

Mock Exam I

1. The Managing Director (MD) of the organization stops by the task board of the team and makes a suggestion of an important feature that the development team should deliver in the current iteration. What should the development team do?
 - A. Since it is coming from the MD, it must be done at any cost. So drop an item of equal size from the backlog.
 - B. Say yes to the MD and then ask the team members to work overtime to achieve their target.
 - C. Ask the product owner so that he can discuss the value and priorities with the MD.
 - D. Ignore it, the MD will most likely forget what he said a few weeks later.

2. A newly formed development team is working on Sprint zero. In terms of doing the following activities, which is false?
 - A. Team completes the entire architecture and high-level design for the project, leaving out the low-level design.
 - B. Develop the detailed project plan.
 - C. Deliver a few stories.
 - D. All of the above.

3. Who makes the final call on priority order in the Product Backlog?
 - A. The Development Team
 - B. The Scrum Master
 - C. The Product Owner
 - D. Someone in senior leadership like the MD or the CEO

4. With respect to the roles on a Scrum team, choose the odd one out?
 - A. Scrum Master
 - B. Product Owner
 - C. Development Team
 - D. Project Manager

5. The Development Team is expected to have all the skills needed to:
 - A. Complete the project by the given deadline and budget shared upfront with the sponsor.
 - B. Do analysis and development work, but leave out all forms of testing since that is handled by another specialized team.
 - C. Turn the Product Backlog items into potentially shippable product increments.
 - D. Master all state-of-the-art technology practices and tools available.

6. What is the main way that a Scrum Master contributes to maximizing the productivity in the development team?
 - A. By maintaining a risk-adjusted Product Backlog in priority order.
 - B. By making sure hygiene is maintained on meeting – agendas, start & end times, capturing and sending out minutes, etc.
 - C. By facilitating Development Team decisions and removing impediments.
 - D. By providing news about the newest technology trends in the market.

7. All of the following are Scrum artifacts except:
 - A. Product backlog
 - B. Gantt chart
 - C. Sprint backlog
 - D. Burndown chart

8. During an estimation session each team member is asked to provide an estimate. Which of the following is correct?
 - A. The team member provides estimates for only the story that will be assigned to him.
 - B. The developer provides a development estimate, the analyst provides an analysis estimate and the tester does his part. Ultimately all the estimates are aggregated.
 - C. The team members provide a relative estimate in units of ideal days.
 - D. Participation of a team member is voluntary as the Scrum Master can fill in wherever necessary.

9. A project stakeholder wants to have a look at how the Agile team is progressing in the middle of an iteration. As a member of the Agile team, you can guide him to:
- A. The most recent weekly status report.
 - B. The sprint backlog.
 - C. The defect log.
 - D. The combined burnup and burndown charts.
10. XP teams take collective ownership of code. For such a team, _____ and _____ are the key.
- A. Definition of done and pair programming.
 - B. Trust and collaboration.
 - C. Velocity and co-location.
 - D. Onsite customer and test-driven development.
11. Barry is a team member currently in a sprint planning session. After hearing about the requirement from the product owner, he estimates the amount of effort required by taking account that he will be working on this story and nothing else. He assumes that he will not face any interruptions. Which unit of estimate is he using?
- A. Story points
 - B. T-shirt sizes
 - C. Ideal days
 - D. Either A or C
12. What is the primary role of a Product Owner?
- A. The PO is basically a project manager who balances scope, time, cost and risk.
 - B. Maximizing the Return on Investment (ROI) of the software developed.
 - C. People management for the Team.
 - D. Avoiding distracting and keeping stakeholders at bay.
13. Which of the two ceremonies are executed after all development for a sprint and beginning of the next one?
- A. Sprint review and sprint retrospective
 - B. Sprint review and sprint planning
 - C. Daily stand-up and sprint review
 - D. Sprint retrospective and sprint planning

14. Kanban board is an example of:
- A. Toyota production system
 - B. Information refrigerator
 - C. High-tech and low-touch system
 - D. Information radiator
15. What happens during a Sprint Review?
- A. Review of what the team could do more or less off during the next sprint.
 - B. Figure out the scope for the next sprint.
 - C. End of the sprint demo for everyone to solicit feedback on the work done in the sprint.
 - D. It is an opportunity to brainstorm and do a root cause analysis of work items that could not get done.
16. How do we know when a sprint is over?
- A. When all items in the sprint goal have met their definition of done.
 - B. When the Product owner accepts all the work that was committed in the sprint planning meeting.
 - C. When the timebox expires.
 - D. None of the above.
17. While inspecting a release burndown chart, it is observed that the bar graph moves below its X-axis. Choose the best conclusion.
- A. This is normal. Scope could have gotten added by the product owner.
 - B. This is normal. The developers would have underestimated the complexity of the story.
 - C. This is abnormal and indicates poor data quality being plotted on the burndown chart. The bar graph can touch the X-axis, but not go below it.
 - D. This is abnormal. The team should have completed what was committed by them.
18. Under what condition can a sprint be abnormally terminated?
- A. When the PO determines that it no longer makes sense to carry on with a sprint.
 - B. The team has overcommitted and the sprint scope is too large to be achieved.
 - C. A production defect needs to be addressed by priority.
 - D. There is another project for which some analysis needs to be completed by the SME's in the current team.

19. During a planning session, the product owner and the team sit down together and sort the stories from the backlog into must-have, should-have, could-have and won't-have. The must-haves top the chart and along with those a few should-haves get selected for implementation during the iteration. Which prioritization technique did the team follow?
- A. Kano model analysis.
 - B. Weighted prioritization technique.
 - C. Simple ranking technique.
 - D. MoSCoW.
20. In Agile vocabulary, a spike is a:
- A. Sudden increase in the quantum of work received.
 - B. Sudden increase in the quantum of risks.
 - C. Sudden increase in the resource demand.
 - D. A task that the team undertakes to experiment on a hypothesis or a new technology.
21. Fill in the blanks for the following Agile principle.
- Build projects around _____ individuals. Give them the environment and _____ they need and _____ them to get the job done.
- A. cross-functional, training, trust
 - B. empowered, support, believe
 - C. self-motivated, support, believe
 - D. motivated, morale boost, trust
22. An XP team realizes that a story is more complex than estimated earlier and so it cannot be completed in the current iteration. Which option should the team exercise?
- A. At the next daily stand-up, propose that the “definition of done” condition be relaxed to allow the partially completed story to look close to being completed.
 - B. Extend the iteration by 3–4 days, as you cannot let the team’s velocity go down.
 - C. Discard the code and put the story back to the backlog for future prioritization and implementation in a successive sprint.
 - D. Keep the code commented so it does not do any harm and tell the customer you will pick up and complete in the next iteration.

23. Some teams use a hardening sprint ahead of a release to:
- A. Train the operations team so that they can support the product post-release.
 - B. Complete some of the final tasks related to productionizing of the code.
 - C. Perform acceptance testing for all the previous sprints that were part of the release.
 - D. Ask all programmers to check-in all the code in version control.
24. An Agile team is using relative sizing to estimate for stories on the backlog. What are the most common units of estimates used?
- A. Days / weeks / months
 - B. Story points
 - C. Ideal days
 - D. Either B or C

25. Bill has worked hard over the last few days and finds that the build is broken because Richard has checked in code without properly unit testing it. It will mean that Bill will have to wait until Richard comes back and fixes the issue. Bill is furious at Richard and he makes statements like, "I know Richard. He is always careless and doesn't bother how others get affected by his actions."

Which stage of conflict do you think is reflected in Bill's language?

- A. Level 1: Problem to Solve
 - B. Level 2: Disagreement
 - C. Level 3: Contest
 - D. Level 5: World War
26. The two highest levels of conflict are Level 4: Crusade where there is hardly any direct speaking terms and Level 5: World war where the conflict is escalated to a level that is beyond repair and resolutions.

As a manager encountering the situation, which are the best approaches you will follow to resolve conflicts?

- A. For Level 4: use shuttle diplomacy until the intensity of the conflict is lowered and team members can be brought into a table discussion. For Level 5: separate the team members such that they do not cause harm to each other or to the environment.
- B. For Level 4: use problem solving to get to the bottom of the issue. For Level 5: ask one party to compromise on a stand that they have rigidly held.
- C. For level 4: separate the team members such that they do not cause harm to each other or to the environment. For Level 5: bring in a third party and take the two team members to battle out in the court.
- D. For Level 4: remind the two members that they need to collaborate and reach consensus, even if that means that they will have to sacrifice. For Level 5: avoid the situation since nothing can be done about it.

27. What is the formula for Risk severity? And how do you expect risks to change during a project?
- A. Risk severity = Risk probability + Risk impact. We expect risks to be highest at the beginning and decrease over time.
 - B. Risk severity = Risk probability x Risk impact. We expect risks to be highest at the beginning and decrease over time.
 - C. Risk severity = Risk probability x Risk impact. We expect risks to be lowest at the beginning and increase over time.
 - D. Risk severity = Risk probability x Risk impact. We expect risks to be highest at the beginning and remain static until the project is over.
28. The product owner is not able to commit enough time for the Scrum team. He is however, very supportive and leading the cause for the project. Who could be the best choice of a proxy user?
- A. Technical lead of the project who knows the ins and outs of the product.
 - B. UX designer because they have close proximity to the business and knows how the UI is expected to behave.
 - C. A business analyst reporting to the product owner since she will be able to articulate the user stories in plain business language that is free from technical jargon.
 - D. A customer care representative who interacts with the real users on a daily basis and resolves support tickets.
29. Which is the odd line out of the following?
- A. Responding to change over following a plan.
 - B. Customer collaboration over contract negotiation.
 - C. Customer interactions over processes and tools.
 - D. Working software over comprehensive documentation.
30. A reflection workshop is also called:
- A. Sprint review
 - B. Sprint retrospective
 - C. Backlog grooming session
 - D. None of the above

31. Richard joins as an Agile coach and observes that there are a few Scrum teams working on a single product that is used by financial planners. The teams are struggling to arrive at a common “definition of done.” What should Richard do?
- A. Richard should give each development team freedom to choose their definition of done. Reconcile differences only during the hardening sprint.
 - B. Richard should give each development team freedom to choose their definition of done, as far as there is convergence and common ground at the time of integration such that the product is potentially releasable.
 - C. Richard should ignore the situation. It’s too messy to get involved in day-to-day work of the development.
 - D. Richard should get hands-on, laying out the definition of done himself and teach all development teams how to follow them.
32. Agile teams use personas that are imaginary user roles to provide a real-life flavor of the users interacting with the system. While building a persona, which of the following relevant information should they include?
- A. Age and gender
 - B. Educational and Professional background
 - C. A name and a picture
 - D. All of the above
33. Agile teams practice value-based delivery. While determining and delivering value, who are we targeting?
- A. Users
 - B. Developers
 - C. Product owners
 - D. Testers
34. Alistair Cockburn has introduced the Crystal family of methodologies, which consists of Crystal clear, Crystal yellow, crystal red, crystal maroon. What are the core differences between them?
- A. From left to right, they denote progressively increasing complexity of projects.
 - B. From left to right, they denote progressively increasing criticality of projects.
 - C. From left to right, they denote progressively increasing size of teams working on projects.
 - D. All of the above.

35. A team hires you as an Agile coach to see if the team's efficiency could be enhanced and the velocity improved. What could be your recommendation to improve velocity?
- A. Have the team commit to fewer stories every sprint, so the probability of getting them completed in time are more.
 - B. Reduce the daily-stand-up meetings from 15 to 10 minutes.
 - C. Suggest bringing in the business representative to sit together with the development team.
 - D. Compare velocities of similar projects running in the same organization and present them to the team.
36. Barry joined as an Agile coach and he wants to improve the way the team conducts retrospective meetings. He states that there are 5 stages for effective retrospectives. They follow the sequence of:
- A. Set the Stage, Gather Data, Generating Insights, Decide What to Do, Wrap up.
 - B. Set the Stage, Generating Insights, Gather Data, Decide What to Do, Wrap up.
 - C. Set the Stage, Decide What to Do, Generating Insights, Gather Data, Wrap up.
 - D. Set the Stage, Gather Data, Decide What to Do, Generating Insights, Wrap up.
37. The Scrum team owns the sprint burndown chart. What is the primary significance of the chart?
- A. Use as a base for weekly status report for senior management.
 - B. An Agile team is characterized with information radiators on team walls. A sprint burndown chart is a relevant artifact for putting up on the team wall.
 - C. Team can view their daily progress and adapt based on the situation.
 - D. Keep other stakeholders at bay. Those who are interested in knowing the status can view the sprint burndown chart and not bother the development team.
38. The acronym TIMWOOD is used to describe the 7 wastes in Lean. The letters T, M and D stand for:
- A. Transport, Machine, Defects
 - B. Turnaround time, Motion, Defects
 - C. Transport, Machine, Deliberate
 - D. Transport, Motion, Defects

39. The Japanese words Muda, Kanban and Kaizen respectively mean:
- A. Waste, signboard, continuous improvement
 - B. Waste, billboard, continuous integration
 - C. Improvement, signboard, continuous removal of waste
 - D. None of these
40. A new team member Billy, fresh from college, joins the team and sees that at every workstation two developers are sitting next to each other. One of them is typing code and the other is looking on and giving some suggestions at times. Billy thinks that privacy could be lost and discusses this with his mentor. His mentor explains that the team is following XP methodology and are involved in _____.
- A. Sharing best practices sitting next to each other.
 - B. Pair programming.
 - C. One is coding and the other is deciding on test cases based on the code written.
 - D. Coaching session for coding skills.
41. The _____ is also called “the voice of the customer”?
- A. Development manager
 - B. Scrum Master
 - C. Product Owner
 - D. Sponsor
42. An Agile team is in its formative stage. One of the first few things that they want to do is determine the length of an iteration. Which is the most important factor to make this decision?
- A. Determine the estimate of the longest story, convert from story points to man-days and then choose the iteration size to accommodate that.
 - B. Look up historical data from other projects and teams.
 - C. Discuss with project stakeholders on how long they can go without demonstrating progress or giving feedback.
 - D. Follow guidelines from the Scrum Master since he is the most seasoned player in the team and has had a varied experience running Scrum teams elsewhere.
43. The commitments made by the product owner to the team include the following EXCEPT?
- A. Bring a prioritized list of features from the backlog to the planning meeting.
 - B. Clarify requirements as and when asked by the team.
 - C. Resist any temptation of changing scope midway through a sprint.
 - D. Mandatorily attend every daily-standup meeting.

