, reforecasting, phase programming
- c)Test-driven development, refactoring, pair programming
- d)Test-driven design, refactoring, phase programming

3. Which of the following describes the Sprint Review Meeting?

- a)It is conducted at the end of the Sprint to gather the feedback from Product Owner on the progress
- b)It is associated with the demo of the software developed in the Sprint
- c)Product Owner reviews the deliverables as per 'Done' definition
- d)All of the above

4. Visualize work stages, Limit Work in progress, Measure and Manage flow are related to which of the following?

- a)Kanban
- b)SAFe
- c)Scrum
- d)Less

5. At the lowest level of any Scaled Agile method, Scrum, XP or Kanban are generally followed

- a)True
- b)False

INTRODUCTION TO AGILE PRACTICES

1. Which of the following statements is TRUE regarding daily stand-up meeting?

- a)Product Owner must be present in every meeting
- b)It is conducted daily, but time keeps on changing frequently as per teams availability
- c)It is conducted every day at the same time where all team members update what they did yesterday, plan for today and mention any road blocks.
- d)None of the above

2. Sprint Burndown Chart helps the Agile Projects for

- a)Tracking project progress on a daily basis
- b)Quick reference for Team to know , if any issue to achieve Sprint goal
- c)Plotted for remaining effort against the days of the sprint
- d)All of the above

3. Product backlog is owned and maintained by

- a)Team
- b)Product Owner
- c)Scrum Master
- d)Project Manager

4. Which of the following statement(s) are CORRECT about Continuous Integration(CI)?

- a)Code needs to be frequently checked in
- b)Automated builds facilitate CI
- c)CI helps to identify integration defects in the early stages of the project
- d)All of the above

5. Test Driven Development and Unit Testing are similar practices in different names.

- a)True
- b)False

AGILE IN DISTRIBUTED ENVIRONMENT

1. Which of the following options is the effective way of conducting Daily Stand-up meeting for the teams distributed in different geographic locations?

- a)Leverage time zone difference in the most effective way and accepted by the team
- b)Plan the meeting at a time which is feasible for key members of the team
- c)Plan the meeting at a time which is feasible for Product Owner
- d)Leverage the time zone difference in the most effective way and accepted by Product Owner

2. Which of the following is NOT an important practice for execution of Agile projects in distributed environment?

- a)Effective usage of communication and collaboration platforms
- b)Building up trust among team members with frequent meetings
- c)Active participation of team members across locations in daily stand up, review and retrospective meetings
- d)None of the above

3. In cases where Product Owner (PO) and development team do not have any time overlap, which is the BEST way to conduct Sprint Planning meeting?

- a)Team should complete Sprint Planning meeting and update Product Owner offline
- b)Team should do certain activities, like analysis, in advance before the actual Sprint Planning meeting with PO
- c)Team should ask Product Owner to do complete Sprint Planning without them and pass on the details to them offline
- d)Team should not wait for any planning and must start with Sprint

4. At which stage of the project is it recommended for the teams to co-locate?

- a)During Initiation stage of the project
- b)In the middle of Release execution
- c)During Release Sprint (before the final shipment of deliverables)
- d)Post Release

5. The advantage of deploying ALM (Application Lifecycle Management) tool in distributed team environment is

- a)Provides Visibility and Traceability of entire project
- b)Manages Reports (tracking project status and Burndown charts)
- c)Manages Project artifacts
- d)All of the above

IMPLEMENTING CMMI IN INFOSYS GLOBAL AGILE PROJECTS

1. In 'InfyAgile Global' projects, Release Planning is associated with –

- a)Verification of customer requirements
- b)Identification of corrective actions
- c)Establishing estimates
- d)Definition of the technical solution

2. Continuous Integration and Continuous Testing does not support which of the following CMMI process area –

- a)Configuration Management
- b)Product Integration
- c)Technical Solution
- d)Verification and Validation

3. Objective of 'Quantitative Project management practice' in 'InfyAgile Global' projects is to:

- a)Obtain the predictability of project performance
- b)Provide status update to the Product Owner
- c)Get the team velocity
- d)Track changes received in Product Backlog

4. Problem and defect prevention, and identification of action items for improvement are recommended to be done during –

- a)Sprint Planning Meeting
- b)Sprint Execution
- c)Sprint Review Meeting
- d)Sprint Retrospective Meeting

5. Which one of the following CMMI process areas is addressed when requirements are traceable and consistent through mechanisms of Product Backlog and User Stories?

