### CompTIA Project+ - Quiz Questions with Answers

### 1.0 Project Management Concepts

1.0 Project Management Concepts

1.

Which term describes a project management approach in which each stage of the project must be completed in a step-by-step order?

Waterfall	
Scrum	
Lean	
Extreme Programming	

Correct answer: Waterfall

The Waterfall method, also known as a predictive methodology, takes a step-by-step approach with each stage of a project being completed in a specific order.

Scrum, Lean, and Extreme Programming are all types of Agile methodology. In Agile methodologies, the projects typically have evolving requirements, higher degrees of uncertainty, and high risk, unlike in the Waterfall methodology.

Amelia is responsible for managing all of the work associated with Project Y. She manages the team and the scope and communicates with stakeholders.

Which BEST describes Amelia's role in Project Y?

Project manager	
Project sponsor	
SME	
Business analyst	

Correct answer: Project manager

The project manager is the person who is responsible for managing all the work associated with a given project. The project manager has many duties, including managing the project team, managing the budget, managing the scope, and communicating with both stakeholders and project team members.

The project sponsor is responsible for approving and signing the project charter. They are usually an executive in the company with the authority to assign money and resources to the project. A Subject Matter Expert (SME) is someone who has expertise and knowledge of how to perform specific work. The business analyst is responsible for gathering and documenting the requirements of the project.

Which of the following BEST describes the process of validation in project management?

The process of ensuring that the final product meets the customer's needs and requirements

The process of inspecting a product to ensure that it meets specified standards

The process of testing individual components of a product to ensure they work as intended

The process of evaluating a product or process to identify areas for improvement

Correct answer: The process of ensuring that the final product meets the customer's needs and requirements

Validation is the process of evaluating the final product to ensure that it meets the customer's needs and requirements. This involves testing the product or service to ensure that it performs as expected and that it meets the specifications that were agreed upon.

Inspecting for compliance with standards, testing individual components, and identifying areas for improvement are not part of the validation process during the closing phase of a project.

Which of the following is NOT a common type of testing for a software project? Select all that apply.

DevOps
DevSecOps
Stress
Integration

DevOps is a collaborative framework that combines development and operations on one team. DevSecOps adds security to DevOps. Neither is a type of testing, but DevOps and DevSecOps teams may run tests.

Common types of software tests include:

- Smoke testing: high-level testing designed to quickly identify failures that could prevent a production release
- Unit testing: performed on individual modules of code
- Integration testing: tests multiple software modules together
- End-to-end testing: tests a complete system end-to-end
- Regression testing: tests for issues that may arise after code is changed
- Stress testing: tests software under heavy loads
- Performance testing: similar to stress testing but focuses on performance issues, such as slow responses and suboptimal resource utilization
- User acceptance testing (UAT): testing performed by end-users of the system

Which of the following is the PRIMARY purpose of using Key Performance Indicators (KPIs)?

To measure project performance against project objectives and goals

To define project scope and deliverables

To monitor the progress of project activities

To identify project risks and their mitigation plans

Correct answer: To measure project performance against project objectives and goals

Key Performance Indicators (KPIs) are used to measure and evaluate the progress and performance of a project against its objectives and goals. KPIs are metrics that help you determine whether or not your project is on track.

Defining project scope and deliverables is done through the project scope statement and other project planning documents. Monitoring the progress of project activities is typically done through project monitoring and control processes. Identifying project risks and their mitigation plans is typically done through risk management processes.

What is the purpose of a Service-Level Agreement (SLA) in project management?

To define the expected level of service to be provided to the customer or user

To assign tasks and responsibilities to team members

To track progress and performance against the project plan

To evaluate the success of the project at its completion

Correct answer: To define the expected level of service to be provided to the customer or user

A Service-Level Agreement (SLA) is a document that defines the expected level of service to be provided to the customer or user.

Assigning tasks and responsibilities to team members is typically done through the project plan and other project management documents. Tracking the progress and performance of the project plan is typically done through project monitoring and control processes. Evaluating the success of the project at its completion is typically done through project closing processes.

Which of the following is the BEST definition of an issue log in project management?

A document used to record and monitor issues throughout the project life cycle

A tool used to track changes to project scope and requirements

A document used to record and monitor risks throughout the project life cycle

A tool used to track project milestones and deliverables

Correct answer: A document used to record and monitor issues throughout the project life cycle

An issue log is a document used to record and monitor issues throughout the project life cycle. It typically includes information such as the issue description, the assigned owner, the status, and any action taken or planned to resolve the issue.

Tracking changes to project scope and requirements is typically done through a change control system or change log and risks are typically tracked in a risk log. Tracking project milestones and deliverables is typically done in a project schedule.

According to Bruce Tuckman's model, what are the five stages of team development? Select all that apply.

Forming
Storming
Norming
Performing
Adjourning
Planning
Discovery

Bruce Tuckman created a model that describes how teams work through five development stages:

- Forming: initial stages of team creation
- Storming: the team works through status and influence among team members
- Norming: team members get comfortable with their positions on the team and begin to focus on project problems more than people problems
- Performing: trust is high among team members and the team is performing well
- Adjourning: the team breaks up

Planning, Initiation, and Discovery are stages of the project life cycle, not team development.

Aaron has a couple of assignments on a particular project but is not expected to work on the project full-time from start to finish.

Which of the following BEST describes Aaron's role in the project?

Functional team member

Core team member

Express team member

Backup team member

Correct answer: Functional team member

A functional team member (also known as an extended team member) comes into a project for one or two assignments but does not work on the project full-time. Core team members are those involved in the project from start to finish. Express team members and backup team members are made-up terms.

Which of the following is a standard meeting or ceremony on an Agile team that practices Scrum?

Select all that apply.

### Retrospective Daily standup Iteration review Lessons learned

Scrum teams have multiple standard meetings and ceremonies throughout the "sprint" (a timebox of one to four weeks). These meetings and ceremonies include a daily standup, an iteration review, and a retrospective.

The daily standup (also known as the Daily Scrum) is a 15-minute or shorter meeting when each team member answers these questions:

- 1. "What did I accomplish yesterday?"
- 2. "What will I do today?"
- 3. "Do I have any issues blocking my work?"

During the iteration review (also known as a sprint review), the team reviews completed backlog items with stakeholders.

During a retrospective, the team examines the progress they have made, what worked well, what did not work well, and how things can be improved.

Lessons learned is not one of the standard Scrum meetings.

Max is writing the business case for a project. Which of the following does he NOT need to include as a section in the business case?

## Cash flow techniques Justification Feasibility study results Alternative solutions

Correct answer: Cash flow techniques

The elements that should be included in a business case are description, justification, alignment to strategic plan, stakeholders, analysis of problem or opportunity, high-level risk analysis, alternative solutions, recommended solution, and feasibility study results. It isn't necessary to outline cash flow techniques in the business case.

In Scrum, what is velocity?

### The amount of work a team can complete in a sprint

The amount of time it takes to complete a user story

The measure of progress toward completion of the project

The number of resources required to clear the backlog

Correct answer: The amount of work a team can complete in a sprint

In Scrum, velocity is a measure of the amount of work a team can complete in a single sprint. It is typically calculated by summing up the story points of all the completed user stories in the sprint. Velocity is used to help the team plan how much work they can commit to in future sprints, based on their past performance.

Velocity is not a measure of time to complete a user story or the number of resources needed to clear the backlog. Progress toward completion of the project is typically measured using other metrics, such as burnup or burndown charts, not velocity.

You are part of a project in which work is carried out in short, iterative phases called sprints. The project emphasizes daily communication and flexible reassessment of plans as needed.

Which type of project management is being used in this scenario?