44. The product owner creates an elevator speech to articulate the vision of a product to the Agile team and its stakeholders. The elevator speech is expected to contain all of the following attributes EXCEPT:
- A. Who is the target customer?
 - B. What is the key benefit that the customer will get by using the product?
 - C. Location and the technology where the product will be developed and tested.
 - D. What differentiates it from its competitors?
45. All the following are Agile methodologies EXCEPT:
- A. Test-driven development
 - B. Feature-driven development
 - C. Extreme Programming
 - D. Scrumban
46. Who is responsible for prioritization of stories, epics and features in the product backlog?
- A. Product owner
 - B. Product owner with inputs gathered from the team
 - C. ScrumMaster
 - D. Development team
47. The Scrum team has committed for a sprint goal. Midway during the sprint, the team discovers that there are some new tasks that need to be done before the committed stories are completed. However, given the time constraint, the team feels it cannot be done. What are the things the team should do now?
- A. Abandon the sprint.
 - B. Bring it up during the daily-standup and then discuss proactively with the product owner.
 - C. Hope for the best and let the stakeholders know during the sprint review that some stories were not completed.
 - D. Find someone to blame.
48. The marketing team is looking for firm commitments from an Agile team based on the estimates that came out of the Affinity estimation session held by the team. What could possibly be wrong in that approach?
- A. Affinity estimation is a very quick estimation technique used for release planning and generally precision of estimates is not the goal.
 - B. The marketing team should direct all their requirements to the product owner and not approach the Agile team directly.
 - C. Agile estimates are relative measure of size. They should not be treated as commitments.
 - D. A and C.

49. At the time of release planning, an epic was estimated to have 13 story points. However, during iteration planning, when the epic was broken down into stories and tasks, the sum of the estimates came to about 15 story points. Choose the most appropriate option below.
- A. This is likely to happen as the estimates don't necessarily add up.
 - B. This is likely to happen as the estimates are done by different people at different times.
 - C. This is likely to happen as the estimates are less accurate at a release level.
 - D. This is a mistake, as it appears that somewhere there was a scope creep, that is, addition of 2 story points.
50. All the following could belong to the definition of done of a team EXCEPT:
- A. Code has been checked into version control.
 - B. Code has passed through the integration test cases and regression suite.
 - C. Acceptance test cases have passed.
 - D. Daily Scrum meetings have been attended.
51. An Agile team is coming together for the first time. They have no prior experience working together, but would like to estimate an initial velocity to target. All the following options are possible EXCEPT:
- A. Use historical values as the working environment and the technology used is the same as a previous project.
 - B. Run an iteration and observe the velocity.
 - C. Make a forecast by breaking stories into tasks and see what fits.
 - D. Use the velocity from any arbitrary project team. The level of accuracy does not matter since the team is new.
52. During a series of conflicts, you get to hear one party blaming the other by generalizing statements like, "They are always late - no surprises in that," "He has forgotten to check-in the file and again! Careless as ever!" Referring to Lea's conflict model, which stage do you think the team members are in?
- A. Problem to solve.
 - B. Arbitration.
 - C. Crusade.
 - D. World war.
53. Which of the following statements is not true?
- A. Higher the IRR the better, higher the BCR the better.
 - B. Higher the IRR the better, lower the payback period the better.
 - C. Higher the NPV the better, higher the IRR the better.
 - D. Higher the NPV the better, higher the payback period the better.

54. Leaving low-priority requirements at a high level, but sufficiently detailing out the high priority (and immediate) ones is called _____.
- A. Incremental development.
 - B. Progressive elaboration.
 - C. Version control.
 - D. Continuous improvement.
55. Retrospectives can be held:
- A. After an iteration.
 - B. After a release.
 - C. After an unexpected and a significant event in the project.
 - D. Any of the above.
56. What does the acronym MMF stand for?
- A. Maximum Marketable Feature
 - B. Minimal Marketable Feature
 - C. Maximum Measurable Feature
 - D. Must-have and Marketable Function
57. Which of the following do you NOT expect to see on an information radiator for an Agile team?
- A. Gantt chart
 - B. Task board
 - C. Burnup chart
 - D. Velocity trends
58. For an emergency reason Richard, the product owner could not make it to the sprint planning meeting. Who do you think could be in a position to play his role for the time being?
- A. The self-organized team.
 - B. The development manager.
 - C. The Scrum Master.
 - D. The CEO who is closely aligned to the project.
59. Which of the following statements is false?
- A. Agile projects do just-in-time planning.
 - B. Agile projects balance progress and flexibility.
 - C. Agile projects do not require a PMO.
 - D. Agile projects value collaboration over documentation.

60. Team A has a velocity of 20 story points and Team B has 40 story points over a 3-week iteration. What does this mean?
- A. Team B is twice more efficient than Team A.
 - B. Team B has double the capacity (team size) than Team A.
 - C. Team B is more mature, uses sophisticated tools and achieves more in the same time.
 - D. Nothing. Velocity of two teams cannot be compared.

61. The three levels of active listening are:
- A. Level I - Internal Listening, Level II - Focused Listening, Level III - Global Listening.
 - B. Level I - Focused Listening, Level II - Internal Listening, Level III - Global Listening.
 - C. Level I - Internal Listening, Level II - Global Listening, Level III - Focused Listening.
 - D. Varies based on the circumstances.

62. An Agile team has an average velocity of 25. During a sprint planning session, they have come up with estimates for a list of stories in priority order as follows:

Story 1 estimate of 12 story points

Story 2 estimate of 3 story points

Story 3 estimate of 8 story points

Story 4 estimate of 5 story points

Story 5 estimate of 2 story points

Story 6 estimate of 1 story points

Story 7 estimate of 1 story points

What is the choice that the team makes?

- A. Choose stories 6, 7, 5, 2, 4 and split the larger ones 1 and 3 so that maximum number of stories can be accommodated.
- B. A team's velocity is subject to change. Also estimates are not absolute. Choose all stories and complete whatever is possible. After all, customer will be pleasantly surprised if the team overachieves.
- C. Club stories that are dependent on each other and deliver them together.
- D. Choose stories 1, 2, 3, 5 - the highest priority ones that add up to the team's velocity.

63. After the story writing workshop the team has come up with a set of 80 story cards that need to be very quickly estimated such that the release plan can be built. The product owner is interested in getting this completed in less than 2 hours. Which estimation technique is best suited for this purpose?
- A. Work breakdown structure or bottom-up estimation.
 - B. Planning Poker.
 - C. Affinity estimation.
 - D. Delphi.
64. The DEEP acronym is used to describe the characteristics of a product backlog. The acronym stands for
- A. Detailed Appropriately, Estimated, Emergent, Prioritized.
 - B. Detailed Appropriately, Economic, Emergent, Prioritized.
 - C. Defined properly, Estimated, Emergent, Prioritized.
 - D. Defined properly, Estimated, Enlisted, Probabilistic.
65. Passing of acceptance test cases is an example of:
- A. Definition of ready
 - B. Definition of done
 - C. Collective ownership
 - D. Teamwork
66. The INVEST acronym is used to describe the characteristics of user stories. The letters I, V and S in the acronym stands for:
- A. Interesting, Verifiable, Small
 - B. Independent, Validatable, Small
 - C. Independent, Valuable, Specific
 - D. None of the above
67. Agile releases could be one of:
- A. Feature-driven or Date-Driven.
 - B. Date-driven or Priority-driven.
 - C. Team-driven or feature-driven.
 - D. Both release dates and constituent features are variable and negotiated on the fly.

68. Sarah is joining an Agile team. On the first day she observes that the team has a task board that contains lots of sticky notes denoting tasks in various stages of progress. She is confused about the small numbers written next to column headers of the task board and asks her manager Jane about their significance. Jane explains that the numbers depict:
- A. Velocity for each column in the task board.
 - B. Number of resources assigned for each column in the task board.
 - C. WIP limit.
 - D. Maximum number of escaped defects allowed per column.
69. XP programmers are required to continuously submit their code into the code repository and run a 10-minute build to assess whether anything has broken or not as a result of the newly made changes. This practice is called:
- A. Continuous integration.
 - B. Continuous improvement.
 - C. Version control.
 - D. Informative team space.
70. The Lean team has understood the benefits of creating value stream maps. After a bit of effort they prepared a value stream map and proceeds to calculate the cycle time for each step and the total lead time to handover value to the business user. What is the most important next step?
- A. Continuously improve on process efficiencies.
 - B. Amplify learning.
 - C. Identify non-value added activities and eliminate them.
 - D. Organize daily stand-up meetings.
71. The project steering board is having a meeting to evaluate and select one of the two projects being presented by their sponsors.
- Project A has IRR of 6% and requires an investment of 100K USD
Project B has IRR of 7.5% and requires an investment of 150K USD
- Which project should be chosen and what is the opportunity cost?
- A. Project A, 100K USD
 - B. Project A, 150K USD
 - C. Project B, 100K USD
 - D. Project B, 150K USD

72. The _____ is best placed to author user stories.
- A. Development team since they know the technical intricacies of the features.
 - B. Customer or business representative because they can articulate business requirements in plain language (no technical jargon).
 - C. The project manager because he knows what it takes to balance scope, time and cost.
 - D. The tester since the acceptance test cases needs to be written at the back of the story card.
73. When is it okay for a team to extend an iteration by 4-5 days to complete what they promised?
- A. Use a group decision-making technique and agree at a daily stand-up meeting.
 - B. Once the Scrum Master approves.
 - C. Iteration length should not be changed.
 - D. Instead of extending the iteration, think of 'crashing' the iteration by putting in more resources or requesting overtime and weekend work.
74. As per Alistair Cockburn, Shu-Ha-Ri is a learning technique that is applied to software development methodologies. The words Shu Ha Ri means:
- A. Follow the rule, break the rule and be the rule respectively.
 - B. Break the rule, follow the rule and be the rule respectively.
 - C. Be the rule, break the rule and follow the rule respectively.
 - D. Follow the rule, be the rule and break the rule respectively.
75. 5 Why's is an example of a/an:
- A. Estimation technique
 - B. Retrospective technique
 - C. Conflict resolution technique
 - D. Facilitation technique
76. In the situational leadership model, the different leadership styles in ascending order of team maturity are as follows:
- A. Selling, Telling, Supporting, Delegating
 - B. Telling, Delegating, Participating, Selling
 - C. Delegating, Directing, Coaching, Supporting
 - D. Telling, Selling, Participating, Delegating

77. Value stream mapping is a technique that has its origin in Lean. Why do we use value stream mapping?
- A. Without a visualized workflow, conversations with the customers are difficult.
 - B. To identify and eliminate wastes in the process.
 - C. To charter the future roadmap.
 - D. To energize the development team.
78. Active listening consists of all the following EXCEPT:
- A. Paying attention to the nonverbal signs of the speaker.
 - B. Providing feedback on what is understood.
 - C. Interrupting the speaker to express your personal views and perspectives.
 - D. Deferring judgment.
79. User stories have enough requirements that serve as a reminder to the team and they can converse to drill down to the specifics during coding. How do the developers confirm that the requirement is met?
- A. Discuss with the users, write down the acceptance test cases behind the card. and execute them.
 - B. There is always more chances, so the team can make assumptions, demo them. and incorporate feedback later.
 - C. Developers expect the product owner to maintain a checklist separately.
 - D. Since the user stories are not sufficient, developers need to augment with comprehensive documentation behind the scenes.
80. User stories should be valuable to _____.
- A. The development team
 - B. The Agile coach
 - C. The organization
 - D. The user or customer
81. The different stages of Test-Driven Development are
- 1) Red - when the test cases fail.
 - 2) Green - when the test cases succeed with barely minimum code.
 - 3) Refactor - when the code is evolved by considering design patterns, code quality etc.
- What is the right sequence?
- A. Green, Red, Refactor.
 - B. Red, Refactor, Green.
 - C. Red, Green, Refactor.
 - D. None of the above as the blue stage is missing.

82. XP teams conduct spike tasks. The product owner realizes that there is no direct value to the customer in conducting such tasks, but yet permits them in the iteration backlog because:
- A. Through spikes teams are able to gain knowledge of an unknown technology.
 - B. Through spikes teams are able to prove a hypothesis.
 - C. Through spikes teams are able to mitigate a risk.
 - D. All of the above.
83. With respect to size, which is the correct order?
- A. Epic, theme, story, task.
 - B. Story, feature, theme, subtask.
 - C. Story, task, subtask, feature.
 - D. Epic, feature, subtask, theme.
84. The Scrum Master in a team plays the following roles EXCEPT:
- A. Servant leader
 - B. Shepherd
 - C. Line manager
 - D. Bulldozer of impediments
85. In Scrum who takes the responsibility to prioritize stories?
- A. Scrum Master.
 - B. Product owner with the help of the whole team.
 - C. Exclusively product owner.
 - D. Whoever is knowledgeable about the stories.
86. The product owner is looking at the backlog, shuffling priorities, adding more epics and features. and removing some that are no longer necessary. The task he is doing is called:
- A. Backlog grooming
 - B. Product roadmap creation
 - C. Project charter creation
 - D. Backlog review
87. An Agile team consists of the following attributes:
- A. Self-organized
 - B. Generalized specialist
 - C. Multilingual
 - D. A and B

88. _____ is a unit of estimates for user stories.
- A. Velocity
 - B. Weeks
 - C. Story points
 - D. Work breakdown structure
89. A persona is:
- A. A real customer or user.
 - B. Imaginary representation of a user role.
 - C. Any stakeholder who can provide system requirements.
 - D. A business analyst or a domain specialist.
90. Regarding ideal days and calendar days, all of the following statements are correct EXCEPT:
- A. Calendar days are the usual days at work and includes interruptions like breaks and meetings.
 - B. Ideal days are the days of work minus the interruptions like breaks and meetings.
 - C. Calendar days are valid units of estimate in Agile, since the definition of ideal days varies from one developer to another.
 - D. Ideal days are valid units of estimate in Agile, since the worth of work done on a calendar day varies from one developer to another.
91. Spot the statement that is incorrect as per the Agile Manifesto:
- A. Individuals and interactions over processes and tools
 - B. Customer collaboration over vendor management
 - C. Working software over comprehensive documentation
 - D. Responding to change over following a plan
92. Which of the following could be the biggest cause for failure in an Agile project?
- A. Lack of availability of the customer to collaborate closely with the team.
 - B. A distributed team.
 - C. Some team members who are not yet well versed in devops practices.
 - D. Resources that have fractional allocation to multiple projects at the same time.
93. You get to see all of the following practices in a, XP team except:
- A. Continuous build and integration.
 - B. Checking in code into a single repository.
 - C. Onsite customer facilitating daily stand-up meetings.
 - D. Test-driven development.