- a)Requirements Development
- b)Requirements Management
- c)Risk Management
- d)Configuration Management

REQUIREMENTS AND PRIORITIZATION TECHNIQUES

1. One of the Cs in 3 'C' Method represents:

- a) Communication
- b) Collaboration
- c) Customer First
- d) Conversation

2. For Epic, which is the most CORRECT definition?

- a) Epics are stories that can be done in Sprint
- b) Epics are large stories to be kept at the bottom of Product Backlog
- c) Epics are large requirements broken down in smaller stories
- d) Epics are created as and when Sprint execution happens

3. Product Backlog is:

- a) Ordered (Prioritized) list of stories, defects, other work items committed for Sprints
- b) List of all stories, epics, tasks required for product/project
- c) List of defects in the product
- d) Ordered (Prioritized) list of tasks for the Sprint

4. The third 'C' of the 3C method, 'Confirmation' represents

- a) Written confirmation from customer
- b) Team confirmation
- c) Acceptance Tests
- d) Confirmed Requirements

5. Sprint Backlog is:

- a) Subset of product backlog in no particular order
- b) Forecasted (committed) list of Product Backlog for the Sprint
- c) List of epics and user stories for the project
- d) Ordered (Prioritized) list of work to be carried out in projects

DESIGN APPROACH FOR AGILE PROJECTS

1. Which of the following is NOT maintained as part of design in Agile?

- a)System architecture diagram
- b)Component diagram
- c)Detailed design document with pseudo code
- d)Deployment document

2. Which of the following is more flexible design?

- a)Classes with singular responsibilities
- b)Classes with increase cohesion and reduce coupling
- c)Both a & b
- d)Neither a nor b

3. Code Refactoring is done to –

- a)Remove duplication and unused code
- b)Change code structure to make it modular and simpler
- c)Increase reuse
- d)All of the above

4. If a method returns a collection, as part of encapsulation collection refactoring technique, it is recommended to make the method return read-only view and provide add/remove methods. This statement is –

- a)True
- b)False

5. An interface between high-level and low-level classes is implemented using –

- a)Dependency Inversion principle
- b)Interface Segregation Principle
- c)Liskov Substitution Principle
- d)Single Responsibility Principle

INTRODUCTION TO DEVOPS

1. Which of the following is NOT an essential element of Continuous Integration?

- a)Automated Build
- b)Frequent Check-in
- c)Disciplined Culture
- d)Database Structure

2. Robin is the Scrum Master of an Agile Team, working on a critical project with stringent timelines. He has observed that his team is spending significant time in fixing defects found at the end of the Sprint. Which of the following practice should Robin ask the team to adopt?

- a)Ensure open defects are discussed in detail in daily standup meetings
- b)Engage a separate testing team for release Sprints
- c)Check-in code daily, as a practice, perform local build frequently before integrating changes to server and run smoke test
- d)Use advanced tools for defect tracking

3. Is Continuous Delivery and Continuous Deployment are same concept in two different name.

- a)Yes, they are one and same
- b)No, there is a difference between these two the way deployment is done

4. How does Continuous Delivery complement Continuous Integration in terms of faster delivery?

- Deploying the working software in the right environment so that it can be accessed by end-user
- Providing the logical conclusion of the development being done
- Faster feedback cycle
- All of the above

5. Which of the following tools can be used for the deployment of a Continuous Integration Server?

- a)Jenkins
- b)Maven
- c)Selenium
- d)HP Load Runner

TEST DRIVEN DEVELOPMENT

1. Choose the option(s) that is/are relevant to Test Driven Development.

- a) Failing tests
- b) Refactoring
- c) Enough code to make tests pass
- d) All of the above

2. TDD can be used for requirements which are not stated clearly.

- a) True
- b) False

3. Which of the following is INCORRECT with respect to TDD?

- a) Write test case that will fail
- b) Arrive at an upfront design and freeze it before starting TDD
- c) Write enough code to make tests pass
- d) Use refactoring principles to make the code clean

4. What is the correct sequence for TDD from the below options?

- a) Write Test --> Develop Code --> RunTest --> Refactor Code
- b) Write Test --> Develop Code --> Refactor Code --> RunTest
- c) Write Test --> RunTest --> Develop Code --> Refactor Code
- d) Write Test --> RunTest --> Refactor Code --> Develop Code

5. Which of these option(s) is/are TRUE regarding TDD?

- a) Enables writing 'clean code' which is fully tested
- b) Helps avoid speculative coding
- c) Helps in defect reduction and high quality code generation
- d) All of the above

COLLABORATION AND COMMUNICATION

1. Which of the following is the BEST mechanism for effective Collaboration and Communication between teams and Product Owner?

- a)Project monitoring and tracking
- b)Identifying action items for tasks
- c)Face-to-Face interaction
- d)Implementation of review comments

2. Which of the following techniques is BEST to collaborate between client and distributed teams while demonstrating new features?