Scrum	
Kanban	
Lean	
Waterfall	

Correct answer: Scrum

Scrum is a form of Agile project management that emphasizes daily communication and flexibility. Work is carried out in short, iterative phases called sprints.

Kanban is an Agile scheduling methodology. Lean is another Agile methodology that focuses on making work as efficient as possible and eliminating waste. Waterfall is a step-by-step methodology in which work is completed in order as resources become available.

.....

Which of the following are signs that an Agile methodology is a good choice for a project?

Select all that apply.



### High risk

Stable work environment

Limited input needed from stakeholders

Agile methodologies are approaches to project management that focus on doing work in small increments that can be completed quickly. Agile methodologies are useful when requirements are uncertain, frequent feedback from stakeholders is needed, the project is high risk, or the work environment is highly dynamic.

You are the project manager for a software development project. The project involves designing a new web application for a client. The project has a total duration of six months, with the first three months dedicated to the design and development phase, followed by two months for testing, and a final month for deployment. The project team consists of ten members, including developers, testers, and designers.

Which of the following schedule management techniques would be MOST appropriate to ensure the project stays on track?

Critical Path Method (CPM)
Gantt chart
Resource leveling
Monte Carlo simulation

Correct answer: Critical Path Method (CPM)

The Critical Path Method (CPM) is a schedule management technique that identifies the longest path of dependent activities in a project and helps to determine the shortest possible project duration by identifying critical tasks that must be completed on time. This technique is particularly useful for projects with a fixed deadline, such as the web application project described in the scenario.

A Gantt chart is a tool that displays project activities and their durations as horizontal bars and is useful for tracking progress against a schedule. Resource leveling is a technique used to resolve conflicts between the availability of resources and the schedule of activities. Monte Carlo simulation is a statistical technique that uses random variables to simulate a range of possible outcomes for a project. While all of these techniques can be useful for schedule development and management, CPM is the most appropriate for ensuring the project stays on track given the fixed deadline.

In a project, team members from two different departments are constantly having misunderstandings and miscommunications, and their progress is suffering as a result. Despite efforts to resolve the issue at the team level, the problem persists. What should the project manager do to address this issue?

Escalate the issue to the functional managers of the team members for resolution

Ignore the issue and hope it resolves itself over time

Replace the team members with others who communicate better

Change the project's communication plan and start over from scratch

Correct answer: Escalate the issue to the functional managers of the team members for resolution

When team-level efforts to resolve communication issues fail, the project manager should escalate the issue to the relevant functional managers for resolution. This ensures that the problem is dealt with at a higher level, where more resources and authority are available to address the issue.

Ignoring the issue is not a viable solution as it will only make the problem worse over time. Similarly, replacing team members should be considered only as a last resort, after all other options have been exhausted. Finally, changing the project's communication plan may be necessary in some cases, but it is not the first step to take when addressing communication issues between team members.

You are the project manager for a software development project. Your team has identified a critical bug in the software that could cause a security breach. The bug fix requires a major overhaul of the affected code, which could delay the project by several weeks. However, you have a key deadline approaching in two weeks and can't afford to delay the project. What resolution technique could you use to address this situation?

Workaround
Transference
Avoidance
Mitigation

Correct answer: Workaround

A workaround is a temporary solution that can be used to address an issue or problem without resolving the underlying cause. In this situation, the critical bug in the software requires a major overhaul of the code, which would take several weeks to complete. However, since you have an important deadline in two weeks, a workaround could be used to address the bug temporarily and allow the project to continue. Once the project is completed, the underlying cause of the bug can be addressed through a permanent fix.

Avoidance, transference, and mitigation are all examples of risk responses and do not provide a temporary solution to address an issue.

Sasha is a project manager at Acme Inc. He is debating whether to use an asynchronous communication method to communicate with a project team member. Of the following, what are some of the reasons to use an asynchronous communication method?

Select all that apply.

Sasha does not want to interrupt the team member

The team member is in a time zone without overlapping working hours with Sasha

The topic requires real-time back-and-forth conversation

It may be easy to misunderstand Sasha's intent in a written message

Asynchronous communications, like email, do not require immediate responses. Asynchronous communications are useful when:

- You want to reduce interruptions
- Participants are in vastly different time zones

Downsides of asynchronous communication include taking longer to reach a decision and a higher probability of miscommunication.

Which of the following BEST describes a quality gate?

A review point in the project when predefined criteria are used to assess the quality of deliverables

A tool used to track project tasks and timelines

A document that outlines project roles and responsibilities

A board that approves or rejects project changes

Correct answer: A review point in the project when predefined criteria are used to assess the quality of deliverables

A quality gate is a predetermined point in the project when a review is conducted to ensure that the deliverables meet predefined quality criteria.

Quality gates are not used for tracking project tasks and timelines. A project charter or project plan is a document that outlines project roles and responsibilities. A change control board is responsible for reviewing and approving or rejecting project changes.

Martin is an executive at Company A. He has the authority to assign monetary assets and resources to Project Y. He is also responsible for approving and signing the project charter.

Which BEST describes Martin's role in the project?

Project sponsor
Project manager
SME
Business analyst

Correct answer: Project sponsor

The project sponsor is responsible for approving and signing the project charter. They are usually an executive in the company with the authority to assign money and resources to the project.

The project manager may write the project charter, but it is the project sponsor who needs to approve and sign it. A Subject Matter Expert (SME) is someone who has expertise and knowledge of how to perform specific work. The business analyst is responsible for gathering and documenting the requirements of the project.

Which of the following BEST describes a resolution plan in project management?

### A plan that outlines how project issues will be resolved

A plan that outlines how risks will be monitored and managed throughout the project life cycle

A plan that outlines how changes to the project scope will be managed

A plan that outlines how project resources will be allocated

Correct answer: A plan that outlines how project issues will be resolved

A resolution plan is a document that outlines the steps and actions required to address and resolve project issues. It includes a description of the issue, potential solutions, responsible parties, and timelines for completion.

A plan that outlines how risks will be monitored and managed throughout the project is a risk management plan. A scope management plan outlines how changes to the project scope will be managed. A resource management plan outlines how project resources will be allocated.

New equipment was just added to the infrastructure as part of a new project. Where should this be documented?

Change log

Status report

Issue log

Project charter

Correct answer: Change log

A change log is a form of documentation that describes change requests. Any changes made to the infrastructure, including software updates, new equipment, and changes to applications, should be captured in the change log.

A status report is a report to stakeholders on the status of project deliverables. An issue log lists any issues and contains list numbers, descriptions, and owners. A project charter authorizes a project to start.

Which of the following are characteristics of an operation in project management? Select all that apply.

### Ongoing and repetitive

### No specific end date

Specific start date

### Creates something new

An operation is an ongoing task without a specific beginning or end date. Operations are typically repetitive processes required to deliver a product or service.

A project has a specific start and end date and creates something new. Often, the completion of a project results in a handoff to an operations team that takes care of the ongoing day-to-day tasks to support the new output created by the project.

Which member of the project team would MOST likely be responsible for gathering and documenting the requirements of the project?



Correct answer: Business analyst

The business analyst is responsible for gathering and documenting the requirements of the project. Business analysts have knowledge and skills related to obtaining requirements by asking pointed questions to stakeholders, probing issues and problems, and recommending solutions.

The project manager has many responsibilities on the project including managing the project team, managing scope, and communicating with stakeholders and the project team. The project sponsor is responsible for approving and signing the project charter. A Subject Matter Expert (SME) is someone who has expertise and knowledge of how to perform specific work.

Which of the following is the PRIMARY benefit of timeboxing in meetings?