94. Which of the following statements regarding technical debt is false?
- A. The quantum of technical debt can be measured by counting the number of days of effort required to address it.
 - B. Technical debt can be introduced at any time, during initial development, during maintenance and enhancements.
 - C. XP teams continuously refactor code to reduce technical debt.
 - D. All of the above are true.
95. PMI®'s code of ethics applies to:
- A. PMI® members.
 - B. PMI® certification seekers.
 - C. PMI® volunteers and chapter members.
 - D. A, B and C.
96. When should individual development team members sign up for implementing a particular story?
- A. At the time of estimation, when they are submitting the estimates.
 - B. Once the sprint goal has been agreed at the end of the planning meeting.
 - C. During the daily stand-up meeting.
 - D. At the last responsible moment and based on capacity of the team. All items are owned by the entire development team.
97. The Agile team has started working on an iteration. On the third day, a business representative comes up to you and requests another feature to be included in the same iteration. What should the Agile team do?
- A. Accommodate the feature since otherwise the business representative will not accept the iteration results.
 - B. Accommodate the feature since otherwise the business representative will escalate that the team is not adaptable to change.
 - C. Accommodate the feature by putting it into the product backlog and asking the product owner to check its ROI relative to other stories in the backlog.
 - D. Accommodate the feature as it is a small change and self-organized team knows how to manage last-minute requirements.

98. An Agile team is working on the software for life-saving medical equipment. The product has already been in the market for about 2 months, when the product team detects a defect in the software that could be fatal to the patients being monitored. Fixing the product and rolling out the solution to all the clients who have purchased the product will be very costly and affect the balance sheets badly. What is the most important thing that the company should do?
- A. Wait and watch, as the clients have not discovered the defect and have not been affected.
 - B. Since it is software for a life-saving medical apparatus, immediately warn all clients and stop their use.
 - C. Immediately sanction a project to fix the software and roll out to all clients. This is estimated to take 4–5 months.
 - D. Wait for the next planned release that is 6 months away and prioritize this production defect fix over anything else.
99. To eliminate duplication in code, the word DRY is used. It stands for _____:
- A. Don't repeat yourself.
 - B. Don't refactor your code.
 - C. Do review your product.
 - D. None of the above.
100. Agile teams do emergent architecture and design. At the end of every iteration, they deliver _____.
- A. Shippable product increment.
 - B. Vertical slice of the cake.
 - C. A and B.
 - D. Horizontal slice of the cake.
101. An Agile team is currently reviewing the proposals submitted by prospective vendors. The outcome of the review is to shortlist and award the contract to the vendor that is considered best to work on the project. Harry, a member of the team comes to know that BigFive Consulting Company, which is owned by his relative, has also bid for the project. In this situation Harry should:
- A. Keep it to himself and patiently see what goes on.
 - B. Keep it to himself and recommend the rest of the team to go with BigFive Consulting Company since you know them all and trust their capabilities.
 - C. Disclose it and stay out of the seller selection process.
 - D. Pass on some insider information to BigFive, so that they are at an advantage during the negotiation process.

102. Which of the following is not an attribute of a product backlog?
- A. Prioritized
 - B. Large
 - C. Detailed appropriately
 - D. Measurable
103. The Agile team is sitting together in a room. Harry asks a quick question on the build configuration and Sally responds where Harry could find it. In between, Richard, who was busy writing code, overhears and cautions that the configuration file at that location has an issue and Harry should use the one at an alternate location. Harry was able to get what he needed in no time and continued with his tasks. This type of communication between co-located teams is called?
- A. Verbal communication.
 - B. Osmotic communication.
 - C. Information radiators.
 - D. Informal communication.
104. On the back of the story card the acceptance test cases are found. Who specifies the acceptance test cases?
- A. Customer
 - B. The whole team
 - C. Test manager
 - D. Scrum Master
105. Which of the following represents the richest and most effective mode of communication in a team?
- A. Recorded webinar
 - B. Video conferencing
 - C. Audio conferencing
 - D. Face-to-face meeting accompanied by a whiteboard session.
106. To launch a product in a foreign country, one needs to pay a facilitation fee required by the municipal department to get the required no objection certificate. Going by PMI®'s code of ethics and professional conduct, one should:
- A. Not pay the fee since it amounts to bribe and violates the code.
 - B. Pay the fee.
 - C. Check with the legal team whether the fee is justifiable and ethical and then decide.
 - D. Revoke the decision to launch the product in a country that asks for such a fee.

107. Harry and Sally have been fighting for a while on the proposed design options. Harry thinks Sally's option will be very difficult to implement and will cost lots of money upfront. Sally thinks that isn't the case as some basic components could be reused from the existing code. She also thinks that Harry is stubborn and refusing to listen to her justifications. Both approaches ask you to resolve the conflict. You think that both Harry and Sally have positive intent, so you ask Sally to present a small prototype that demonstrates her design. You also ask Harry to be patient and be attentive to what Sally demonstrates and all constructive feedback should be registered. The conflict resolution technique you followed was:
- A. Problem Solving
 - B. Avoiding
 - C. Compromising
 - D. Forcing
108. In a planning poker session, the cards used to provide estimates are numbered as:
- A. T-shirt sizes S, M, L, XL, XXL, etc.
 - B. Odd number 1, 3, 5, 7, 9, 11, etc.
 - C. Fibonacci series like 1, 2, 3, 5, 8, 13, 21, 34, etc.
 - D. Arithmetic progression like 5, 10, 15, 20, 25, 30, etc.
109. Richard has recently joined company ABC as a senior designer. While working on the project, he faintly recalls that he had seen such a design solution in his ex-company. So he calls up his old buddy and asks him to email the design document from his previous company to his personal id. Is this action correct?
- A. Yes, since Richard is reusing the design that saves time and cost.
 - B. Yes, since Richard is showing his prowess in networking.
 - C. No, since this is a violation of intellectual rights and unethical.
 - D. No, since he should have not still been speaking terms with colleagues in his ex-company.
110. Which of the following activities does a servant leader NOT do?
- A. Remove impediments.
 - B. Reiterate the vision of the project.
 - C. Come up with a detailed project plan at the end of the planning poker session.
 - D. Help in logistics and facilitation.

111. A team determines its velocity to be 30 story points in a 3-week iteration. Given that there are 300 stories in the backlog, how long will the project take to complete?
- A. 30 weeks.
 - B. 30 weeks provided the scope remains unchanged during this period.
 - C. 30 weeks provided the scope doesn't change and the estimates don't change.
 - D. 30 weeks provided the scope, estimates and the velocity of the same remains constant.
112. Richard is tasked with evaluating a few proposal received from vendors. One of the vendors met Richard over lunch to explain their value proposition and also handed over a small token of appreciation for Richard's time. Going by the gift and entertainments policy in the company, Richard should:
- A. Deny the gift from the vendor and tell him that his proposal will be rejected for trying to bribe him.
 - B. Accept the gift because it is not expensive.
 - C. Accept the gift as it is not inappropriate, disclose it in the organization and continue to fairly assess rest of the proposals.
 - D. Call up his manager before leaving the meeting to let him decide whether the gift should be accepted or denied.
113. Which of the following conflict resolution techniques results in a lose-lose outcome?
- A. Problem Solving
 - B. Avoiding
 - C. Compromising
 - D. Forcing
114. Which of the following conflict resolution technique results in a win-lose outcome?
- A. Problem Solving
 - B. Avoiding
 - C. Compromising
 - D. Forcing

115. A team consumes the data produced by the software written by another team. The 'producer' team will be ready on Day 8, but to be on the safe side, the 'receiver' team inserts a buffer of 3 days and plans a start on Day 11. These 3 days between systems are called?
- A. Management reserve
 - B. Feeding buffer
 - C. Backup
 - D. Dependency adjustments
116. Planning poker technique is NOT:
- A. An estimation technique
 - B. A group decision-making technique
 - C. A variation of the Wideband Delphi technique
 - D. A sprint retrospective technique
117. The Agile team is during the second last stage of the retrospective meeting where the action items are being decided. Who will take ownership of the action items?
- A. The whole team
 - B. The product owner
 - C. The Scrum Master
 - D. Whoever raised the topic in the first place
118. In MoSCoW prioritization technique, 'S' and 'C' standfor:
- A. Should have, could have
 - B. Shouldn't have, could have
 - C. Should have, couldn't have
 - D. Shouldn't have, couldn't have
119. An Agile coach is tasked on suggesting ways to enhance the velocity of the team. Which of the following is not an option he states?
- A. Remove non-value added tasks from the team.
 - B. Refactor code and remove technical debt.
 - C. Ask the customer to stay aloof and not interfere with the team at work.
 - D. Invest behind devops tools for version control, continuous build and integration.
120. Which of the following will not help a distributed team?
- A. A kickoff meeting at the beginning of the project.
 - B. Sensitivity and awareness of cultural diversity of the team in multiple locations.
 - C. Rotations of the team members if travel budget permits.
 - D. Making teams sit in groups of specialism, like the BA's together, developers together, testers together.

Mock Exam II

1. _____ is the minimum set of features in a product that the users can start using and get benefit without waiting for more.
 - A. Delighters
 - B. Story maps
 - C. Walking skeleton
 - D. MMF

2. During value-based prioritization of user stories, Wiegers' technique considers all the following aspects except
 - A. Cost
 - B. Risk
 - C. Value
 - D. Testability

3. Which of the following is part of Agile Manifesto?
 - A. Contract negotiation over following a plan
 - B. Working software over comprehensive documentation
 - C. Process and tools over individuals and interactions
 - D. Responding to change over processes and tools

4. In the 100-point method for prioritization of user stories:
 - A. Each participant is given a set of 100 stories to prioritize.
 - B. Participants are given 100 minutes to sort out the prioritization of a list of stories.
 - C. Participants are given 100 points that they can randomly allocate to stories based on their perceived importance to them.
 - D. Each participant is asked to pick the 4 most important stories and asked to divide 100 points between them.

5. Which of the following best describes the value of all the future cash inflow and outflow in today's value by factoring in the rate of interest?
 - A. Net Present Value
 - B. Discounted value
 - C. Payback value
 - D. Future value

6. As per the Lean philosophy all of the following are categorized as wastes except:
 - A. Defects
 - B. Transport
 - C. Overprocessing
 - D. Communication that lacks richness

7. A senior executive appoints a product owner for an Agile team. He explains that the key responsibility of the product owner is to:
 - A. Make sure that the Agile team is operating efficiently and effectively.
 - B. ROI is maximized during every iteration.
 - C. Team has a sustainable pace and is not getting burned out.
 - D. The number of escaped defects reaching the customer is as minimal as possible.

8. While analyzing a risk, the team came up with the following figure. Probability = 65%, Impact = \$1000\$, Frequency = once in a week. What is the severity of this risk?
 - A. \$65
 - B. \$650
 - C. 0.65
 - D. 0.00065

9. As per Pareto's 80/20 principle:
 - A. 80% of the defects are removed in the last 20% of the time left on the project.
 - B. 80% of the users use 20% of the features in the product.
 - C. 80% of the system errors can be removed by resolving 20% of the defects.
 - D. 80% of the work in the team is done by 20% of the team members.

