Q1. Summarize the incremental model and iterative model.

The incremental model builds software incrementally in multiple cycles, adding new functionality in each iteration. The iterative model involves repeating cycles of development, refining the software with each iteration.

Q2. How much time does each iteration in agile methodology take? Justify your answer. a) 1-2 Weeks b) 2-3 Weeks c) 1-4 Weeks d) 1-2 Months

c) 1-4 Weeks. Agile iterations are short to promote quick feedback and adaptability, ensuring continuous improvement throughout the project.

Q3. Compare traditional model with agile model.

Traditional models follow a linear approach with extensive planning upfront, while agile is iterative, allowing for flexibility, customer involvement, and adapting to changing requirements.

Q4. Select the key practice of Crystal methodology and Justify your answer. a) Heavy documentation b) Predictive modeling c) Collaboration and communication d) Incremental development

c) Collaboration and communication. Crystal methodology emphasizes the importance of team interaction and frequent communication to ensure project success and adaptability.

Q5. Outline the concept of adaptive software development along with three phases.

Adaptive software development focuses on continuous learning and adjustment. Phases include Speculate (planning), Collaborate (development), and Learn (evaluation), iterating to refine the product iteratively.

Summarize the agile software methodology.

Answer: Agile methodology is an iterative approach to software development that emphasizes collaboration, flexibility, and customer feedback. It involves breaking down projects into smaller increments, known as sprints, and prioritizing continuous improvement and adaptation.

In which model testers and developers work together in the project? Justify your answer. a) Waterfall Model b) Agile Model c) V Model d) Rapid Development Model

Answer: b) Agile Model. In Agile methodology, testers and developers work closely together throughout the development process, promoting collaboration, communication, and faster feedback loops, which are essential for delivering high-quality software in short iterations.

Differentiate Agile testing with Traditional testing.

Answer: Agile testing is iterative and integrated with development, emphasizing collaboration and adapting to changes quickly, while traditional testing typically follows a sequential approach, focusing on comprehensive documentation and formal sign-offs at each stage.

Identify the framework activities that are found in the Extreme Programming (XP). Justify your answer.
a) Planning, Analysis, Design, Coding b) Planning, Design, Coding, Testing c) Analysis, Design, Coding, Testing d) Planning, Analysis, Coding, Testing

Answer: d) Planning, Analysis, Coding, Testing. Extreme Programming (XP) follows a cyclical approach where planning involves user stories and task estimation, analysis focuses on understanding requirements, coding emphasizes pair programming and continuous integration, and testing includes both unit tests and customer acceptance tests.

Outline the key principles of lean development.

Answer:

a) Eliminate waste: Focus on delivering value to the customer while minimizing unnecessary processes or activities.

b) Amplify learning: Encourage a culture of continuous improvement through feedback and reflection.

c) Decide as late as possible: Delay decisions until the last responsible moment to accommodate changing requirements and maximize flexibility.

1. Show the three-dimensional model of project management.

The three-dimensional model of project management encompasses time, cost, and scope. It visualizes how these dimensions interact and influence each other throughout the project lifecycle, aiding in effective planning and execution.

2. In Agile product management, which accounting approach aligns better with the principles of delivering value quickly and responding to change? Justify your answer.

b) Throughput accounting. Throughput accounting focuses on maximizing the flow of value through a system, which aligns well with Agile principles of delivering value quickly and adapting to change. It emphasizes reducing bottlenecks and increasing the rate of delivering valuable outcomes.

3. Outline the two management accounting approaches.

The two management accounting approaches are traditional cost accounting and throughput accounting. Traditional cost accounting focuses on allocating costs to products or services based on predetermined formulas, while throughput accounting emphasizes maximizing the flow of value through a system to enhance profitability.

4. Which of the following Agile methodologies is commonly supported by Jira? Justify your answer.

c) Scrum. Jira is widely used to support Scrum, an Agile framework characterized by iterative development cycles called sprints. Jira's features such as sprint planning, backlog management, and task tracking align well with Scrum practices, making it a popular choice among Scrum teams for project management.

5. Define the term epic in JIRA.

An epic in JIRA represents a large body of work that can be broken down into smaller tasks or user stories. Epics help in organizing and managing complex projects by providing a high-level view of the work to be done, allowing teams to prioritize and plan effectively.

1.Summarize the benefits of RAD model.

Rapid Application Development (RAD) offers several benefits such as accelerated development cycles, enhanced adaptability to changes, improved customer feedback incorporation, and increased software quality through prototyping and iterative development.

2. In Agile project management, iteration refers to ------------. Justify your answer.

b) A repeating cycle of planning, executing, and reviewing work.

Iteration in Agile signifies a time-boxed period (usually 1-4 weeks) where a team completes a set of tasks or features. This iterative process allows for continuous improvement and adaptation to changing requirements.

3.Show the two cumulative flow diagrams of agile development management.
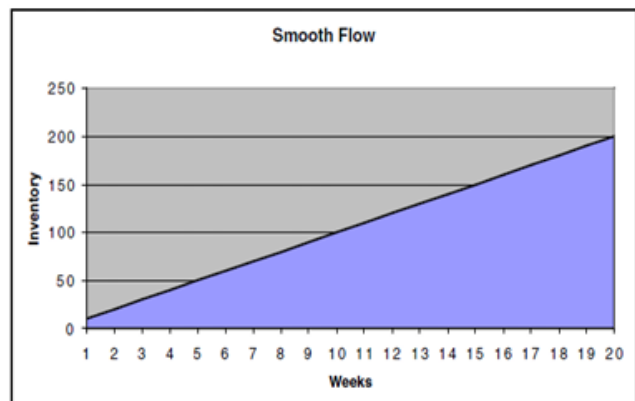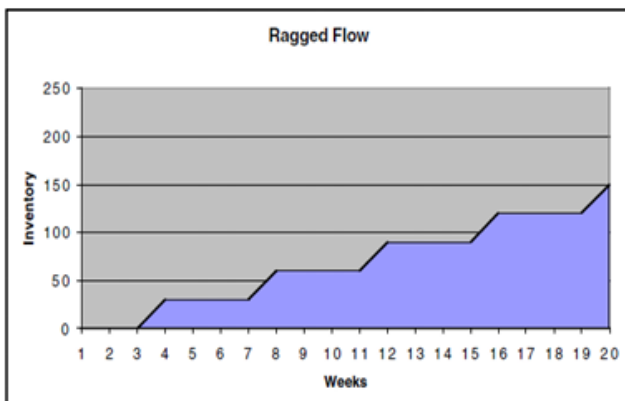
4. Which of the following is NOT a type of issue in JIRA Cloud? Justify your answer.

d) Event.

JIRA Cloud categorizes issues into types like Bug, Task, and Feature for managing software development projects. However, "Event" isn't a standard issue type in JIRA Cloud.

5. Define the terms epic and backlog in JIRA.

Epic: In JIRA, an epic refers to a large body of work that can be broken down into smaller tasks or user stories. Epics help in organizing and managing complex projects by grouping related work together.

Backlog: The backlog in JIRA is a prioritized list of tasks, user stories, or epics that need to be addressed in the development process. It serves as a repository for pending work, ensuring transparency and alignment with project goals.