### Encourages focus and prevents meetings from running over

Allows for greater flexibility and open discussion

Reduces the need for a clear agenda

Increases the likelihood of productive discussions

Correct answer: Encourages focus and prevents meetings from running over

Meetings should be timeboxed, which means they should have a designated start and end time. Setting a clear time limit for each item encourages participants to stay focused and avoid going off on tangents. This helps to ensure that all agenda items are discussed within the allocated time, making the meeting more productive overall.

Timeboxing does not necessarily allow for greater flexibility and open discussion. A clear agenda is still necessary to ensure that all important topics are covered. Productive discussions do not depend only on timeboxing but also on the quality of discussion and participation.

In order for something to be considered a project, which of the following must be TRUE?

### There is a start and end date

Completion will take no longer than one year

It is ongoing and repetitive

It results in tangible goods

Correct answer: There is a start and end date

There is no limit to what is considered a project, but projects must meet certain criteria, such as having a start and end date.

The time it takes to complete a project can vary drastically from days to years, but there is always a start and end date. Projects are meant to bring about something that has not existed before, but these results do not have to be tangible goods. Business operations are ongoing and repetitive, while projects are unique.

What are dependencies in project management?

### Relationships between project activities

Limitations of project resources

Risks associated with the project

The critical path of the project

Correct answer: Relationships between project activities

Dependencies are relationships between project activities in which the completion of one activity depends on the completion of another.

A project's constraints, risks, and critical path do not define its dependencies.

Project stakeholders can BEST be described as which of the following?

### Anyone who has a vested interest in the project

The project manager and their employees

The organization's executive team

The individuals who are marked as accountable on the RACI chart

Correct answer: Anyone who has a vested interest in the project

A stakeholder can be described as anyone (individuals or organizations) who has a vested interest in the project.

While the project manager and their employees, the executive team, and the individuals marked as accountable on the RACI chart will likely all be stakeholders, it is not limited to these groups.

1	0	
Z	y	_

Agile teams typically consist of how many team members?

5–11

15-25

30-50

50-100

Correct answer: 5–11

Agile teams are small, self-maintained, and self-managed teams that typically consist of between five and 11 team members.

Waterfall teams are not limited to a specific size and are generally much larger.

What is analogous estimating in project management?

A technique used to estimate the duration or cost of an activity based on historical data from similar activities

A technique used to estimate the duration or cost of an activity by breaking it down into smaller, more manageable components

A technique used to estimate the duration or cost of an activity by averaging the estimates of multiple experts

A technique used to estimate the duration or cost of an activity by using statistical models and historical data from previous projects that are not directly comparable

Correct answer: A technique used to estimate the duration or cost of an activity based on historical data from similar activities

Analogous estimating is a technique for estimating the duration or cost of an activity by using historical data from similar activities on previous projects. This technique is often used when limited information is available about the activity or when it is not feasible to use other, more precise, estimating techniques.

In bottom-up estimating, an activity is broken down into smaller components and each component is estimated separately. In the Delphi technique, multiple experts provide independent estimates, and those estimates are averaged to arrive at a final estimate. Parametric estimating uses statistical models and historical data to estimate activity duration or cost.

What is the PRIMARY purpose of resource leveling in project management?

### To avoid overloading resources on a project

To assign resources to tasks as they become available

To load resources at the beginning of the project

To ensure that resources are used efficiently and effectively

Correct answer: To avoid overloading resources on a project

The primary purpose of resource leveling is to avoid overloading resources on a project. Overloading can lead to delays, burnout, and reduced productivity. Resource leveling helps to distribute the workload evenly among team members and to prevent overburdening of any single team member. Although resource leveling can improve efficiency and effectiveness, that is not its primary purpose. Assigning resources to tasks as they become available is resource assignment, not resource leveling. Loading resources at the beginning of the project is part of resource loading, not resource leveling.

Which of the following is NOT a responsibility of a meeting facilitator?

### **Taking meeting minutes**

Making sure that all agenda items are addressed

Ensuring that everyone is participating

Keeping the meeting within the allotted time frame

Correct answer: Taking meeting minutes

The scribe is responsible for taking meeting minutes, which are notes that capture discussion items, action items, and more.

The facilitator is responsible for ensuring that all items on the agenda are addressed, ensuring that everyone is participating, and ensuring that the meeting stays within the allotted time frame.

Which of the following is a Lean scheduling Agile methodology that was developed by Toyota Motor Corporation?

# Kanban Scrum PRINCE2 Extreme Programming

Correct answer: Kanban

Kanban is a Lean scheduling Agile methodology that was developed by Toyota Motor Corporation. Kanban is often seen in both manufacturing projects and the information technology field.

Scrum is a form of Agile project management that consists of cross-functional team members from various areas of the organization. PRINCE2 is not an Agile methodology. Extreme Programming is an Agile methodology used in software development projects.

In what situation is reverse resource allocation scheduling MOST useful in project management?

Key resources are required at specific points in the project and are the only resources available to perform specific activities

Resources are over-allocated and need to be reallocated

Multiple resources are available for each task

Resources are not critical to project success

Correct answer: Key resources are required at specific points in the project and are the only resources available to perform specific activities

Reverse resource allocation scheduling is most useful when key resources are required at specific times in the project and are the only resource available for specific activities. This technique involves working backward from the project completion date and scheduling the key resources to ensure they will be available when they are needed for critical activities.

Resource leveling is used in cases when resources are over-allocated and need to be reallocated. When multiple resources are available for each task, it is not necessary to use reverse resource allocation scheduling. Additionally, even if resources are not critical to project success, resource allocation and scheduling are important aspects of project management.

You are a project manager in the Planning phase of your project. Which of the following are you likely to do during this phase?

### Develop a communication plan

Define access requirements

Monitor the budget

Implement change management

Correct answer: Develop a communication plan

Developing a communication plan should be done in the Planning phase of the project.

Defining access requirements should be done during the Initiation phase. Monitoring the budget and implementing change management are parts of the Execution phase.

2	0
-5	h

Which of the following is TRUE about Scrumban? Select all that apply.

It is an Agile methodology

It displays work on a Kanban board

It uses sprints as timeboxes to deliver increments of work

It displays work on a Scrum board

It is a waterfall methodology

Scrumban combines two Agile methodologies: Scrum and Kanban. Like Scrum, Scrumban uses sprints as timeboxes to deliver increments of work. Instead of a Scrum board, work is displayed on a Kanban board.

What is the PRIMARY purpose of establishing points of escalation in relation to risk management?

# To provide a clear path for risk resolution

To accept risks

To avoid risks altogether

To transfer risk to other parties

Correct answer: To provide a clear path for risk resolution

The primary purpose of establishing points of escalation in relation to risk management is to provide a clear path for the resolution of risks.

Establishing points of escalation is not meant to avoid risks altogether, accept risks, or transfer them to other parties.

A project has a budget of \$100,000 and is expected to be completed in six months. After three months, the Earned Value (EV) is calculated as \$50,000, and the Actual Cost (AC) incurred is \$60,000. What is the Cost Variance (CV) of the project?

-\$10,000

\$10,000

\$40,000

-\$40,000

Correct answer: -\$10,000

Cost Variance (CV) is calculated using the formula CV = EV - AC. Given that the Earned Value (EV) is \$50,000 and the Actual Cost (AC) is \$60,000, we can calculate the CV as follows:

\$50,000 - \$60,000 = -\$10,000

A negative CV indicates that the project is over budget, in this case by \$10,000.

Jamar is managing seven related projects using coordinated processes. Because these projects are all related, there would be a loss of benefits if the projects were all handled separately without collective management. Which BEST describes what Jamar is managing?

Program
Portfolio
Project charter
Operations

Correct answer: Program

A program is a group of related projects that are managed together using coordinated processes. Managing the projects as a group provides benefits that would not exist if they were managed completely separately.