10. A servant leader:
- A. Is aware of his and his team member's emotions and controls them.
 - B. Is an expert in people management and lays down ground rules that the team members must obey.
 - C. Is attentive to the needs of the team and helps to remove impediments.
 - D. Monitors and controls affairs of the project by using a lot of metrics that the team needs to capture and plot on a daily basis.
11. What is the Internal Rate of Return (IRR)?
- A. It is a metric that is used to calculate the amount of an investment.
 - B. It is a metric that is used to calculate the profitability of an investment.
 - C. It is a metric that is used to determine whether the source of return is from internal or external sources.
 - D. It is a metric that is used to compare prevailing interest rates.
12. What is the purpose of a risk burndown graph?
- A. Track risk impact over iterations.
 - B. Track risk probability over iterations.
 - C. Track risk severity over iterations.
 - D. Track risk frequency over iterations.
13. Stakeholder management is important for an Agile team because:
- A. Having stakeholders that engage and participate in the project is a critical success factor.
 - B. Without that there is likely going to be scope creep.
 - C. They need to be plotted on a power-interest grid.
 - D. They need to be plotted on an engagement assessment matrix.
14. Which of the following practices if followed persistently and continuously increases the quality of the product?
- A. Information radiators
 - B. Verification and validation
 - C. Affinity estimation technique
 - D. BART analysis

15. Sidky has defined SAMI (Sidky Agile Maturity index) that has five evolutionary stages of Agile maturity in an organization. In the right sequence, they are as follows:
- A. Collaborative, engaging, integrated, adaptive, encompassing.
 - B. Collaborative, evolutionary, integrated, adaptive, encompassing.
 - C. Integrated, collaborative, evolutionary, adaptive, encompassing.
 - D. Collaborative, evolutionary, integrated, encompassing, adaptive.
16. Choose the most correct response:
- A. Two projects A and B have IRR -5% and -12% respectively. While catering for a budget cut, Project B is likely to get the axe and not Project A.
 - B. IRR is the interest rate in which NPV of cash flows is equal to zero.
 - C. ROI of all projects is higher if Agile is used instead of waterfall.
 - D. Both A and B.
17. An Agile team is busy working with the product owner to shuffle the product backlog items based on value and risk severities that were identified so far. The team provides the inputs, but the product owner has the last say on the decisions made and keeps the accountability. The resulting list is called _____:
- A. Risk register
 - B. A DEEP backlog
 - C. Risk-adjusted product backlog
 - D. Iteration backlog
18. What are the three parameters of the Agile triangle?
- A. Value, quality, constraints
 - B. Cost, time, scope
 - C. Value, cost, customer satisfaction
 - D. Value, cost, quality
19. On the branch of a decision tree, you see a decision has a 60% chance of earning a \$1000 profit, but also a 40% chance of a \$2000 loss. What is the EMV of this branch on the decision tree?
- A. -\$200 (loss)
 - B. \$600 (profit)
 - C. -\$800 (loss)
 - D. None of the above

20. The Agile team has just completed the sprint review and the feedback on the product increment was mostly positive, but a few new features have been called out. What do you think the team should do first after the review meeting?
- A. Start implementation for the new features requested.
 - B. Update the backlog and estimate for the new features requested.
 - C. Complete stories that were left out in the sprint.
 - D. Spend time to reflect on currently used processes and how they can be improved in the retrospective meeting.
21. Bill is a Java programmer and joins an Agile team that uses XP. He is new to Agile, so he tries to find out the way of working that is prevalent on the team. He is explained that the code is integrated:
- A. Finally, before the planned release date.
 - B. Many times a day, almost after every check-in.
 - C. Every Monday, Wednesday and Friday.
 - D. Once in an iteration when it has been reviewed and unit tested.
22. A product owner decides that the amount of risks in the project has escalated so much that it does not seem feasible to continue with the project. There is no visibility of profitability in sight. Termination of such a project is which kind of risk response?
- A. Avoid
 - B. Mitigate
 - C. Transfer
 - D. Accept
23. A user story reads: As a borrower of a book from the library, I would prefer to search a book quickly.
- The user story is not good because:
- A. It doesn't seem to be specific or valuable from the borrower's standpoint.
 - B. It does not quantify what 'quickly' means. Without a response time it's difficult to measure.
 - C. It is not estimable since the acceptance criteria is not specified.
 - D. It is too small and not detailed enough.

24. The 4th stage of a retrospective is “Decide what to do.” As a part of this stage:
- A. Action items are added to the product backlog and the product owner is asked to determine the ROI and priority.
 - B. The Scrum Master takes notes and allocates them to whoever is best skilled to carry out the action items.
 - C. The retrospective leader starts the “Helped, Hindered, Hypothesis” activity to determine if the retrospective itself was useful.
 - D. Team members self-volunteer to take specific actions from the next sprint itself.
25. Which of the following is the best Agile team?
- A. An Agile team with specialists.
 - B. An Agile team that avoids conflicts.
 - C. An Agile team that collaborates and self-organizes continuously.
 - D. An Agile team that has no one to blame if things go wrong.
26. During sprint execution, Wilson notices that a story was missed and needs to be implemented. What would he do?
- A. Quickly estimate, design, and complete the implementation, even if that means working overtime.
 - B. Ask the product owner to add the story to the product backlog for future prioritization and planning.
 - C. Pick up the item during the retrospective to determine the root cause of why the item was missed during the planning stage.
 - D. Extend the iteration deadline to accommodate the missed story.
27. By maintaining a constant iteration length, the team:
- A. Establishes an operating rhythm.
 - B. Creates a predictive delivery schedule where the scope is variable.
 - C. Allows the team to measure a trend of their velocity, thereby improving future projections.
 - D. All of the above.
28. During an iteration planning meeting, the product owner has just read out a story and provided some initial set of clarifications. The team is now going to use planning poker to estimate the story. The estimates produced in round one looks like 1, 2, 3, 2 and 8. What should happen now?
- A. Go with 2 since maximum people voted for it.
 - B. Take the average of the 5 estimates.
 - C. Take the worst case 8 as the estimate.
 - D. Have the team members who voted for 1 and 8 explain their rationale and repeat the voting round.

29. One of the core practices in XP is 'Small releases'. Following are the advantages except:
- A. Deliver value early and quickly.
 - B. Mitigate risks of a 'big-bang' integration.
 - C. Adapt to changes incrementally.
 - D. Limit work in progress.
30. Kaizen is a Lean principle. The literal meaning of the Japanese word Kaizen is:
- A. Continuous integration
 - B. Continuous improvement
 - C. Frequent validation and verification
 - D. Billboard
31. Which of the following is the best definition of 'definition of done'?
- A. A term defined when the project is completed and ready to be shipped to production.
 - B. A term defined by the team to determine when a user story is completed and ready for shipping to a customer.
 - C. A term defined to indicate acceptance of features by the end user.
 - D. A term defined to indicate when the Scrum team can take credit for their accomplishment and demo their deliverables.
32. Harry is a member of the Agile team. He is not a tester, but is interested to randomly check a few things about the system behavior without a lot of up-front planning. He begins with the charter and spends an hour or so trying different things that otherwise are not documented as user stories. Harry is conducting:
- A. Refactoring
 - B. Peer reviews
 - C. Acceptance testing
 - D. Exploratory testing
33. Which of the following statements is NOT true?
- A. It is cheaper and easier to terminate an Agile project midway than a waterfall-based project.
 - B. Agile project have a continuous focus on quality and planning.
 - C. Fixed price contracts are best suited in Agile.
 - D. There is no need of heavy change management processes to make and track changes in an Agile project.

34. A loosely engaged stakeholder requests John the Scrum Master, to show him the latest weekly status report to check the project health and the remaining amount of work in the project. Instead, John takes the stakeholder to the team wall where a few pertinent updates are posted continuously. To address the stakeholder's query, John specifically points out to
- A. Burndown chart
 - B. Sprint backlog
 - C. Task board
 - D. Velocity trend
35. A persona in an Agile project is:
- A. The proxy user who can provide requirement in absence of the product owner.
 - B. The person who provides acceptance of the product increment at the end of every iteration.
 - C. An imaginary representation of a user role to collect requirements from his or her perspective.
 - D. An onsite customer or anyone he/she assigns to be co-located with the team to provide clarifications on the fly.
36. A product roadmap contains all of the following except:
- A. Milestones of each release
 - B. Estimates of epics and themes
 - C. Contents of each releases
 - D. Depiction of value-driven delivery to the customer
37. During iteration planning stories are broken down into tasks that are entered into the iteration backlog. The tasks neither should not be too long nor too small to cause a tracking overhead. The thumb-rule of the length of each tasks is:
- A. 4-16 hours
 - B. 0-8 hours
 - C. One story point
 - D. Less than half a day
38. Which of the following is not a valid reason to update the product backlog?
- A. Change in the composition of the development team
 - B. Addition of new stories or risks
 - C. Change in priorities
 - D. Finding from previous sprints

39. Which is the fastest way to generate a lot of good quality requirements?
- A. Surveys
 - B. Facilitated workshops
 - C. Wisdom of crowd
 - D. Dot voting
40. Thumb voting is a group decision-making technique. Holding a thumb sideways indicates:
- A. Agreement
 - B. Disagreement
 - C. Neutrality
 - D. Strong support
41. At the end of the iteration, the team observes that they have completed only 50% of a story that was initially estimated for 12 story points. How many story points from this story would count toward the team's velocity?
- A. 0
 - B. 6
 - C. 12
 - D. 18
42. The customer has provided a bunch of requirements to the Agile team. But they are not sure what the collection of the requirements will finally look like. They asked the team if they could complete the entire design and give them a preview. Since up-front design is not encouraged, the Agile team instead produced a:
- A. Spike
 - B. Prototype
 - C. Persona
 - D. Definition of done
43. 'Remember the future' and 'Prune the product tree' are examples of _____ and used to _____.
- A. Estimation techniques, determine relative size of stories
 - B. Prioritization techniques, determine relative priorities of stories
 - C. Brainstorming techniques, solve problems
 - D. Innovation games, collect requirements

44. As per the estimation convergence / cone of uncertainty graph, estimates produced at the beginning of the project is called _____ while that near the end of the project are called _____.
- A. Budget, definitive
 - B. Ballpark, accurate
 - C. Rough order of magnitude, definitive
 - D. Rough order of magnitude, precise
45. During a 3-week iteration, the team completed 3 stories of 5 story points each, 2 stories of 12 story points each and completed 50% of two stories of 14 story points each. What is the team's velocity for this iteration?
- A. 39
 - B. 53
 - C. 67
 - D. None of the above
46. Apart from story points, which of the following could be used as unit of estimates for Agile?
- A. Calendar days
 - B. Coffee-cup sizes
 - C. Person months
 - D. Feature points
47. Jeremy, an Agile developer practices picks up a story from the sprint backlog. He begins with writing the automated unit tests before writing the code. Jeremy is following the practice of:
- A. Test-first development
 - B. Pair programming
 - C. Continuous integration
 - D. Feature-driven development
48. Which is the best definition of escaped defect?
- A. A defect that has simply escaped the attention of the tester.
 - B. A defect that should have been caught during exploratory testing.
 - C. A defect that went undetected and landed with the customer.
 - D. A defect that unearths inefficiencies in the processes that needs to be rectified in the next iteration.

49. During iteration planning, the Agile team comes across a story that has an iteration length that is almost 90% of the velocity of the team. What is the best suggestion that you can give to the team in this situation?
- Reject the story since it is not small enough.
 - Split the story.
 - Extend the iteration length.
 - It is not advisable to compare estimates of a story with the team's velocity.
50. Use the Earned Value Management technique to determine the status of the project. The parameters are $EV = \$4000$, $PV = \$5000$ and $AC = \$6000$.
- Project is behind schedule and within budget.
 - Project is behind schedule and has cost overrun.
 - Project is ahead of schedule and within budget.
 - Project is ahead of schedule and has cost overrun.
51. For the same parameters given in the previous question (#50), what is the Schedule performance index (SPI)?
- 0.8
 - 0.66
 - 0.83
 - 1.25
52. Richard has been appointed as an Agile coach. The team is newly formed, so he has to explain a lot of Agile practices. He asks the team to practice Just-In-Time (JIT) planning as that is followed in Agile. What is the main reason that Richard cites to support the practice of JIT planning?
- A JIT plan is easier to create and maintain by the project manager.
 - JIT planning helps to accommodate changes far more easily instead of using change control principles.
 - JIT planning keeps the team on their toes and helps to constantly maintain focus among the team members.
 - JIT planning helps to keep stakeholders at bay, since they cannot see the overall picture.
53. The sponsor of an Agile project approaches the Scrum Master and asks him about the burn rate of the team per sprint. The team consists of 6 members each of whose billing rate is \$50 per hour. Assuming a 40 hour week and an iteration length of 2 weeks, what is the burn rate per sprint?
- \$36,000
 - \$20,000
 - \$30,000
 - \$24,000

54. An iteration started with 10 user stories to deliver. In the middle of iteration, a team member got sick and was not available to work. During a daily stand-up meeting, this was raised to the Scrum Master to seek advice as team thinks they cannot deliver all 10 user stories in the iteration. What should be the Scrum Master's advice to team?
- A. Work overtime to catch up on the lost time.
 - B. Fastrack if possible and extend the iteration.
 - C. Complete what can be done and the pending items should be put in the backlog for future iterations.
 - D. Reduce the scope of iteration from 10 user stories to 8 user stories and deliver as per the revised commitment.
55. A team's average velocity is 40 story points per 2-week iteration. There are 600 story points left in backlog. How many iterations are needed to complete the backlog?
- A. 30
 - B. 25
 - C. 20
 - D. 15
56. Who facilitates the sprint review?
- A. Sponsor
 - B. Product owner
 - C. Anyone from the self-organized team
 - D. Scrum Master
57. A team's average velocity is 45 story points per 2-week iteration. There are 490 story points left in backlog. How many weeks are needed to complete the backlog?
- A. 22
 - B. 20
 - C. 10
 - D. 11
58. Affinity estimating is the process of:
- A. Averaging the best and worst case estimates.
 - B. Checking that the stories in the same functional areas are of equivalent magnitude.
 - C. Checking that the stories of the same estimated size are of equivalent complexity.
 - D. Checking that the stories of the same estimated size are of the same technology.

59. What does the term “Done Done” mean in Agile projects?
- A. Unit testing completed, all tests passed.
 - B. Accepted by the sponsor.
 - C. Development done, ready for exploratory testing.
 - D. Ready for Production release and available to the end user.
60. All tasks that are to be completed before the final release of the product are called:
- A. The iteration backlog
 - B. The project backlog
 - C. The sprint backlog
 - D. The product backlog
61. As far as whole-team coaching is concerned, the Agile coach is most active during:
- A. Beginning of the sprint.
 - B. End of the sprint, during the retrospective.
 - C. In the middle of the sprint.
 - D. During sprint planning and retrospectives.
62. Which of the following is an Agile Manifesto value?
- A. Individuals and interactions over comprehensive documentation.
 - B. Working software over following a plan.
 - C. Customer collaboration over contract negotiation.
 - D. Working solutions over processes and tools.
63. Agile projects unleash creativity and innovation by:
- A. Engaging customers in frequent interactions and shared ownership.
 - B. Recognizing that individuals are the ultimate source of value and creating an environment where they can make a difference.
 - C. Making continuous flow of value our focus.
 - D. Group accountability for results and shared responsibility for team effectiveness.
64. Which of the following Agile Manifesto values deals with working closely with business or client?
- A. Individuals and interactions over processes and tools.
 - B. Working software over comprehensive documentation.
 - C. Customer collaboration over contract negotiation.
 - D. Responding to change over following a plan.