- a)Email
- b)Screen sharing
- c)Both (a) and (b)
- d)None of the above

3. Which of the following facilitates good communication?

- a)Use live or real-time communication channels
- b)Use available tools like instant messaging, video/voice conference
- c)Not wait for a planned meeting till end of the day
- d)All of the above

4. Workshop is an event where –

- a)A group of people collaborate for gathering, understanding and prioritizing requirements
- b)Team members update each other about the progress
- c)Status update is provided to the Product Owner
- d)Team identifies tasks for user stories during the current Sprint execution

5. Sprint Reviews are an effective way to –

- a)Share information and improve communication with all stakeholders
- b)Inspect and adopt what has been developed in the current Sprint and collaborate on what needs to be done next
- c)Notify the Product Owner with overall status of the project
- d)All of the above

PLANNING IN GLOBAL AGILE

1. How is planning done for Agile Projects?

- a) Only by Product Owner based on his judgment
- b) Scrum Master and Product Owner together take decisions
- c) Project Manager consult the Scrum Master for planning
- d) Planning is done in a collaborative way involving the entire Team

2. Which of the following statements is FALSE about Agile Planning?

- a) The initial plans are revisited during the project execution
- b) Project high level planning is recommended by Infosys Global Agile
- c) Agile practices need not be planned upfront
- d) None of the above

3. Infrastructure Planning for Agile is needed only when projects are executed in distributed environment.

- a) True
- b) False

4. Which of the following statements is TRUE about Quality Management Planning?

- a) It is intended to define and measure project goals
- b) It is done at Project, Release and Sprint level
- c) Both a & b
- d) None

5. Why is Sprint 0 important in package context?

- To know about the dependency in the modules
- To understand roles and responsibilities in case of multi-vendor context
- Fitgap Analysis
- All of the above

ESTIMATION IN INFOSYS GLOBAL AGILE

1. Among the following roles, who is NOT involved during estimation for Agile projects?

- a)Product Owner
- b)Scrum Master
- c)Scrum Team
- d)End user

2. Which of the following is NOT an estimation methodology at Proposal Level?

- a)Quick Function Point
- b)COCOMO
- c)Story Point
- d)None of the above

3. Story Point estimation is done for Sprint Planning:

- a)True
- b)False

4. Which of the following is INCORRECT about Function Point Estimation?

- a)Can be used as a reference across organization
- b)Not an industry standard method for measurement
- c)Can be used for Agile projects
- d)Used to measure the size of an application

5. Story Point estimation has below properties:

- a)Consensus-based
- b)Can differ from team to team for same User Stories
- c)Is a Relative measure of complexity
- d)All of the above

QUANTITATIVE PROJECT MANAGEMENT

1. What is the purpose of Burndown charts?

- a)To visually represent the progress of the project
- b)To provide an indication on when the remaining work will be completed
- c)To graphically represent work yet to be completed over a time scale
- d)All of the above

2. QPM aligns project level strategies to meet the objectives at the Sprint and Release level.

- a)True
- b)False

3. What is the purpose of setting goals at a Project, Release and Sprint level?

- a)To let customer know that team understands his or her needs
- b)To help team plan the project better in terms of realistic targets, appropriate strategies and quantitatively track Project/Sprint progress
- c)To monitor the project progress and update internal stakeholders in an objective manner
- d)Both (b) and (c)

4. Sprint level metrics for Infosys Global Agile projects is/are:

- a)Velocity
- b)Defect density
- c)Both a) and b)
- d)None of the above

5. To define the goals for a project, what are the feasible options to adopt?

- a)Past performance of similar project of different client
- b)Process capability base line of the organization
- c)Past performance of the same project with same client
- d)Any of the above

RISK MANAGEMENT

1. Which of the following is the CORRECT sequence for risk management process?

- a) Risk Identification -> Risk Response Planning -> Risk Analysis -> Risk Monitoring and Control
- b) Risk Identification -> Risk Response Planning -> Risk Monitoring and Control -> Risk Analysis
- c) Risk Identification -> Risk Analysis -> Risk Response Planning -> Risk Monitoring and Control
- d) Risk Response Planning -> Risk Identification -> Risk Analysis -> Risk Monitoring and Control

2. Which one of the following is the risk response strategy for managing risks?

- a) Risk Avoidance
- b) Risk Mitigation
- c) Risk Acceptance
- d) All of the above

3. Requirements are not detailed before start of the Sprint and are changing during the Sprint. Under which of the following category does this risk fall?

- a) Client Relationship
- b) Scope/Requirements/NFRs
- c) Environment and Infrastructure
- d) Project Profile

4. The identified tools are not suitable for Test Automation in Agile projects. What would be the probable mitigation action for this risk?

- a) Perform proper due diligence before proposing automation tool for Agile testing
- b) Create reusable checklists for testing
- c) Ensure most of the assumptions are documented
- d) None of the above

5. Which of the following risks DOES NOT qualify under Environment and Infrastructure category?

- a) Project setup is not planned and will adversely affect the schedule
- b) Unrealistic commitments to the clients has exposed the project to very high risk situations
- c) Extreme delays are expected in procurement of tools and software licenses
- d) Slow link/connectivity has adverse impact on the schedule and quality of deliverables