A portfolio is a group of projects and programs, but unlike a program, the projects in a portfolio do not need to be related to each other. Operations are the repetitive and ongoing functions of a business that support the production of goods and services. A project charter authorizes a project to begin.

When it comes to resource loading, what is the MOST effective way to ensure project success?

## Load resources at the beginning of the project

Load resources as needed throughout the project

Load resources at the end of the project

Load all resources simultaneously

Correct answer: Load resources at the beginning of the project

Loading resources at the beginning of the project is the most effective way to ensure project success. It ensures the necessary resources are available when needed and helps avoid delays or reworking. Loading resources as needed throughout the project may lead to delays and can cause confusion for team members who are not aware of the resource requirements. Loading resources at the end of the project may lead to delays and can cause project timelines to be extended. Loading all resources simultaneously is not practical or efficient.

Which formula is used to calculate cost variance in project management?

CV = EV - AC

$$EV = CV - AC$$

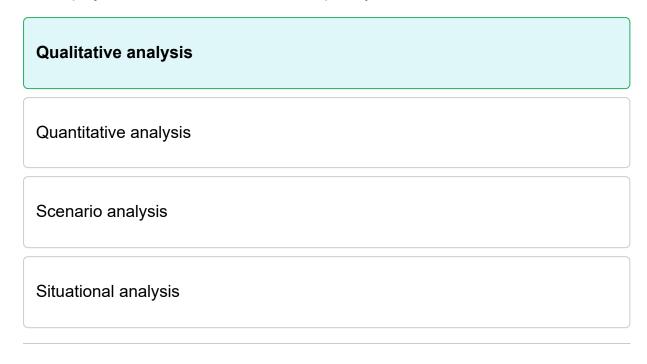
$$AC = CV - EV$$

$$CV = AC - EV$$

Correct answer: CV = EV - AC

Cost Variance (CV) is calculated by subtracting the Actual Cost (AC) from the Earned Value (EV). The formula is expressed as CV = EV - AC.

Casey has been tasked with performing a risk analysis for an upcoming project. Which type of analysis determines the probability of risks and their potential impact on the project, then ranks them in order of priority?



Correct answer: Qualitative analysis

A qualitative analysis determines the probability of risks and the impact of those risks on a project and ranks them in order of priority to determine which ones need response plans.

A quantitative analysis quantifies the aggregate risk exposure for a project by assigning numerical probabilities to risks. Scenario and situational analyses look at risks from the perspective of various situations and scenarios that may occur as the project progresses.

Which of the following BEST describes Agile project management and how it differs from traditional project management?

Agile project management is a more flexible approach to project management, while traditional project management is more structured

Agile project management is a newer methodology, while traditional project management has been around for decades

Agile is a more cost-effective approach to project management, while traditional project management is more expensive

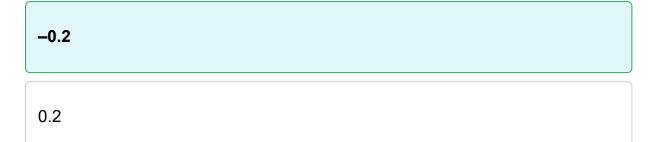
Agile is more focused on scope, while traditional project management is more focused on budget

Correct answer: Agile project management is a more flexible approach to project management, while traditional project management is more structured

Agile project management is an iterative and adaptive approach to project management that values collaboration, flexibility, and continuous improvement.

Traditional project management, on the other hand, is a more structured and linear approach that emphasizes planning, control, and predictability.

You are a project manager, and you have been using the earned value management technique to track your project's progress. You estimated that you would have completed 60% of the project work by the end of the second month, which was your Planned Value (PV). However, by that time, you managed to complete only 40% of the project work, which is your Earned Value (EV). Using the formula, what is the value of the Schedule Variance (SV)?



Correct answer: -0.2

The formula for Schedule Variance (SV) is: SV = EV - PV

In this scenario, the Earned Value (EV) is 40%, and the Planned Value (PV) is 60%. Plugging these values into the formula gives:

$$SV = 40\% - 60\% = -20\%$$

Therefore, the Schedule Variance (SV) is –0.2, which means the project is running behind schedule.

A	5	
-	-	

Which of the following is NOT a characteristic of a project?

Permanent
Stateholder satisfaction
Purpose
Unique
Correct answer: Permanent  Projects are temporary, meaning they have a start and end date. Something permanent would not be considered a project.  Stateholder satisfaction, purpose, and uniqueness are all characteristics of a project.

In a project with team members working in different time zones, which of the following communication methods is most appropriate to ensure effective collaboration?

### **Synchronous communication**

Asynchronous communication

Both synchronous and asynchronous communication

No communication is necessary

Correct answer: Synchronous communication

In a project with team members working in different time zones, synchronous communication is most appropriate to ensure effective collaboration. It allows for real-time interaction and immediate feedback, which are particularly important when working on time-sensitive tasks.

Asynchronous communication, on the other hand, may result in delayed responses and can slow down the project. While using both synchronous and asynchronous communication can be helpful, synchronous communication should be prioritized when team members are working in different time zones. Communication is always necessary in project management.

What is the purpose of a sprint review meeting?

### To present completed work to stakeholders

To review the performance of the team during the sprint

To plan and prioritize the backlog for the next sprint

To conduct a daily standup meeting with the team

Correct answer: To present completed work to stakeholders

A sprint review is a recurring meeting held at the end of a sprint in Agile methodology. The purpose of the meeting is to present the completed work to stakeholders and gather feedback for further improvement.

Reviewing the performance of the team during the sprint is typically done during a retrospective meeting. Backlog planning and prioritization are typically done during sprint planning meetings. Daily standup meetings are separate recurring meetings held during the sprint to keep the team updated on progress and identify any obstacles.

What is the PRIMARY objective of resource smoothing in project management?

#### To balance the use of resources over time

To ensure that resources are used efficiently and effectively

To load resources at the beginning of the project

To avoid overloading resources on a project

Correct answer: To balance the use of resources over time

The primary objective of resource smoothing is to balance the use of resources over time, avoiding spikes or dips in resource usage that can disrupt the project. Resource smoothing maintains a consistent level of resource utilization while keeping the project on track. Avoiding resource overload and loading resources at the start of a project are aspects of resource leveling and resource loading, not resource smoothing.

Which of the following BEST describes a risk trigger in project management?

#### An event that indicates a risk is about to occur

A process for documenting risks and assigning them to a risk owner

A technique for analyzing the probability and impact of risks

A strategy for reducing the likelihood or impact of risks

Correct answer: An event that indicates a risk is about to occur

A risk trigger is an event or condition that indicates a risk is about to occur.

Risk triggers are used to identify potential risks and to alert the project team to take appropriate action to manage the risk.

	4	_	
6	1	m	
- 1	u	v.	١_

When is a project considered a success?

The goals of the project have been fulfilled and the stakeholders are satisfied with the results

The project deliverables have been produced

The project came in at or under the set budget

The scope of the project stayed the same and did not expand

Correct answer: The goals of the project have been fulfilled and the stakeholders are satisfied with the results

A project is considered a true success only once the goals it set out to achieve have been fulfilled and the stakeholders are happy with the results.

Which of the following is an example of risk transfer?

## Purchasing insurance to cover potential losses

Reducing the likelihood or impact of a risk event

Choosing not to proceed with a project that has associated risk

Accepting the potential impact of a risk event without taking action to mitigate it

Correct answer: Purchasing insurance to cover potential losses

Risk transfer involves transferring responsibility for a risk to a third party, such as an insurance company or subcontractor. This can be done to reduce the financial or legal liability associated with a risk.