65. Which of the following Agile principles shows “Architecture and design emerge from a collaboration between teams”?
- A. The best architectures, requirements and designs emerge from self-organizing teams.
 - B. Business people and developers must work together daily throughout the project.
 - C. Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.
 - D. Continuous attention to technical excellence and good design enhances agility.
66. Which of the following artifacts helps to bring product owner and team together collaboratively?
- A. Iteration Plan
 - B. The Product Backlog
 - C. The Iteration Backlog
 - D. Burndown chart
67. During iteration planning meeting, who is responsible to commit to deliver selected user stories in the iteration?
- A. Product Owner
 - B. Agile project manager
 - C. Scrum Master
 - D. The team
68. Which of the following is the least desirable practice in the case of a distributed team?
- A. Setting ground rules that a team in a particular time zone will have to extend their working hours to ensure overlap.
 - B. Use collaboration tools and videoconferencing whenever practical.
 - C. Have some time overlap between remote teams for handoffs and daily interactions.
 - D. Maintain common coding rules and tools for continuous integration.
69. What is expected from a traditional Project Manager on Agile projects?
- A. People management.
 - B. Responsible to pick up and estimate user stories for next iteration.
 - C. Direct team on how to work, track their progress.
 - D. None of the above.

70. What are the five XP values?
- Communication, feedback, simplicity, courage and respect
 - Commitment, openness, simplicity, courage and respect
 - Commitment, openness, focus, courage and respect
 - Commitment, feedback, simplicity, courage and respect
71. An Agile leader is planning the seating arrangement for the team. He makes sure that everyone can see each other. The benefit of such a seating arrangement is that:
- The leader will be able to exercise authority.
 - The leader is making optimum use of available space.
 - The team will be able to see what the other person is doing.
 - This helps in osmotic communication.
72. The three pillars of empirical process control are:
- Planning, Adaption, Retrospective
 - Inspection, Transparency, Adaptation
 - Planning, Inspection, Consistency
 - Collaboration, Value-driven, Kaizen
73. Which of the following is a valid prioritization method for an Agile project?
- Sidky maturity model
 - Monopoly money
 - Kanban
 - Value stream mapping
74. The daily stand-up meeting was scheduled to start at 9 a.m. However the team waited till 9:08 a.m. before all participants came into the meeting room. Morning greetings exchanged between the participants. By then the clock showed 9:12 a.m. There was an issue reported by a team members and team gets into brainstorming and spent another 10 minutes. Finally, the meeting was over at 9:37 a.m.
- Calculate the process cycle efficiency of this process.
- 73%
 - 57%
 - 52%
 - 68%

75. What should be the severity order of the following four risks in descending order?
- Risk A has an impact of 0.3 and a probability of 0.2.
Risk B has an impact of 0.4 and a probability of 0.2.
Risk C has an impact of 0.3 and a probability of 0.5.
Risk D has an impact of 0.5 and a probability of 0.8.
- A. D, C, B and A
 - B. D, B, C and A
 - C. D, C, A, B
 - D. D, B, A, C
76. Agile projects deliver reliable results by:
- A. Engaging customers in frequent interactions and shared ownership.
 - B. Recognizing that individuals are the ultimate source of value and creating an environment where they can make a difference.
 - C. Making continuous flow of value our focus.
 - D. Group accountability for results and shared responsibility for team effectiveness.
77. One of the key stakeholders suggested changing the priority of a user story by making it number one on the backlog. The story was earlier placed third on the prioritized backlog. He is very influential and powerful in the department. How should you act on the suggestion made?
- A. Accept the suggestion, change the prioritization order and inform all stakeholders.
 - B. Simply decline. Inform him that product backlog has already been prioritized and no more changes can be made.
 - C. Inform and discuss this with product owner.
 - D. Explain why this is placed at number 3 in backlog and importance of other top user stories to deliver early.
78. Which artifact is the best to display when releases of the product will be ready and what all features will be included in those releases?
- A. Developer team
 - B. Product backlog
 - C. Product owner
 - D. Product roadmap

79. There are a number of projects running where your company is losing money. To reduce the losses, company decides to review and terminate a project. Consequently, 3 projects were shortlisted for review. Which project should be terminated first?
- Project 1 has an internal rate of return of -7%
- Project 2 has an internal rate of return of -3%
- Project 3 has an internal rate of return of -5%
- Terminate project 1
 - Terminate project 2
 - Terminate project 3
 - Terminate all projects, all have negative IRR and are losing money
80. To track and report the status of schedule and cost, which tool is best to use?
- S-curve graph
 - Gantt chart
 - Burndown and burnup chart
 - Project plan
81. You called a TV engineer to repair your faulty TV set. You spent 10 minutes explaining the problem with the TV set. It took 4 hours for the engineer to repair the TV set and then you take another 10 minutes to check if the issue is fixed or not before the engineer leaves the site.
- In the whole exercise, what is the process cycle efficiency for the engineer and you? Assume that the engineer only values the repair time, whereas you value only the time explaining the issue and checking the TV set.
- 92.3% for engineer, 7.7% for you
 - 93.7% for engineer, 6.3% for you
 - 95.8% for engineer, 4.2% for you
 - 98.3% for engineer, 1.7% for you
82. Agile project charter is different than a traditional project charter because:
- Agile projects do not require a charter.
 - While creating an Agile project charter, what approach to be used is not clear.
 - The scope is less clearly defined on Agile projects.
 - Agile projects typically are small, so a small charter is enough.

83. Why is the presence of the customer representative made mandatory in Agile projects?
- A. The customer representative is the main judge for business value.
 - B. The project leader needs to build personal rapport with the customer representative.
 - C. The customer representative can dictate the project plan and suggest course corrections.
 - D. All of the above.
84. When an item is blocked, Kanban teams gather around and collectively work to remove the obstacle. This is prioritized over picking up any new piece of work and ensures continuity of flow through the system. This technique is called:
- A. Collective ownership
 - B. Self-organization
 - C. Swarming
 - D. Group decision-making
85. All are the following are helpful when performing risk management except:
- A. Risk-Based Spikes
 - B. Risk-Adjusted Backlogs
 - C. Risk Burndown Charts
 - D. Risk Owner
86. During a project audit, it is determined that the vendor is artificially inflating the estimates of the user stories. They are on a time-and-materials contract, so the longer they stay on in the project, the more revenue they generate. On getting to know such a practice, what should you do?
- A. Report to PMI®.
 - B. Halve the estimates produced.
 - C. Report the unethical conduct to the appropriate parties.
 - D. Drag the vendor to the court.
87. Wideband Delphi technique is best described as:
- A. A group-based estimation approach
 - B. A value-driven estimation approach
 - C. A negotiating estimation approach
 - D. A team-based estimation approach

88. Story points are used as one of way to estimate Agile projects. These story point estimates are:
- A. Absolute
 - B. Relative
 - C. The sum of the features in release
 - D. A fraction of the velocity of the team
89. Planning poker allows multiple rounds of estimates. Which other technique allows a similar approach?
- A. Shu-Ha-Ri
 - B. Wideband Delphi
 - C. Triple nickel
 - D. Circle of questions
90. On an Agile project, you get to see estimates of a user story expressed as:
- A. Completed by November 15th 2016.
 - B. Completed within 3 months from when the user story was started.
 - C. Completed before the start of the next user story.
 - D. Completed within 40 to 60 hours.
91. On a burndown chart, the top of the bar moved lower from one iteration to the next. What does that imply?
- A. The team corrected some of the underestimates of the past.
 - B. The team completed work in the previous iteration.
 - C. Scope got added into the backlog.
 - D. Scope got removed from the backlog.
92. Which of the following qualifies to be a good MMF?
- A. An online grocery shopping cart that allows you to view and save the items you want to buy and complete the purchase process.
 - B. A bicycle having 2 wheels along with supporter, decorative lights, a water bottle space.
 - C. A cell phone that allows you to make and receive calls, click photos and allows you to connect with social media and other Internet world.
 - D. A camera that allows you to take photos and then access the Web to add descriptions and share them with friends.

93. It is observed that the bottom of the bar in the burndown chart is raised above the X-axis. What does that mean?
- A. Scope has been removed.
 - B. Scope has been added.
 - C. This could be a mistake in plotting.
 - D. Team is tracking ahead of the estimated velocity.
94. Drawing a tree, the participants are asked to add related features as leaves closer to the trunks and dependent features higher on the tree. This activity is called:
- A. Leaves and trunks
 - B. Features and dependencies
 - C. Define the scope tree
 - D. Prune the product tree
95. During an internal project audit your project is marked as RED and highlighted as noncompliant as it does not have a detailed plan. You are asked to prepare the project plan and submit within 3 days instead of having plan for next 2 iterations. What should you do?
- A. Ask the team to create a plan based on experience.
 - B. Ignore them, as this is an internal audit and has no adverse effect on you and the project.
 - C. Conduct a meeting with them explaining the Agile methodology and progressive planning approach.
 - D. Contact your management and ask for project exception from the audit.
96. You are into the 6th month of the project, which has an estimated schedule completion of 1 year from start. Referring to the latest project status report submitted by you, your sponsor wants to understand why you show that the project will be completed a month earlier than the schedule project completion date. What data should you present in support of your report?
- A. Velocity
 - B. Risk burndown chart
 - C. Cumulative Flow diagram
 - D. Risk-based spikes
97. In an Agile project charter, you will not find the:
- A. Detailed project scope
 - B. Estimated project cost
 - C. Expected ROI
 - D. Project objective

98. In a control chart, a process is expected to be out of control:
- A. When the measured parameter is below the lower control limit.
 - B. When the measured parameter is above the upper control limit.
 - C. When the rule of seven is violated.
 - D. Any of the above.
99. Kanban boards reflect WIP limits against each stage of the workflow. The drawbacks of WIP include the following:
- A. Hides bottlenecks.
 - B. Results in context switching.
 - C. Delayed feedback.
 - D. All of the above.
100. Project cost calculation must include:
- A. Total cost = (Time X Resource rate) + other project costs
 - B. Total cost = (Team velocity X average labor rate) + additional project costs
 - C. Total cost = (average team size X average labor rate) + non-labor project costs
 - D. Total cost = (team size X hourly rate) + additional project costs
101. You are managing a project and the labor cost per month for the whole team is 30,000 USD. The fixed cost for infrastructure procurement is estimated at 10,000 USD. Based on prioritized product backlog items and team velocity, the team will need 20 iterations of 1 month each to complete the work. Post backlog items are successfully delivered and a 1-month warranty period is requested for the team to remain intact before the project is closed and the team released. What would be the total cost of the project until completion?
- A. \$5,90,000
 - B. \$6,60,000
 - C. \$6,30,000
 - D. \$6,40,000
102. What do you expect from a servant leader?
- A. Tracks tasks on the Kanban board.
 - B. Empowers the team.
 - C. Collects requirements and gather user stories.
 - D. Hosts the iteration review meeting.

103. Which of the following is not a characteristic of high performing Agile teams?
- A. Constructive disagreement
 - B. Plan driven
 - C. Empowered
 - D. Self-organizing
104. Which of the following is not appropriate to be discussed in a daily stand-up meeting?
- A. The application developer is on vacation, so the code changes are on hold.
 - B. Build failed for the transaction validator. This is expected to be fixed by today evening.
 - C. Code upgrade for the payment module is completed.
 - D. That configuration fix made by Harry last week has caused a significant improvement in our batch jobs. However there is room for a bit more improvement.
105. An Agile coach is building a high-performance team. Which of the following techniques can she adopt?
- A. Make all decisions on behalf of the team, saving their time.
 - B. Demonstrate expertise by solving problems hands-on.
 - C. Performing individual coaching interventions in the middle of the sprint when team members approach with problems.
 - D. Intervene at every possible hint of conflict within the team.
106. In a distributed team, which is the most effective tool to use for communication between team members?
- A. Email
 - B. Wiki
 - C. Skype
 - D. Audio playback
107. A product owner MUST attend a planning poker estimation session. Without his presence:
- A. The session will not be moderated.
 - B. The team will have a tendency to overestimate.
 - C. The team will not get the necessary clarifications regarding the stories getting estimated.
 - D. There will be no timekeeping.

108. You are managing a complex program across the globe and team members are from different regions. You have a large number of team members working on projects and reporting to the respective project manager and then each project manager is reporting to you. Currently you have 10 different project managers on a program. To have an effective communication, how many communication channels will be there between you and project managers?
- A. 10
 - B. 45
 - C. 55
 - D. 110
109. Which of the following Emotional Intelligence pairings is correct?
- A. Self-management relates to self-control.
 - B. Self-awareness relates to empathy.
 - C. Social skills relate to influence.
 - D. Social awareness relates to self-confidence.
110. Which is a correct pairing of adaptive leadership and team phases?
- A. Directing and Storming, Coaching and Forming, Supporting and Norming, Delegating and Performing
 - B. Directing and Forming, Coaching and Storming, Supporting and Norming, Delegating and Performing
 - C. Coaching and Forming, Supporting and Storming, Directing and Norming, Delegating and Performing
 - D. Coaching and Forming, Supporting and Storming, Directing and Delegating, Performing and Norming
111. You should be flexible while leading and managing a team as an Agile coach and improve emotional intelligence. There are different aspects of emotional intelligence, divided into quadrants. What are they?
- A. Self, Team, Regulate, Recognize
 - B. Self, Others, Regulate, Optimize
 - C. Self, Team, Regulate, Optimize
 - D. Self, Others, Regulate, Recognize
112. Which of the following is not a Kanban principle?
- A. Limit WIP
 - B. Visualize work
 - C. Make processes explicit
 - D. Limit feedback loops

113. Which of the following is not a Lean principle?
- A. Eliminate waste
 - B. Empower the team
 - C. Optimize learning
 - D. Defer decision
114. You are a program manager and taking an interview for a PMP certified project manager position in your organization. This position is for a different project that will be led by a different program manager. During the interview process, you find the person violating the standards of PMI® code of ethics and professional conduct. However, you find him a suitable candidate for the position. What you should do?
- A. Confront the person.
 - B. Report this to PMI® to get it appropriately investigated, as you have a suspicion, but no concrete evidence.
 - C. Ignore it and do not recommend him to be hired for the project manager position.
 - D. Ignore it and recommend him for hiring as he will not be working with you, so it is of no harm to you.
115. What are the success criteria for a methodology while performing process analysis?
- A. The project got stopped, sponsorship remained intact and the team would work the same way again.
 - B. The project got stopped, leadership remained intact and the team would work the same way again.
 - C. The project got shipped, sponsorship remained intact and the team would work the same way again.
 - D. The project got shipped, leadership remained intact and the team would work the same way again.
116. One thing to avoid when choosing a new Agile practice over an existing process is:
- A. Accepting the claims of new practice without validation.
 - B. Taking time to research the validity of the benefits claimed for the new practice.
 - C. Testing the approach on a small scale before committing to it on the project.
 - D. Discontinuing the activities that have led to the underlying problems we want to address.

117. In focus on / focus off activity, what is focused on rather than an argument?
- A. Inquiry
 - B. Conversation
 - C. Dialogue
 - D. Understanding
118. As per principle of systems thinking, Agile works well when a project is:
- A. Highly-complex requirements and highly-complex technology
 - B. Low-complex requirements and low-complex technology
 - C. Highly-complex requirements and highly-complex technology
 - D. Medium-complex requirements and medium-complex technology
119. An Agile team's velocity is 18. The team is referring to the following stories in priority order on the product backlog:
- Story 1 - 4 Points
 - Story 2 - 1 Points
 - Story 3 - 5 Points
 - Story 4 - 2 Points
 - Story 5 - 13 Points
 - Story 6 - 5 Points
 - Story 7 - 5 Points
- What is the best choice of stories for the next iteration assuming that stories cannot be split any further?
- A. Story 1, 2, 3, 4, 6
 - B. Story 1, 2, 5
 - C. Story 1, 2, 3, 4
 - D. Story 3, 5
120. Which of the following is not a good idea to have in a brainstorming session?
- A. Send meeting invites with a clear agenda in advance.
 - B. Have an experienced facilitator lead the session.
 - C. Allow people to vent their frustrations and criticisms openly.
 - D. Have a diverse group so as to consider many different perspectives.

Mock Exam III

1. What are the core values of the PMI® code of ethics?
 - A. Responsibility, Respect, Fairness, Truth
 - B. Responsibility, Respect, Fairness, Honesty
 - C. Accountability, Integrity, Respect, Fairness
 - D. Accountability, Responsibility, Respect, Honesty

2. Kano, Wiegers' and MoSCOW are techniques used for:
 - A. Disaggregation
 - B. Risk analysis
 - C. Value-based prioritization
 - D. Collecting requirements from customers

3. The letters V, S and T in the acronym INVEST (that is used to describe user stories) stands for?
 - A. Valuable, small, testable
 - B. Valuable, smart, time-bound
 - C. Verifiable, small, testable
 - D. Valuable, specific, timely

4. An Agile coach is suggesting ways for the team to increase their velocity. Which of the suggestions are valid?
 - A. Increase headcount of the team if budget permits.
 - B. Engage the customer closely, if possible let him/her be co-located with rest of the team.
 - C. Remove technical debt by refactoring code continuously.
 - D. All of the suggestions above are valid.

5. Team members are observed to be frequently conflicting with each other, even on petty issues. Referring to Bruce Tuckman's team formation model, at which stage do you think the team is in?
 - A. Forming
 - B. Storming
 - C. Norming
 - D. Adjourning

6. During an iteration, the team has committed to deliver 20 story points. As the end of the iteration nears, it appears that 4 story points cannot be completed during the iteration. Which option is the team most likely to exercise?
 - A. Extend the iteration by a few days.
 - B. Relax the definition of done.
 - C. Terminate the sprint, because the estimated velocity cannot be achieved.
 - D. Complete whatever is possible and carry over the balance to the product backlog.

7. Referring to the Agile planning onion, which of these are in the correct sequence?
 - A. Strategy, product, portfolio, iteration, daily
 - B. Portfolio, product, release, iteration, daily
 - C. Portfolio, release, product, iteration, daily
 - D. Portfolio, daily, strategy, iteration, release

8. Midway during an iteration, a team member had to go on emergency leave for personal reasons. The team is on the verge of missing the committed sprint goal. What should be the course of action now?
 - A. Agile teams are self-organized, so the others should rally around and make up for the absent team member.
 - B. Agile teams are self-empowered, so they should remove the scope from the sprint goal.
 - C. Agile teams are cross-functional, so the Scrum Master should help in coding and testing activities.
 - D. Agile teams maintain sustainable pace, so they deliver what is possible during the sprint and leave the rest to be put back into the product backlog.

9. What are the first three steps to conduct a retrospective?
 - A. Set the stage, gather data, generate insights.
 - B. Gather the team, brainstorm, make decisions.
 - C. Introduce, collaborate, actions.
 - D. Set the stage, generate data, gather insights.

10. Which of the following statements related to different levels of coaching are true?
- A. Whole team coaching happens in the middle of the sprint, while individual coaching happens at the beginning and end of the sprint.
 - B. Whole team coaching happens at the planning stage of the sprint, while individual coaching can happen throughout the whole sprint.
 - C. Whole team coaching happens in the planning and retrospective sessions of the sprint, while individual coaching happens at the middle of the sprint.
 - D. Whole team coaching happens throughout the whole sprint, while individual coaching can happen at the middle of the sprint.
11. The formula for Little's Law states:
- A. $WIP = Lead\ Time * Throughput$.
 - B. $WIP = Lead\ Time / Throughput$.
 - C. $WIP = Lead\ Time + Throughput$.
 - D. Higher the WIP, greater is the flow through the system.
12. An Agile team agrees on a 3-week iteration and a planned velocity of 40 story points per iteration. The team starts with a backlog of 400 story points. In the middle of the project, 40 story points get removed and an additional 120 story points get added. How long will the project team take to complete the project?
- A. 39 weeks
 - B. 36 weeks
 - C. 33 weeks
 - D. 36 weeks provided the average velocity of the team remains at 40 throughout the project
13. Spikes are conducted to:
- A. Mitigate risks
 - B. Make better estimates
 - C. Gain confidence
 - D. All of the above
14. Who can terminate a sprint midway?
- A. Product owner
 - B. Scrum Master
 - C. Development team
 - D. Anyone in the Scrum team, but not someone who is outside the team

15. Sequence the following in descending order of size:
 - A. Themes, tasks, stories
 - B. Epics, features, stories, sub-stories
 - C. Epics, stories, tasks, subtasks
 - D. Feature, tasks, stories

16. Lyssa Adkins has provided some recommendations to follow during one-on-one coaching. Which of the following is not one of them?
 - A. Meet team members a half-step ahead
 - B. Partner with functional managers
 - C. Create positive regard
 - D. Feedback and follow-up

17. "We are going too slow. Let us remove the lower priority stories #12 and #23 from the backlog." Who do you think has the right of saying this?
 - A. The development team since they are observing the velocity trends.
 - B. The Scrum Master since he facilitates the daily Scrum meetings and needs to escalate the impediments to the product owner.
 - C. The Product Owner since he needs to balance ROI and determine what gets delivered when.
 - D. The Project Manager since his job is to track scope, time and cost.

18. How do Agile teams achieve knowledge sharing?
 - A. Through team participating in all ceremonies.
 - B. Through practices like pair programming and continuous integration.
 - C. Through use of osmotic communication and technologies across virtual teams.
 - D. All of the above.

19. The vertices of the Agile triangle are labeled as:
 - A. Quality, Value, Constraints
 - B. Quality, Scope, Time
 - C. Quality, Value, Scope
 - D. Time, Cost, Scope

20. Which of the following is NOT a criterion for determining the length of an iteration for an Agile team?
 - A. Maintaining focus and sense of urgency
 - B. Length of the largest story in the release
 - C. Risk and uncertainty in the requirement
 - D. Overhead of iterating

21. A story map is meant to show the stories that are to be delivered over time. The time parameter is shown in the horizontal (X) axis. What is there on the vertical (Y) axis?
- A. Priority of the story.
 - B. Estimate of the story.
 - C. ROI of the story.
 - D. None of the above.
22. _____ is a low-fidelity prototype that shows a mockup for a set of screen, containing the basic layout of the different widgets on it.
- A. Persona
 - B. Wireframe
 - C. Spikes
 - D. Story map
23. A value stream map used to show:
- A. Release date and mapping to business benefits.
 - B. Product backlog items mapping to risk.
 - C. Current process flow.
 - D. Estimates per user story in product backlog.
24. The velocity of a Scrum team is observed to be slightly below the average velocity computed over the last three sprints. The Scrum Master is concerned and asks the team to reflect and come up with a corrective action. Which do you think is a valid action?
- A. All stories needs to be reestimated to arrive at better estimates.
 - B. Redo the definition of story point.
 - C. Increase the length of the iteration.
 - D. There is no need to be overly concerned. Such variations are naturally going to happen.
25. Which of the following is not a valid statement in the Agile Manifesto?
- A. Individuals and interactions over processes and tools.
 - B. Working software over comprehensive documentation.
 - C. Customer negotiation over contract collaboration.
 - D. Responding to change over following a plan.

26. A distributed Agile team is more likely to use _____.
- A. Work breakdown structure
 - B. An electronic Kanban board for tracking work in progress
 - C. A command and control style of leadership
 - D. A project manager to monitor and control day-to-day tasks.
27. Agile contracts are characterized by:
- A. Ability to define scope upfront.
 - B. Ability to squeeze the vendor to do more for less.
 - C. Ability to respond to change without the need of change control procedures.
 - D. Ability to deliver by a fixed time and at a fixed cost.
28. All of the following hinder effective communication in a team space EXCEPT:
- A. Teams seated by their skillsets, like developers together, testers together, etc.
 - B. Information radiators that have not been regularly updated.
 - C. Developers using headphones to listen to music.
 - D. Developers using webcams for communicating with their distant team members.
29. One uses “shuttle” diplomacy by carrying thoughts from one group to the other until they are able to de-escalate the conflict situation. At which level of conflicts do we see the use of shuttle diplomacy?
- A. Level 1: Problem to solve
 - B. Level 2: Disagreement
 - C. Level 3: Contest
 - D. Level 4: Crusade
30. Bill and Harry belong to a XP team and are paired up for a programming session. They pick up a story from the backlog and observe the acceptance criteria mentioned at the back of the story card. They code the acceptance test cases first and then write their modules in such a way to make the test cases pass. Which technique are they using?
- A. Continuous integration
 - B. Peer code reviews
 - C. Test first development
 - D. Refactoring

31. The _____ is the summation of labor costs for the team. This is the cost that the team incurs during each iteration.
- A. Planned Value
 - B. Burn rate
 - C. Earned value
 - D. Indirect cost
32. Sailboat, 20/20 vision and prune the product tree are innovation games that Agile teams use to:
- A. Collect requirements
 - B. Determine release plan
 - C. Perform retrospective
 - D. Perform estimation
33. All of the following are true about ground rules EXCEPT:
- A. They are abided by all team members.
 - B. They are unwritten rules.
 - C. They set clear expectations of what is or is not acceptable behavior.
 - D. They are enforced by the Agile coach and all team members have to follow them.
34. A Kanban board reflects columns marked with a WIP limit of 5 for analysis and 7 for coding. This means that
- A. There are 5 analysts and 7 developers on the team.
 - B. Coding cannot start until all the 5 work items are done with analysis. Similarly testing cannot start until all 7 are finished coding.
 - C. The team can progress on a maximum of 5 work items for analysis and 7 work items for coding at any time. Any work item beyond that needs to wait.
 - D. It should take a maximum of 5 days to complete analysis and 7 days to complete coding for a work item. Anything beyond that signifies that the work item is too complex and it must be further broken down.
35. A team member, while trying to gather more details around a user story, is not able to get hold of a particular user. He has attempted several times, but seems like the user is unable to provide his time to the team member. What should the team member do first?
- A. Escalate to the product owner and ask him to appoint a proxy.
 - B. Escalate to the Scrum Master as he is supposed to remove the impediments.
 - C. Escalate to the Team during the daily stand-up meeting.
 - D. Remove the item from the backlog and continue with the rest.

36. The _____ is responsible for updating the Task board.
- A. Tester (when test cases pass)
 - B. The Team (as they progress)
 - C. The Scrum Master (after the daily Scrum)
 - D. The Product owner (after the sprint review)
37. A senior member of the team Henry is negotiating with a third-party vendor on the applicable rates on the contract. Henry is passionately hearing the vendor's concerns and trying to relate to it. Which skill is Henry using?
- A. Active listening
 - B. Servant leadership
 - C. Emotional intelligence
 - D. Empathy
38. One of the very important stories in the sprint backlog has not passed acceptance testing. The whole team has swarmed around and tried to isolate the defect, but they have not yet been successful. The sprint is almost coming to an end and the review is in another 2 days from now. It is unlikely that the 'definition of done' will be met for this particular user story. What should the team members be thinking of now?
- A. As the story is very important, they should extend the sprint deadline and defer the sprint review meeting.
 - B. They should deliver the software as is (with the story that failed) and ask the customer not to use it, until it is fixed in the next sprint.
 - C. They should consult with the Agile coach on the best way forward.
 - D. They should deliver only the stories that have met the definition of done. All other stories that are incomplete should be removed from delivery.
39. It seems that the number of escaped defects has been rising over the last 3 iterations. As a Scrum Master what should you do?
- A. Identify which developer(s) is/are not doing things properly and schedule one-on-one meetings with them.
 - B. Do nothing, but wait to vent it out in the upcoming retrospective meeting.
 - C. Ask the team to print out the chart showing the escaped defects trend and post it on the team wall.
 - D. Get the team to address the issue collectively.