Reducing the likelihood or impact of a risk event is a risk mitigation strategy, not risk transfer. Choosing not to proceed with a project or activity is a risk avoidance strategy. Accepting the potential impact of a risk event without taking action to mitigate it is a risk acceptance strategy.

Which of the following BEST describes a mandatory dependency in project management?

### A task that must be completed before another task can begin

A task that can begin before another task is completed but will delay the dependent task if not finished

A task that depends on another task but can still be completed if the dependent task is not finished

A task that does not depend on any other task and can be completed at any point in the project

Correct answer: A task that must be completed before another task can begin

A mandatory dependency is a type of task dependency that requires a task to be completed before another task can begin. This means the dependent task cannot start until the task it depends on is finished. This type of dependency is also known as a hard dependency or hard logic because it is inflexible and cannot be changed without affecting the project's timeline.

	2	
<b>:</b>	-5.	

What are the possible strategies to respond to a positive risk? Select all that apply.

Exploit
Share
Enhance
Accept
Combine
Reduce
Mitigate

The possible responses to positive risk (also known as opportunity) are:

- Exploit Share
- Enhance
- Accept

A project team at Acme Inc. is presented with a negative risk related to an event planning project. There is a chance that it will rain the day the event is scheduled, but it is too early to know the forecast for the date. What are possible strategies to deal with this risk?

Select all that apply.

Mitigate	
Accept	
Combine	
Network	

There are four possible strategies to deal with negative risks:

- Avoid
- Transfer
- Mitigate
- Accept

For example, the team could plan to hand out umbrellas if needed to mitigate the risk. Alternatively, they could accept the risk and deal with the impact rain may cause.

Which of the following BEST describes gap analysis in project management?

The process of identifying the difference between actual performance and expected performance

The process of analyzing the difference between the actual start date and the actual finish date of a project task

The process of analyzing the difference between the planned cost of a project task and the actual cost incurred

The process of identifying the difference between the current state of a process or system and the desired state

Correct answer: The process of identifying the difference between actual performance and expected performance

Gap analysis is a technique used in project management to identify the difference between the current performance on a project and the expected performance. It is typically used to identify areas where improvement is needed and to develop strategies to improve performance enough to close the gap.

The other options describe various types of analysis used in project management, but they do not accurately describe gap analysis.

h	h	
•.	u	_

Rosario is a project manager at Acme Inc. She wants to evaluate risks on a project using as many techniques as are practical. Which of the options below are risk analysis techniques?

Select all that apply.

Impact
Qualitative
Quantitative
Situational
Bottom-up
Impact analysis, qualitative analysis, quantitative analysis, and situational (or scenario) analysis are all valid risk analysis techniques.  Bottom-up is an estimating technique.

	_	
h		
J		_

What are the benefits of qualitative analysis over quantitative analysis for risk assessment?

Select all that apply.

Speed	
Cost	
Precision	
Propinquity	

Qualitative analysis, which involves the use of nonquantitative values to rank risks, is typically cheaper and faster than quantitative analysis. However, quantitative analysis, which uses numeric values, is typically more precise. Propinquity describes how a stakeholder perceives the significance of a risk.

Alexander is managing a project in which the development team and the operations team work side by side and report to him. Which framework is being used in this example?

DevOps
DevSecOps
Waterfall
Agile

Correct answer: DevOps

Prior to the creation of the DevOps concept, the development team responsible for developing the application and the operations team responsible for the services and networks the application would run on were managed separately by different managers. DevOps is a framework that brings the development staff and operations staff together into one team that reports to a single manager. This allows for more streamlined communication and collaboration.

DevSecOps includes the development staff and operational staff like DevOps, but adds in the security operations staff as well. Waterfall is a methodology in which projects are handled in a step-by-step manner; each step of the project is completed before the team moves on to the next. Agile is a method of managing projects in which the project is broken up into small, incremental portions of work that do not need to be done in a specific order.

Jeremy is reviewing a hierarchical chart that breaks down the necessary types of work on a project according to the type of resource needed to perform the task. The chart shows electricians and plumbers as two resource types. What type of chart is Jeremy looking at for this project?

RBS		
OBS		
RAM		
RACI		

Correct answer: RBS

A Resource Breakdown Structure (RBS) is a type of hierarchical chart that breaks down project work based on the type of resource needed to do the work. The RBS may include electricians, plumbers, painters, and carpenters as resource types.

The Organizational Breakdown Structure (OBS) is a form of an organizational chart that shows departments or teams within an organization and their respective work packages. A Responsibility Assignment Matrix (RAM) maps the work breakdown structure elements to resources. RACI stands for "Responsible, Accountable, Consult, and Inform," and it assigns responsibility to different members of the project.

.....

Which project management document incorporates the use of a RACI chart to define stakeholder responsibilities?

RAM
Project charter
Risk register
Business case

Correct answer: RAM

The Responsibility Assignment Matrix (RAM) is a project management document that incorporates the use of a RACI chart to define stakeholder responsibilities. RACI stands for "Responsible, Accountable, Consult, and Inform" and is used to define responsibilities on the project.

A project charter authorizes the project to start. A risk register is a list of risks and their description. The business case is the justification for the project.

For a project manager, what is the purpose of scheduling a follow-up meeting?

To discuss items that were not completed or could not be addressed in the original meeting

To provide the project manager with an opportunity to demonstrate their leadership skills

To ensure that all stakeholders are aware of the issues identified in the previous meeting

To ensure that all team members are present at the meeting

Correct answer: To discuss items that were not completed or could not be addressed in the original meeting

The purpose of a follow-up meeting is to discuss items that were left unfinished or could not be discussed in the original meeting.

Scheduling a follow-up meeting is not about demonstrating leadership skills, although it may be a secondary benefit. Stakeholders may already be aware of the issues, and if not, it is the responsibility of the project manager to communicate the issues to them outside of the follow-up meeting. Only the team members necessary to address identified issues need to be present at the follow-up meeting.

You are working on a project in which the project manager has constructed a board that represents the project. The board includes various tasks that can be assigned and moved from different stages, such as "not yet started," "in progress," and "complete."

Which Agile methodology is in use in this example?

Kanban	
Scrum	
Lean	
Extreme Programming	

Correct answer: Kanban

Kanban is a type of Lean Agile methodology in which a board with columns is used to represent the project. The board can be either a physical board or one managed by software. The methodology is pull-based and progresses to the next step as resources become available.

Scrum, Lean, and Extreme Programming are all Agile methodologies, but they do not require a board.



You are a project manager working on the Discovery phase of a project. Which of these activities are NOT likely to be among your tasks?

Select all that apply.

# Creating the project charter

## Performing an initial risk assessment

Creating a business case

Working with prequalified vendors

The Discovery phase comes before the Initiation phase and focuses on whether the project is worthwhile. Common tasks in the Discovery phase include working with prequalified vendors and writing a business case.

The project charter is created during the Initiation phase, and initial risk assessment is performed during the Planning phase.

What are the three primary characteristics of a project?

Temporary, unique, and progressive

Ongoing, goal-oriented, cost-focused

Agile, Scrum, and Waterfall

Risk management, quality assurance, and stakeholder management

Correct answer: Temporary, unique, and progressive

The three primary characteristics of a project are that it is temporary, meaning it has a defined start and end date; unique, meaning it produces a one-time product, service, or result; and progressive, meaning it moves the organization closer to achieving its strategic goals.

Which of the following is an example of risk mitigation?

### Reducing the likelihood or impact of a risk

Purchasing insurance to cover potential losses

Developing a contingency plan to be executed if a risk event occurs

Transferring responsibility for a risk to a third party

Correct answer: Reducing the likelihood or impact of a risk

Risk mitigation involves reducing the likelihood or impact of a risk event. This can be done by implementing controls or taking actions to prevent the risk from occurring or to minimize its impact if it does occur.