40. You have been appointed as an Agile coach in a fairly large department. On an initial survey you notice that there are several projects implementing Agile in their own way and sometimes in different ways. Their definition of story points and velocities are also different. The team members also have varied maturity levels. What should you be doing?
- A. Ignore. You have been recently appointed and it will take some time to understand the ways of working in different teams.
 - B. Express no concern. It is completely acceptable that the team implements Agile and tailor it in a way that suits them the best.
 - C. Express deep concern. Pull up the Agile PMO and ask them why they have not been able to address the issue of inconsistency.
 - D. Express deep concern. Ask each of the teams to email you their metrics every Friday morning.
41. The keyword SMART is used to denote attributes of a well-defined user story. The letters S and T stand for?
- A. Smart, testable
 - B. Specific, testable
 - C. Short, timeboxed
 - D. Specific, time-bound
42. In Agile, prioritization is done on the basis of:
- A. Risk
 - B. Value
 - C. A and B
 - D. Complexity
43. Which of the following are NOT benefits of pair programming?
- A. Collaboration within the team
 - B. Collective code ownership
 - C. Feedback on coding on the fly
 - D. Refactoring
44. Agile teams have large walls where they display artifacts and different metrics showing progress. These are collectively called:
- A. Caves and commons
 - B. Information refrigerator
 - C. Information radiator
 - D. Status reports

45. Which of the following is NOT a group-based technique used to arrive at a decision?
- A. Nominal group technique
 - B. Delphi
 - C. Control charts
 - D. Wisdom of crowd
46. Undocumented knowledge that team members gather by working in close proximity to each other is called:
- A. Informative workspace
 - B. Expert in earshot
 - C. Confidential information
 - D. Tacit knowledge
47. Which of the following is NOT a core practice in XP?
- A. Test-Driven Development
 - B. Continuous integration
 - C. Value Stream mapping
 - D. Collective Code ownership
48. Which of the following are valid project selection methods?
- A. Discounted payback period, Net present value, ROI, Benefit cost ratio
 - B. Planning poker, Benefit cost ratio, internal rate of return, payback period
 - C. Monopoly money, feasibility, value-based prioritization
 - D. ROI, NPV, IRR, MMF
49. Earned value management technique can be used on Agile projects, especially for tracking release. EVM is an example of:
- A. Lagging metric
 - B. Leading metric
 - C. Both A and B
 - D. None of the above.
50. Velocity is _____ across iterations for a given team on a given project. Velocity is _____ across teams or projects.
- A. Comparable, comparable
 - B. Comparable, not comparable
 - C. Not comparable, comparable
 - D. Not comparable, not comparable

51. During the first half of the iteration planning meeting, the product owner mentions that Feature A should be implemented since it has the highest ROI. The team argues that they think that Feature B would give the maximum benefit to a section of users as they found out during previous conversations. What should happen now?
- A. The team should use the 'force' technique of conflict resolution and go with the Feature Benefit.
 - B. The team should use the 'smoothing' technique of conflict resolution.
 - C. The team should use the 'withdraw' technique of conflict resolution and go with Feature A, since the product owner has the last say as far as the ROI of a feature is concerned.
 - D. The team should use the 'compromise' technique of conflict resolution and do a little bit of both Features A and B.
52. The responsibility of creating the product roadmap primarily rests with:
- A. The product owner
 - B. The empowered team
 - C. The Scrum Master
 - D. The onsite customer
53. The responsibility of fixing defects found during acceptance testing lies with:
- A. The programmer who coded it.
 - B. The programmer who paired and reviewed the code.
 - C. Anyone on the team.
 - D. A subject matter expert.
54. The Product owner declined an invite for the sprint planning meeting indicating his unavailability. What should happen now?
- A. The Sprint planning meeting cannot happen without the PO, so it should be rescheduled.
 - B. The Scrum Master should substitute for the PO and refer to the existing Product Backlog. Any questions from the team should be taken offline.
 - C. The team is self-organized, so they should determine the sprint backlog themselves.
 - D. The sprint should be used only for spikes and technical tasks instead of business features.
55. One of the values of XP is collective ownership. What does the team collectively NOT own?
- A. Quality of the deliverable.
 - B. Code.
 - C. Product backlog.
 - D. Coding conventions.

56. The team is unable to decide whether it makes sense to buy an off-the-shelf from the vendor or go about building it themselves. Both options have its merits and demerits. As a Scrum Master what would be your recommendation to the team?
- A. Consult with the product owner of what he is willing to sponsor.
 - B. Conduct a spike to evaluate both options.
 - C. Do a fist of five voting.
 - D. None of the above.
57. As per Stacey's matrix, Agile projects are best suited where there is:
- A. Agile projects can be applied in all of the below situations.
 - B. High disagreement on requirements and high uncertainty of technology.
 - C. High agreement on requirements and high certainty of technology.
 - D. Moderate agreement on requirements and some uncertainty on technology.
58. As an outcome of the team retrospective, the team members decide to procure the Teamcity software to automate their build process. This is an example of:
- A. Agile tooling
 - B. Refactoring
 - C. Information radiator
 - D. Emotional intelligence
59. If an XP coach asks the team to be DRY, he/she means that:
- A. Team should check-in and integrate their code many times a day.
 - B. Team should not duplicate the same code at multiple places.
 - C. Team should follow test-driven deployment.
 - D. Team should be disciplined in their practices.
60. A release burndown chart should show a downward trend to show progress. However, if there is an upward movement, it implies that:
- A. One or more team members is absent and the team has slowed down.
 - B. This is a glitch in data collection and it should be fixed during charting.
 - C. User stories were added to the backlog.
 - D. The team has been working on analysis, spikes and prototypes more than delivering business functionality in recent times.

61. The team has identified a new stakeholder of the project. However, the stakeholder has low power and low influence. The stakeholder requests the Scrum Master for an invite in the daily stand-up meeting such that he catches up with the latest of the project. The Scrum Master:
- A. Agrees, but tells the stakeholder that he needs to participate actively in the meeting.
 - B. Agrees, but tells the stakeholder that he needs to listen in, but not allowed to speak in the meeting.
 - C. Disagrees, but tells the stakeholder to wait for the next review meeting to see if his expectations have been fulfilled or not.
 - D. Ignores the request stating that this is not a legitimate request.
62. The Scrum team is in a formative stage. It is learned that the team will not be co-located. What are the options available to the team?
- A. Be persistent with the demand of co-location without which the project will fail.
 - B. Invest in collaboration tools and technologies like interactive chats, audio and video conferences.
 - C. Explore possibility of rotating team members such that each gets a flavor of the culture and working at the other location.
 - D. B or C.
63. During a sprint planning session, the team is looking at the following stories from the backlog sorted in descending order of priority. They also have the estimate of each story as mentioned below.
- Story A - 12 story points
 - Story B - 6 story points
 - Story C - 2 story points
 - Story D - 5 story points
 - Story E - 7 story points
 - Story F - 15 story points
 - Story G - 8 story points
 - Story H - 6 story points
 - Story I - 2 story points
- Assuming the team velocity of 20 story points and that no story can be further split, what is the most likely backlog for each sprint?
- A. Sprint 1: ABC, Sprint 2: DEG, Sprint 3: FI, Sprint 4: H
 - B. Sprint 1: ABC, Sprint 2: DEF, Sprint 3: GHI
 - C. Sprint 1: ABC, Sprint 2: DEG, Sprint 3: F, Sprint 4: HI
 - D. None of the above

64. If you happen to hire for a new Agile team, you should prefer:
- A. Developers
 - B. Specialists in the technologies to be used
 - C. Generalists with cross-functional skillsets
 - D. People who exhibit adaptive leadership skills
65. During the sprint planning session, the PO asks who will be developing a particular story, because he would like to have a conversation with that developer privately. What would happen?
- A. A developer comes forward and volunteers.
 - B. It is not known who will develop a story at the planning stage. But this will be reflected in the task board during the iteration when the story is picked up for development.
 - C. Ask the PO to attend the daily stand-up meeting to keep a tab on who is working on which story.
 - D. The Scrum Master should be providing the requested information to the PO.
66. Levels two, three and five in Lea's conflict model represent:
- A. Disagreement, contest, world war
 - B. Problem to solve, contest, world war
 - C. Problem to solve, contest, crusade
 - D. Disagreement, contest, crusade
67. All of the following are brainstorming techniques except:
- A. Quiet Writing
 - B. Round-Robin
 - C. Free-for-all
 - D. Triple nickels
68. All of the following are techniques to gathering data during retrospectives except:
- A. Mad, sad, glad
 - B. Timeline
 - C. Circle of questions
 - D. Team radar

69. During the iteration planning meeting, the Agile teams commit to deliver stories A, B, C and D having estimates of 20, 12, 8 and 4 story points. However the team could complete stories A, B, C and 50% of D. What is the team velocity?
- A. 38
 - B. 40
 - C. 42
 - D. 44
70. ESVP is used during _____ while Weigers' method is used during _____.
- A. Retrospectives, estimation
 - B. Retrospectives, prioritization
 - C. Meeting etiquettes, prioritization
 - D. Planning, estimation
71. The current size of the Agile team is increasing from 9 to 15. As a result, it is observed that the team is unable to complete their daily stand-up meetings within the stipulated 15 minutes. As a Scrum Master, which option out of the following are you most likely to explore?
- A. Extend the meeting from 15 to 25 minutes to accommodate everyone.
 - B. Ask team members to talk about blockers only and leave the other two questions.
 - C. Ask only the senior team members to talk.
 - D. Divide the team into two subteams and have two separate daily stand-ups. The team division should be such that they are mostly independent.
72. Agile teams are self-organized and empowered to make decisions. Which of the following core value in the Agile Manifesto best relates to this?
- A. Individuals and interactions over processes and tools.
 - B. Working software over comprehensive documentation.
 - C. Responding to change over following a plan.
 - D. None of the above.
73. The steps of TDD are as follows:
- A. Write code, test code, fix defect, retest
 - B. Write test, write code, refactoring
 - C. Green, red, refactor
 - D. Write code, refactor and test

74. The sponsor of an Agile project:
- A. Represents the user community
 - B. Defines the product roadmap
 - C. Approves the project plan
 - D. Provides funding for the project
75. Amplify learning is a principle of _____, while system metaphors are used in _____.
- A. Lean, XP
 - B. Kanban, Scrum
 - C. DSDM, XP
 - D. Scrum, Lean
76. Although the acceptance test cases have passed, the team realizes that the code violates a few coding standards, which might make it difficult to maintain over the long term. This is because of some last-minute tactical changes done by the team to complete the user story. Such an issue is an example of:
- A. Violation of definition of done.
 - B. Introduction of technical debt.
 - C. Violation of ground rules.
 - D. Violation of collective ownership.
77. In the hardening sprint, one expects the team to:
- A. Continue adding features that add business value
 - B. Complete testing of whatever is there and make it ready for deployment to production
 - C. Refactor the code
 - D. Perform process improvements as per the last retrospective
78. As time progresses, in an Agile project you expect:
- A. Cycle time to be shorter
 - B. Estimates to be shorter
 - C. Velocity to be shorter
 - D. Iterations to be shorter

79. The _____ manages the product backlog while the _____ manages the iteration backlog.
- A. Scrum Master, developer
 - B. Product owner, Scrum Master
 - C. Product owner, team
 - D. Product manager, team
80. A Product owner is or could be invited in all of the following meetings except:
- A. Iteration planning
 - B. Daily stand-up
 - C. Iteration review
 - D. Iteration retrospective
81. The Y-axis of an iteration burndown chart depicts _____.
- A. Time
 - B. Story points
 - C. Number of features completed
 - D. Burn rate / cost of resources
82. All of the following are valid units of estimation in Agile projects except:
- A. Story points
 - B. Ideal days
 - C. T-shirt sizes
 - D. Person-days
83. Your team agreed on a velocity of 25 story points per iteration. The Agile PMO pointed out that another team working on a project of similar complexity is more productive with a velocity of 40 story points per iteration. What should you do?
- A. Agree to go with 40 and convince the team that overtime might be necessary to catch up.
 - B. Stick to 25 and convince the PMO that velocities of two teams cannot be compared to each other.
 - C. Hire an Agile coach to see how to reach 40.
 - D. Use an alternate estimation technique.

84. Which of the following are valid promises made by the product owner to the team and vice versa?
- A. PO promises not to change the scope in the middle of the sprint, the team commits to deliver what is mentioned on the sprint goal.
 - B. PO promises to be available for any questions the development team might have, the team commits to implement any changes introduced in the middle of the sprint.
 - C. PO promises to bring in a prioritized list of backlog, the team promises to bring in their list of risks and technical tasks that compete in priority over the business requirements.
 - D. PO promises to deliver a world class product, the team commits to use the most sophisticated technologies available at the market.
85. An Agile project charter contains all of the following except:
- A. Description of the purpose of the project.
 - B. A detailed project plan.
 - C. Identified stakeholders and the intended customer base.
 - D. Rough timelines when the project is likely to be delivered.
86. In the context of Agile project management, which characteristic is the odd one out in the below?
- A. Iterative and incremental delivery
 - B. Focus on individuals and interactions
 - C. Tracking and monitoring with high-tech, low-touch tools
 - D. Value-based prioritization
87. Which of the following is going to be least effective in increasing velocity of the team?
- A. Increase involvement of the customer.
 - B. Remove technical debt by continuously refactoring code.
 - C. Shield the team from interferences.
 - D. Use an alternate technique for estimation.
88. An Agile coach practices whole team coaching during _____ and individual coaching at _____.
- A. Sprint planning, middle of sprint.
 - B. Middle of sprint, throughout the sprint.
 - C. Sprint planning and retrospective, middle of sprint.
 - D. Throughout the sprint, retrospective.

89. A team of 5 members has an average velocity of 20 story points. They need to deliver a backlog of 120 story points at iterations of 2 weeks duration. Assuming that weekly labor rate of each team member is \$100\$ what would be the estimated budget of the project? Consider only labor costs.
- A. \$4000
 - B. \$5000
 - C. \$6000
 - D. \$7000
90. The following are characteristics of exploratory testing EXCEPT:
- A. Simultaneous learning and testing.
 - B. Testing with focus on execution rather than up-front planning.
 - C. Writing acceptance tests before writing code.
 - D. Used in conjunction with other forms of testing like automation, regression, usability and acceptance, etc.
91. One should use daily stand-up meetings to do all of the following EXCEPT:
- A. Keep up peer pressure and commit to each other.
 - B. Highlighting issues and bottlenecks.
 - C. Collaborate effectively with each other.
 - D. Provide a status update to the Scrum Master or Product Owner.
92. Agile teams sometimes use extreme personas to collect stories. Extreme personas are helpful since:
- A. Unlike other forms of personas, they are imaginary characters that one can relate to easily.
 - B. Considering extreme personas help to discover stories that otherwise would have been missed.
 - C. Extreme personas are used when all other forms of story writing is found to be noneffective.
 - D. None of the above.
93. Which of the following is not a preferred unit of estimation for Agile stories?
- A. Function points
 - B. Story points
 - C. Ideal days
 - D. T-shirt sizes

94. The technique of breaking up an epic into a story, a story into a task and a task into a subtask is called:
- A. Decomposition
 - B. Simplification
 - C. Disaggregation
 - D. Splitting
95. The progress midway in an iteration is monitored best using:
- A. Working software, as per the Agile Manifesto.
 - B. Release burndown chart.
 - C. Task board.
 - D. Conducting demos midway between the sprints.
96. An Agile team space is characterized by a zone where maximum osmotic communication takes place and another zone where privacy prevails and the team members can take care of their needs for separation. This arrangement is called?
- A. Information radiators
 - B. Caves and commons
 - C. Private and public areas
 - D. Informative team zones
97. You are invited to screen a few proposals from a few vendors. While doing so, you notice that one of the proposals is from a company owned by your relative. What should you do?
- A. Ignore and try to evaluate as fairly as possible.
 - B. Contact your relative and ask them to tweak the proposal to make it sound more competitive.
 - C. Influence the rest of the proposal evaluators that your relative's company is the best as you know them personally.
 - D. Disclose it to the appropriate authorities and stay out of the selection process.
98. Which of the following is the least-recommended way to determine the initial velocity of a team?
- A. Refer to historical values.
 - B. Make a guess.
 - C. Run an initial iteration as a pilot, measure and use the velocity of that.
 - D. Use another team's velocity.

99. In which stage of a retrospective are the techniques like 5 Why's, Fishbone and Force field analysis used?
- A. Set the stage
 - B. Gather data
 - C. Generate insights
 - D. Decide what to do
100. XP teams use the technique of _____ to enhance code quality, while keeping its behavior unchanged.
- A. Refactoring
 - B. TDD
 - C. Spikes
 - D. Pair programming
101. For sprint planning, the following should participate actively:
- A. Customers, analysts and developers
 - B. Scrum Master, product owner and analysts
 - C. Whole project team
 - D. Sponsor, onsite customer, Development lead, testing leads
102. How do Agile teams manage scope?
- A. Prevent scope creep during the project.
 - B. Lock down scope during a sprint.
 - C. Allow scope changes to the backlog only before a sprint.
 - D. B and C.
103. Which of the following statements regarding velocity is not correct?
- A. Velocity helps to correct and adjust inaccuracies in estimates.
 - B. Velocity differs from team to team.
 - C. Velocity can differ from one iteration to another iteration.
 - D. It is impossible to determine the initial velocity, unless the team has actually worked in the project.

104. As an Agile coach, you keep reminding the team to standup during the daily Scrums, update the storyboard before leaving for the day and complete the tasks they have committed during the daily Scrum meeting. This is a description of which failure mode of Agile coaching?
- A. The Expert
 - B. The Nag
 - C. The Opinionator
 - D. The Seagull
105. During osmotic communication between teams, we have to be careful of drafts that are_____.
- A. Unwanted chatter on topics that are not useful in the context of the current working environment.
 - B. Gush of air from the window.
 - C. Negative publicity.
 - D. Conflicts between the storming phases of the team.
106. The pillars of Scrum are:
- A. Plan, Do, Check, Act
 - B. Honesty, respect, fairness, responsibility
 - C. Transparency, Inspection and Adaptation
 - D. Green, red, refactor
107. During the estimation session, the team wants to compare the estimate of a new story with a small story and a medium story that has already been estimated to 1 and 5 story points. This is commonly referred to as:
- A. Affinity estimation
 - B. Analogous estimation
 - C. Wideband Delphi
 - D. Triangulation
108. Which of the following is true for a user story card?
- A. The story card is not a requirement specification, but a reminder to have a conversation between the developer and the customer.
 - B. The story card can be torn apart after the definition of done is achieved.
 - C. The acceptance criteria are written at the back of the card.
 - D. All of the above are true.

109. Which of the following Scrum artifacts acts as a communication bridge between the developer and the product owner as far as priorities go?
- A. Product backlog
 - B. Release burndown charts
 - C. Cumulative burndown and burnup charts
 - D. Product increment
110. From a risk burndown chart, we get to see:
- A. New risks or existing risks whose severity has changed.
 - B. Whether the team is able to address risks properly and the cumulative risk severity is showing a downward trend.
 - C. Both A and B.
 - D. How many spikes have been performed in the team.
111. During the Scrum meeting, Richard the Scrum Master notices there is some disagreement between Bill and Harry on the timing to change a run-time configuration of the software. The conflict was assessed at Level 1. What should Richard do?
- A. Openly blast Bill and Harry in the Scrum meeting, reminding them that such conflicts are not healthy in a self-organized team.
 - B. Do nothing. Since it is a Level 1 conflict, Richard expects Bill and Harry to resolve it on their own.
 - C. Immediately after the Scrum meeting, take Bill and Harry to another room and try to mediate to resolve the problem.
 - D. Escalate to Bill and Harry's line managers.
112. Mute mapping is a technique used for categorizing ideas. Which of the following is true?
- A. All phone lines are muted so that the speaker can continue without interruption.
 - B. It is used during sprint review.
 - C. Participants are not allowed to speak while they move related cards (topics) together and put unrelated cards separate.
 - D. The ideas with the maximum votes win and the others are discarded.

113. Fractional assignment is not suitable for Agile projects since:
- A. Lot of time is wasted because of context switching.
 - B. People do not get bored because they are involved in a variety of tasks.
 - C. Productivity suffers.
 - D. A and C.
114. During which Scrum ceremony are risk audits held?
- A. Sprint planning
 - B. Sprint execution
 - C. Sprint review
 - D. Sprint retrospective
115. If co-location is not possible, which of the following is NOT a good practice in distributed teams?
- A. It is advisable to bring them team together at the beginning to conduct a kick-off meeting or get teams to work together for 1 or 2 iterations and get used to each other's styles of working.
 - B. Distribute the team as per job specification – such that all analysts are in one location, all developers are in another location and all testers in the third location. Such kind of horizontalization will increase osmotic communication where team members can learn from each other.
 - C. Invest behind communication technologies like interactive chats, webcams, audio and video conferences, collaboration tools, electronic task boards like Jira and online planning poker sites.
 - D. Explore if work times can be adjusted such that there is some overlap between team members located in different time zones.
116. The product owner brings all stakeholders in a common place with an intent to reach consensus on the priorities of the items on their wish list. He tells everyone to distribute 100 points across all features that are deemed valuable to them. They may even choose to give all 100 to only one feature, if that is the only one they are interested in. Once the choices are made, the product owner sums up the votes and lists the features in descending order of priority. What is the name of this prioritization technique?
- A. Planning Poker
 - B. Delphi
 - C. 100-point method
 - D. Weigers' method

117. Which of the following roles could an Agile PMO play in a project?
- A. Help in resource management, especially shared resources.
 - B. Help in rolling up management reporting.
 - C. Help in vendor and contract management.
 - D. All of the above.
118. By tracking velocity trends, a team can:
- A. Gauge the rate of progress
 - B. Estimate how much longer it will take to complete
 - C. Correcting estimation errors
 - D. All of the above
119. Bob is a newbie in an Agile team. He is studying how the team is working and sieving through the artifacts that teams track to measure their progress. While looking at a burndown chart, he observes that the bar chart, instead of going down has actually risen in the current iteration, from where it was in the past. He is confused and runs to Jessica for a clarification. What is Jessica likely to explain?
- A. Jessica explains that there is a mistake in the burndown chart, as the bar graphs should always show a downward trend.
 - B. Jessica explains that the team has corrected the estimates of a few stories based on better understanding that they have gathered recently. In the past, there was an underestimate.
 - C. Jessica explains that the product owner has recently added a bunch of new stories to the backlog, hence the top has moved up.
 - D. Jessica explains that the rise in the bar graph is because the team's progress has been slow in the last few days, as a colleague has been ill.
120. A Kanban team uses an expedite lane on their Kanban board to:
- A. Slot in work items that exceed the WIP limit, but must get done on a best effort basis.
 - B. To tackle critical and urgent work like production issues, but are again subject to their own WIP limits.
 - C. To find bottlenecks in the rest of the lanes on the Kanban board.
 - D. The word expedite shows that the team is working expeditiously – reacting to tasks and changes as swiftly as possible at all times.

Answers

Answers – Mock Exam I

1. C	31. B	61. A	91. B
2. D	32. D	62. D	92. A
3. C	33. A	63. C	93. C
4. D	34. D	64. A	94. D
5. C	35. C	65. B	95. D
6. C	36. A	66. D	96. D
7. B	37. C	67. A	97. C
8. C	38. D	68. C	98. B
9. D	39. A	69. A	99. A
10. B	40. C	70. C	100. C
11. C	41. C	71. C	101. C
12. B	42. C	72. B	102. D
13. A	43. D	73. C	103. B
14. D	44. C	74. A	104. A
15. C	45. A	75. B	105. D
16. C	46. B	76. D	106. C
17. A	47. B	77. B	107. A
18. A	48. D	78. C	108. C
19. D	49. A	79. A	109. C
20. D	50. D	80. D	110. C
21. C	51. D	81. C	111. D
22. C	52. C	82. D	112. C
23. B	53. D	83. A	113. C
24. D	54. B	84. C	114. D
25. C	55. D	85. B	115. B
26. A	56. B	86. A	116. D
27. B	57. A	87. D	117. A
28. C	58. C	88. C	118. A
29. C	59. C	89. B	119. C
30. B	60. D	90. C	120. D

Answers – Mock Exam II

- | | | | |
|-------|-------|-------|--------|
| 1. D | 31. B | 61. D | 91. B |
| 2. D | 32. D | 62. C | 92. A |
| 3. B | 33. C | 63. B | 93. A |
| 4. C | 34. A | 64. C | 94. D |
| 5. A | 35. C | 65. A | 95. C |
| 6. D | 36. B | 66. B | 96. A |
| 7. B | 37. A | 67. D | 97. A |
| 8. B | 38. A | 68. A | 98. D |
| 9. C | 39. B | 69. D | 99. D |
| 10. C | 40. C | 70. A | 100. A |
| 11. B | 41. A | 71. D | 101. D |
| 12. C | 42. B | 72. B | 102. B |
| 13. A | 43. D | 73. B | 103. B |
| 14. B | 44. C | 74. D | 104. D |
| 15. B | 45. A | 75. A | 105. C |
| 16. D | 46. B | 76. A | 106. C |
| 17. C | 47. A | 77. C | 107. C |
| 18. A | 48. C | 78. D | 108. C |
| 19. A | 49. B | 79. A | 109. A |
| 20. D | 50. B | 80. A | 110. B |
| 21. B | 51. A | 81. A | 111. D |
| 22. A | 52. B | 82. C | 112. D |
| 23. B | 53. D | 83. A | 113. C |
| 24. D | 54. C | 84. C | 114. B |
| 25. C | 55. D | 85. D | 115. D |
| 26. B | 56. B | 86. C | 116. A |
| 27. D | 57. A | 87. A | 117. B |
| 28. D | 58. C | 88. B | 118. D |
| 29. D | 59. D | 89. B | 119. A |
| 30. B | 60. D | 90. D | 120. C |

Answers – Mock Exam III

- | | | | |
|-------|-------|-------|--------|
| 1. B | 31. B | 61. B | 91. D |
| 2. C | 32. A | 62. D | 92. B |
| 3. A | 33. D | 63. A | 93. A |
| 4. D | 34. C | 64. C | 94. C |
| 5. B | 35. C | 65. B | 95. C |
| 6. D | 36. B | 66. A | 96. B |
| 7. B | 37. A | 67. D | 97. D |
| 8. D | 38. D | 68. C | 98. D |
| 9. A | 39. D | 69. B | 99. C |
| 10. C | 40. B | 70. B | 100. A |
| 11. A | 41. D | 71. D | 101. C |
| 12. D | 42. C | 72. A | 102. D |
| 13. D | 43. D | 73. B | 103. D |
| 14. A | 44. C | 74. D | 104. B |
| 15. C | 45. C | 75. A | 105. A |
| 16. D | 46. D | 76. B | 106. C |
| 17. C | 47. C | 77. B | 107. D |
| 18. D | 48. A | 78. A | 108. D |
| 19. A | 49. C | 79. C | 109. A |
| 20. B | 50. B | 80. D | 110. C |
| 21. A | 51. C | 81. B | 111. B |
| 22. B | 52. A | 82. D | 112. C |
| 23. C | 53. C | 83. B | 113. D |
| 24. D | 54. A | 84. A | 114. D |
| 25. C | 55. C | 85. B | 115. B |
| 26. B | 56. B | 86. C | 116. C |
| 27. C | 57. D | 87. D | 117. D |
| 28. D | 58. A | 88. C | 118. D |
| 29. D | 59. B | 89. C | 119. B |
| 30. C | 60. C | 90. C | 120. B |

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