Transferring responsibility for a risk to a third party and purchasing insurance are both risk transfer strategies, not risk mitigation. Developing a contingency plan is a risk response strategy but doesn't necessarily involve risk mitigation.

Which methodology can be used for projects of any size, in any industry, because it manages the project in stages, step by step, to keep projects under control?

PRINCE2
Scrum
Kanban
Feature-Driven Development

Correct answer: PRINCE2

PRINCE2 can be used for projects of any size in any industry. PRINCE2 stands for PRojects IN Controlled Environments. The 2 was added after the methodology was updated. PRINCE2 is the standard project management methodology in the United Kingdom.

Scrum is a form of Agile project management and is most useful for managing software development projects. Kanban is another form of Agile project management that is often used in manufacturing projects but has started to be used in the information technology field as well. Feature-Driven Development (FDD) was created to address large software development projects.

0	7	
n	/	

What tests would typically be performed by a software quality assurance tester? Select all that apply.

Regression
Stress
End-to-end
UAT

Regression, stress, and end-to-end tests are typically performed by a tester or engineer on a software team.

User Acceptance Testing (UAT) is typically performed by end-users to confirm the software meets requirements.

Which of the following is an example of a regulatory environment change that may pose a risk to a project?

A new law that requires additional reporting and compliance measures for the project

A change in management that leads to new goals for the project

A delay in the delivery of project materials due to unforeseen circumstances

A change in the weather that impacts project timelines

Correct answer: A new law that requires additional reporting and compliance measures for the project

A regulatory environment change is a risk associated with changes in laws, regulations, or compliance requirements that may impact the project's scope, timeline, or budget. A new law that requires additional reporting and compliance measures for the project is an example of a regulatory environment change.

A change in management that leads to new goals for the project is a risk associated with changes in management, not the regulatory environment. A delay in the delivery of project materials due to unforeseen circumstances is a risk associated with delays, which is also a separate category of risk. A change in the weather that impacts project timelines is a risk associated with environmental factors, which is not related to a regulatory environment change.

Which option is typically NOT a main factor in deciding which project management methodology to use?

Developer's preference

Budget

Tolerance for change

Environmental factors

Correct answer: Developer's preference

The factors that are typically considered when determining which methodology to use include tolerance for change/flexibility, project requirements, budget, schedules, environmental factors, culture, developmental standards, and industry standards. Although an individual's preference may be considered as part of the overall "cultural" factor, it is not typical for one person's preference to determine which methodology is used.

Which of the following BEST describes the relationship between risks and changes in a project?

### Changes can introduce new risks into a project

Changes can only mitigate risks and cannot create new ones

Changes have no impact on risks in a project

Changes are necessary only to manage risks, not to mitigate them

Correct answer: Changes can introduce new risks into a project

Risks and changes are connected because risks can introduce changes in the project plan, and changes can create new risks. For example, if a risk associated with a project task is identified, the project team may decide to change the timeline or approach to the task to mitigate the risk. This change, in turn, may create new risks, such as a delay in the project timeline or additional costs.

Changes always impact risks in a project, either positively or negatively. Changes can also introduce new risks or exacerbate existing ones rather than just mitigating them. Changes can be necessary to mitigate risks, but they are not the only means of managing them.

During a trip to a small developing country, Megan noticed many of the residents didn't have access to warm, high-quality coats for the winter. She started a project within her own clothing company to provide a coat for a person in need anytime her company sells a coat to a consumer.

Which of the following reasons BEST describes the driving factor behind Megan's project?

Social need
Ecological impact
Customer request
Organizational need

Correct answer: Social need

A social need, such as a person in a developing country needing a warm coat, clean drinking water, or shoes, can bring about many different projects.

An ecological impact brings about a project to actively mitigate the ecological effects of a business. Customer requests can bring about projects when customers voice their requests in a manner such as a focus group. Organizational needs refer to changes that impact the internal organization, such as a new technology solution.

Which option BEST describes the main difference between known risks and unknown risks in project management?

Known risks are identified and documented in the risk register, while unknown risks have not been identified or documented

Known risks are usually minor and can be easily managed, while unknown risks are typically more severe and require a more complex risk management approach

Known risks are specific to the project, while unknown risks are external factors that cannot be controlled by the project team

Known risks have already occurred in past projects, while unknown risks are new risks that have never been encountered before

Correct answer: Known risks are identified and documented in the risk register, while unknown risks have not been identified or documented

The main difference between known and unknown risks in project management is that known risks have been identified and documented in the risk register, while unknown risks have not been identified or documented.

Andrew is entering into a working relationship with a vendor on a project. He wants to ensure that the vendor can't share sensitive company information or trade secrets outside of the organization.

Which vendor-related document should Andrew use to prevent this?

NDA	
SLA	
Warranty	
Letter of intent	
Correct answer: NDA	

A Non-Disclosure Agreement (NDA) is used to ensure that trade secrets and sensitive company information are not disclosed outside of the organization.

A Service-Level Agreement (SLA) defines the expectations of the level of service between two or more parties. A warranty is a guarantee that the product or service will meet expectations. A letter of intent is used to show the intent of both parties before they enter into a contract.

Which of the following is TRUE about workshop meetings?

They are interactive meetings that use collaborative techniques to achieve project objectives

They are passive meetings in which the project manager simply updates team members on project progress

They are meetings in which only the project manager talks and the team members listen

They are not important for project success and can be skipped if needed

Correct answer: They are interactive meetings that use collaborative techniques to achieve project objectives

Workshop meetings are an important tool in project management because they allow for collaboration and discussion among team members to achieve project objectives. They are interactive and may involve activities such as brainstorming, decision-making, and problem-solving.

The project manager facilitates the meeting, but all team members are encouraged to participate and contribute their ideas. Skipping these meetings can lead to miscommunication, confusion, and delays in project delivery.

Which of these options BEST describes the difference between communication methods in Agile and waterfall methodologies?

Agile methodologies emphasize face-to-face communication, while waterfall methodologies rely mostly on written documentation

Agile methodologies rely heavily on written documentation, while waterfall methodologies emphasize face-to-face communication

Agile and waterfall methodologies use the same communication methods

Agile and waterfall methodologies prohibit communication between team members

Correct answer: Agile methodologies emphasize face-to-face communication, while waterfall methodologies rely mostly on written documentation

In Agile methodologies, face-to-face communication is emphasized over written documentation. This is because Agile methodologies value the interactions and collaboration between team members.

Waterfall methodologies rely heavily on written documentation, such as requirements documents and design specifications, as the primary method of communication.

Elenor is managing a collection of projects that support strategic business objectives. However, some of the projects she is managing are not actually related to each other. Which of the following BEST describes what Elenor is managing?

Portfolio
Program
Operation
Business case

Correct answer: Portfolio

A portfolio is a collection of projects, programs, and subportfolios that support strategic business goals or objectives. Unlike a program, the projects in a portfolio may not be related to each other.

A program is a group of related projects that are managed together. Operations are ongoing and repetitive functions within an organization that typically support the production of goods and services. A business case is the justification for a project that is created during the discovery phase.

Which of the following questions would be useful during an impact assessment for a change request?

Select all that apply.

What is the projected cost of the change?

What are the potential impacts on the project schedule?

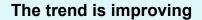
What were the smoke test results for the change?

How much did the change cost to implement?

An impact assessment is a key exercise evaluating change requests during project execution. Subject Matter Experts (SMEs) familiar with the affected area of a project typically conduct an impact assessment and work with the project manager to quantify the impact of a change request. Questions that help quantify the impact of the change are useful when conducting a change request.

Questions that cannot be answered unless the change has already been implemented would not be useful at this stage as the change is still being evaluated. Therefore, questions such as "What were the smoke test results for the change?" and "How much did the change cost to implement?" would not be valid.

You are managing a software development project and have set a Key Performance Indicator (KPI) for the number of bugs reported per week. During the first week of the project, 15 bugs were reported. However, in the second week, only five bugs were reported. What is the trend in the number of bugs reported per week, based on the KPI?



The trend is declining

The trend is stable

It is impossible to determine the trend from this information

Correct answer: The trend is improving

The KPI for the number of bugs reported per week indicates that a lower number is better. Therefore, since the number of bugs reported in the second week is lower than in the first week, the trend is improving.

If the number of bugs had increased, the trend would be declining (moving in an undesirable direction). If the number of bugs were about the same, the trend would be stable.

Which of the following are Agile project methodologies?

Select all that apply.

Scrum
Kanban
Waterfall
Predictive

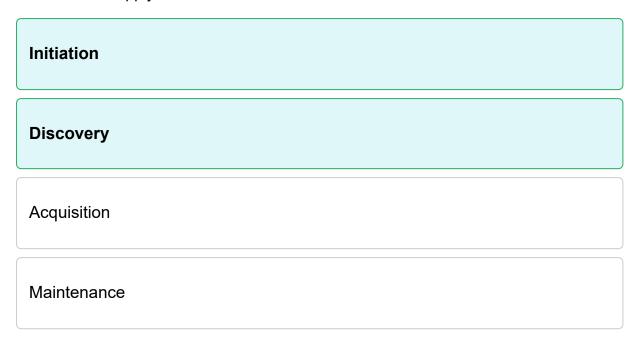
Agile methodologies are approaches to project management that focus on doing work in small increments that can be completed quickly. Agile methodologies are useful when requirements are uncertain, frequent feedback from stakeholders is needed, the project is high risk, or the work environment is highly dynamic.

Scrum and Kanban are both common Agile methodologies used to complete work in small increments.

Waterfall (also known as predictive) methodology is another approach to project management that involves moving a project through phases. Waterfall is useful when requirements are well defined, the project is low risk, and the work environment is stable.

The resource life cycle consists of multiple stages. Which of the following is NOT a resource life cycle stage?

Select all that apply.



Initiation and Discovery are phases of the project life cycle, not the resource life cycle. Resource life cycle stages include:

- Acquisition
- Maintenance
- Hardware decommissioning
- End-of-life software
- Successor planning

Which of the following BEST describes the benefit of issue tracking in project management?

It allows you to identify issues early, before they become major problems

It assigns the blame for issues that occur to others

It eliminates the need for a project manager

It helps reduce the number of issues that arise

Correct answer: It allows you to identify issues early, before they become major problems

The key benefit of issue tracking in project management is that it helps identify issues early on, before they become major problems that can derail the project. By tracking issues as they arise, project managers can address them quickly and proactively, minimizing the impact on the project schedule and budget.

Issue tracking does not eliminate the need for a project manager; in fact, it is a key responsibility of the project manager to track and manage issues. While issue tracking can reduce the number of issues that arise, this isn't guaranteed and isn't a key benefit of issue tracking. Additionally, assigning blame for issues to others is not a benefit of issue tracking.

Which of the following is an example of risk avoidance?

Choosing not to proceed with a project that is associated with significant risks

Developing a contingency plan to be executed if a risk event occurs

Purchasing insurance to cover losses

Implementing controls to reduce the likelihood of a risk

Correct answer: Choosing not to proceed with a project that is associated with significant risks

Risk avoidance involves choosing not to proceed with a project or activity that comes with significant risks. This may be done when the potential impact of the risk is too great or when the cost of mitigating the risk is too high.

Developing a contingency plan is a risk response strategy but not risk avoidance. Purchasing insurance is a risk transfer strategy. Implementing controls is a risk mitigation strategy.

Alex is working on a project with a vendor in which the vendor is expected to respond to queries within two hours after Alex opens a ticket.

Where would this time frame be defined?

SLA
Warranty
NDA
Letter of intent

Correct answer: SLA

A Service-Level Agreement (SLA) defines the expectations of the level of service between two or more parties. The speed at which a vendor is expected to respond would likely be defined in the SLA.

A warranty is a guarantee that the product or service will meet expectations. A Non-Disclosure Agreement (NDA) is used to ensure that trade secrets and sensitive company information are not disclosed outside of the organization. A letter of intent is used to show the intent of both parties before they enter into a contract.

0	A	
റ	4	٠.

Which of the following are characteristics of a project?

Select all that apply.

	n	~		Δ
v	n	ч	u	C

# **Temporary**

# Has a purpose

Permanent

Uses Agile methodologies

Projects are unique, temporary endeavors that are intended for a specific purpose or reason and that focus on meeting goals in alignment with stakeholder expectations.

Projects are not permanent. They have specific start and end dates.

Projects do not necessarily use Agile methodologies. For example, a project with well-defined requirements and low risk may be better suited for a waterfall approach.

Which of the following BEST defines project scope and its importance in project management?

The work that needs to be done to complete the project

The budget allocated for the project

The timeline of the project

The resources needed to complete the project

Correct answer: The work that needs to be done to complete the project

The scope defines the boundaries of the project and what work needs to be done to complete it successfully. It includes the project's objectives, deliverables, requirements, constraints, and assumptions.

Project scope does not refer to the budget allocation, timeline, or resources.

Which of the following is NOT a factor to consider when determining the priority of an issue in the resolution plan?

# The length of time the issue has been open

The potential impact of the issue on project objectives

The cost and effort required to address the issue

The severity of the issue

Correct answer: The length of time the issue has been open

When determining the priority of an issue in the resolution plan, it is important to consider factors such as the potential impact of the issue on project objectives, the cost and effort required to address the issue, and its severity. However, the length of time the issue has been open is not typically a factor in its level of priority. Rather, the urgency of the issue and the potential consequences of not addressing it in a timely manner should be considered.

Which of the following is NOT one of the types of Scrum team members? Select all that apply.

# Product manager Tester Scrum master Product owner

A Scrum team consists of three key accountabilities:

- Scrum master
- Product owner
- Team member (sometimes called a developer or development team)

There are also external stakeholders that have an interest in the outcome of a Scrum team's work.

Tester and product manager are common job titles, but they are not specific accountabilities in Scrum.

Which organization is the de facto standard in project management worldwide?

PMI	
CompTIA	
NIST	
HIPAA	

Correct answer: PMI

The Project Management Institute (PMI) is the de facto standard worldwide for project management. Project management standards are documented in the Project Management Body of Knowledge Guide (PMBOK Guide) published by PMI.

CompTIA creates certifications that are non-company specific. The National Institute of Standards and Technology (NIST) creates processes and frameworks to help the federal government set standards for project information and information systems. The Health Insurance Portability and Accountability Act (HIPAA) provides regulations regarding the protection of electronically protected health information.

What is the PRIMARY advantage of using dedicated resources over shared resources in a project?

# Improved efficiency and productivity

Reduced project costs

Improved resource utilization

Greater flexibility in resource allocation

Correct answer: Improved efficiency and productivity

Using dedicated resources means that team members work exclusively on a particular project or set of tasks, which can lead to increased efficiency and productivity. This is because they are able to focus all of their attention on the project without any distractions from other competing projects or tasks.

However, using dedicated resources may also result in higher project costs because the resources are not shared across multiple projects. Additionally, shared resources may provide more flexibility in resource allocation and improved resource utilization because the same resources can be used to complete multiple projects.

You are a member of a Scrum team working on a software development project. During a sprint, the team tracked its progress using a burndown chart. As you review the chart, you notice that the line representing the actual work completed by the team is above the expected progress line.

What might this indicate?

The team has underestimated the effort required to complete the tasks.

The team is not working efficiently and needs to improve their productivity.

The team has overestimated the amount of work required to complete the sprint.

The team is likely to complete the sprint ahead of schedule.

Correct answer: The team has underestimated the effort required to complete the tasks.

A burndown chart is a graphical representation of the remaining work in a sprint versus time. The expected progress line represents the ideal pace of work completion to finish the sprint on time. If the actual work line is above the expected progress line, it suggests that the team is completing less work than planned, thus likely underestimating the effort needed. This situation does not necessarily indicate inefficiency; rather, it might suggest issues with initial planning or unexpected complexities in the tasks.

What is a benefit of having a Change Control Board (CCB) in project management?

It ensures that all project changes are approved in a timely manner

It reduces the need for communication among team members

It eliminates the need for project planning and risk management

It guarantees that the project stays on budget

Correct answer: It ensures that all project changes are approved in a timely manner

One of the benefits of having a Change Control Board (CCB) in project management is that it ensures all project changes are approved in a timely manner. Having a designated group of stakeholders who review and approve project changes helps to prevent delays and ensure that the project stays on track.

Communication among team members is still necessary, even with a CCB in place. Project planning and risk management are critical components of project management that cannot be eliminated even with a CCB. The CCB can't guarantee that the project stays on budget, but it can help since all changes to the budget must be approved by the CCB.

	0	
ч		

Which of the following are signs that suggest a project is a good fit for the waterfall approach?

Select all that apply.

High risk

Low risk
Stable work environment
Well-understood requirements
Dynamic work environment

Waterfall (also known as predictive) methodology is an approach to project management that involves moving a project through phases. Waterfall is useful when requirements are well defined, the project is low risk, and the work environment is stable.

What is another term for a dependency in which the successor activity cannot start until the predecessor activity has finished, also known as a "fixed" or "inflexible" relationship?

Hard logic
Soft logic
Lead time
Lag time

Correct answer: Hard logic

A mandatory dependency is a relationship between two activities in which one activity cannot start until the other is finished. This is also known as a "fixed" or "inflexible" relationship and is referred to as "hard logic."

Soft logic represents a preference between two activities, in which one activity should start after another but is not strictly required to do so. Lead time and lag time are durations added to an activity to create a delay between two activities.

Which of the following statements BEST describes a matrix organization?

It combines functional and projectized organizational structures in which employees work on projects while reporting to a functional manager

It has a traditional hierarchy with multiple levels of management and strict departmental boundaries

It is a flat organizational structure with self-managed teams and minimal hierarchy

It is a hybrid structure that combines a network of contractors and vendors with in-house employees

Correct answer: It combines functional and projectized organizational structures in which employees work on projects while reporting to a functional manager

In a matrix organization, employees work on projects and also report to a functional manager. This structure combines the advantages of both functional and projectized structures, allowing for greater flexibility and responsiveness.

Matrix organizations are not characterized by traditional structures with departmental boundaries, flat structures with self-managed teams, or network-type organizational structures.

Raha, a project manager at Acme Inc., received a verbal change request from a stakeholder. What should she do?

Select all that apply.

Document the change request in the change control log

Inform the stakeholder there is a formal change request process that should be followed

Tell the stakeholder the request will be implemented in the next sprint

Verbally approve the request

After the project management plan is approved, all change requests should be formally documented in the change control log to ensure traceability and proper assessment. Raha should not agree verbally to the request. Instead, she should direct the request through the established formal process. There is no indication in the question that Raha's project utilizes sprints, and even if it did, the change request should still undergo proper documentation and review before any commitments are made. By reminding the stakeholder of the formal change control process — typically introduced during the project kickoff — Raha reinforces the importance of adhering to established project management practices.

$\sim$	
ч	h
-1	w.

What is the correct order of the project life cycle phases according to CompTIA?

Discovery/Concept, Initiation, Planning, Execution, and Closing

Initiation, Discovery/Concept, Planning, Execution, Closing

Planning, Initiation, Execution, Closing

Initiation, Execution, Closing

Correct answer: Discovery/Concept, Initiation, Planning, Execution, and Closing

CompTIA outlines the project life cycle phases as Discovery/Concept, Initiation, Planning, Execution, and Closing. The other options do not include all the phases or are in the wrong order.

Max is managing a project in which new software is being developed to meet a need within the organization. Max writes down that the sales team needs this software in order to create a client deliverable. By defining the need, which of the following criteria is being met for this to be a project?

Reason or purpose
Temporary
Stakeholder satisfaction
Environmental factors

Correct answer: Reason or purpose

In order for something to be considered a project, it must meet the criteria of being unique, temporary, having a reason or purpose, and providing stakeholder satisfaction. Having a defined need means there is a defined reason or purpose.

Temporary refers to the existence of defined start and end dates. Stakeholder satisfaction refers to having the appropriate stakeholders approve the project plan. Environmental factors are not part of the criteria for something to be considered a project.

You are a member of an Agile development team tasked with estimating the effort required to complete a user story. The team is considering using story points as the estimation technique. What factors should you consider when assigning story points to the user story?

The complexity, effort, and difficulty involved in implementing the user story

The number of team members available to work on the user story

The amount of time required to complete the user story

The potential risk associated with the user story

Correct answer: The complexity, effort, and difficulty involved in implementing the user story

When assigning story points to a user story in Agile development, the team should consider the complexity, effort, and difficulty involved in implementing the user story. This includes factors such as the level of technical difficulty, the amount of coordination required with other teams or stakeholders, and the level of domain expertise required to complete the user story.

Team capacity is typically estimated separately from story points. Story points are not a measure of time or a measure of risk.

During a project, the development staff, operations staff, and security staff are all embedded in one team to ensure smooth collaboration and communication among team members. Which of the following BEST describes the methodology or framework being used in this example?

DevSecOps	
DevOps	
Waterfall	
PRINCE2	

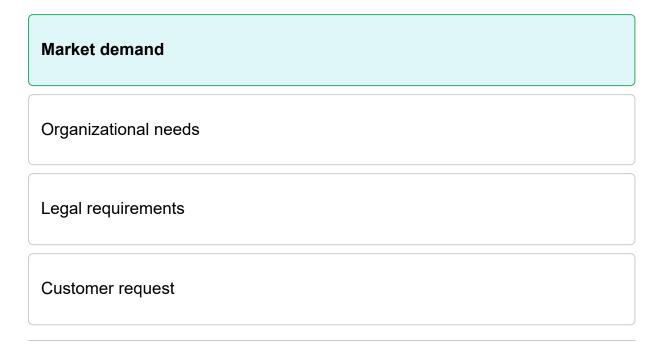
Correct answer: DevSecOps

DevOps is a methodology in which development staff and operations staff are combined into one team to complete a project. When you add security staff to the team, it becomes DevSecOps.

Waterfall refers to the step-by-step methodology in which each step of the project is completed in order. PRINCE2 stands for PRoject IN Controlled Environments. The 2 was added to the name when it was updated in 1996.

Company A noticed that many consumers were choosing to purchase electric vehicles from their competitors due to the high cost of gasoline. In response, Company A began a project to introduce a new line of fully electric cars and SUVs.

Which of the following BEST describes the main driving factor for undertaking the project?



Correct answer: Market demand

The reasons that projects come about typically fall into one of the following categories: market demand, organizational need, customer request, technological advance, legal requirements, ecological impacts, and social needs. An increase in consumers purchasing a specific type of vehicle falls under market demand.

An organizational need is for a project that would help the internal organization. Legal requirements refer to local, state, and federal regulation changes. A customer request refers to an idea coming directly from customers, such as through a focus group.