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Project Management Professional (PMP)[®] Exam



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8.6. Traditional Projects

The traditional approach to projects uses a set of developed techniques for planning, estimating, and controlling activities in order to reach the desired result on time, within budget, and in accordance with specifications.

8.7. Hybrid Projects

The hybrid approach to projects uses elements from the Agile approach and the traditional approach. This is done to accommodate a specific project or situation.

8.8. Agile and Hybrid Management Formulas and Variables

There are no formulas for this chapter. See the Cost chapter for earned value management formulas.

8.9. Agile and Hybrid Management Terminology

Term	Description
Acceptance Criteria	Customer identified functionality written in enough detail to validate product performance; objective criteria that determines if the story achieves the value it represents
Acceptance Test	Activities that validate that the features perform in accordance with customer defined functionality
Activity	The Agile term for task
Adaptive Project Management Life Cycle Model (Adaptive PMLC Model)	A change-tolerant life cycle model used for projects where the details of the expected result (solution) are incomplete and/or not well-defined and some functionality is incomplete and/or not well-defined; an example of an adaptive PMLC Model is an APF project
Agile	An iterative software development approach, expressed in a variety of methodologies, which embraces incremental delivery, flexibility, cross-functional and self-organizing teams, direct customer-developer communication and collaboration, and frequent inspection and adaptation
Agile Coach	An experienced leader who consistently directs team members to move beyond the performance of Agile practices and adopt Agile thinking
Agile Development Life Cycle	A comprehensive elaboration that includes continuous integration, refactoring, acceptance testing, cross-functional teams, planning poker, burnup charts, information radiators, and burndown charts
Agile Manifesto	Declaration of values and principals for Agile development including prioritizing individuals over processes and working software over extensive documentation
Agile Model	A barely sufficient representation that is free from error, understandable, unembellished, and coherent
Agile Planning	The processes and practices that result in flexible and effective management of a project and include a vision and roadmap among other artifacts
Agreement	A Scrum term used to describe the agreement between a product owner and the team that includes the definition of done, the acceptance criteria, and any general agreements; can be applied to stories, capabilities, sprints, and releases
Artifact	Something made by the team for the project, especially something that may be reused
Backlog	An evolving list of customer-prioritized stories, tasks, and bugs that have not been completed and are not being worked on during the current iteration
Backlog Item	Any story, task, or bug that has not been completed and is not being worked on during the current iteration
Backlog Refinement (also referred to as Backlog Grooming or Backlog Maintenance)	Continuously updating the prioritized product backlog to reflect any changes, including adding new items, removing items that are no longer appropriate, re-prioritizing existing items as necessary, and refining/cleaning user stories to get them ready for planning and execution
Bug	A code defect or error
Burndown Chart	A graphical representation of the work (represented by story points for a release and hours for an iteration) remaining over time
Burnup Chart	A graphical representation of the work that has been completed over time plotted against the total work

Term	Description
Capacity	The amount of work that can be completed in a defined time period taking into consideration the need to perform administrative tasks, the need to perform other work, and absence
Change Management	A proactive approach to controlling, communicating, and responding effectively to fluctuations
Colocation	The desirable state of working in close proximity to promote face-to-face communication
Context Model	A graphical representation of the system within the overall environment
Continuous Integration	The process of assimilating newly developed iterations into the existing system at frequent intervals via an automated and tested build, so that any faults can be quickly determined and corrected
Core Team	Group composed of cross-functional team members with varying levels of Agile knowledge; typically comprised of a sponsor, project management, developers, quality assurance personnel, architecture expert, product manager, and business knowledge experts
Cross-Functional Team	A group whose members collectively provide the skills required to complete the project
Daily Scrum	Team meeting held on a daily basis used to share the daily reality (what you have done since the last daily scrum, what you will do until the next daily scrum, and what impediments stand in your way) and to adapt to that reality, which usually involves an immediate re-planning meeting and additional meetings (based on the availability of team members, what technical debt was revealed, and other information that impacts today's work)
Dashboard	An information radiator that contains graphical representations depicting progress, trends, and identification of potential issues
Data-flow diagram (DFD)	Graphical representation depicting the movement of data between processes, objects, and storage within the system
Definition of Done	A Scrum term representing the objective criteria used to determine if a story meets internal standards/constraints
Demo	A working version of the product shown to the customer at the end of an iteration to evidence work done and solicit feedback
Development Team	A self-organizing, cross-functional group of individuals who do the work of the project, including analysis, design, development, testing, technical communication, and documentation
Distributed Team	A team working on same project whose members are physically located in separate work sites or locations
Elevator Statement	The synopsis of a concept, such as the purpose of a project, which can be expressed in thirty seconds or so
Emotional Intelligence Quotient (EQ)	The capacity to acknowledge and effectively manage feelings in oneself and others
Empirical Process Control	The continuous inspection and adaptation of procedures to ensure any variances in output are within acceptable limits
Epic	A large story, usually undeveloped, that needs to be decomposed into smaller stories
Feature	Business functionality comprised of one or more user stories
Fibonacci Sequence	A series of numbers that begins with 0 and 1, and then is expanded by adding the two previous numbers together: 0, 1, 1, 2, 3, 5, 8, 13...
Flow	The rate of value delivery to the customer
Impediment	Anything that prevents the team from working efficiently and effectively

Term	Description
Impediment Backlog	An evolving list of impediments that have not been completed and are not being worked on during the current iteration
Increment	Consecutive changes that increase the amount or value of something
Information Radiator	A wall in the common workspace that contains highly visible, graphic representations of progress
Inspect and Adapt	The practice of inspecting a solution at pre-determined stages and, based upon the inspection results, making improvements (adaptations)
Interdependent Stories	User stories that, considered together, solve a problem
INVEST	An acronym that stands for the rules that define a user story (Independent, Negotiable, Valuable, Estimable, Small, and Testable)
Issue	A disputed or unsettled condition
Issue Log	A project document that tracks elements which cause stakeholder concern or dissension
Iteration Demo	A working version of the product shown to the customer at the end of an iteration to evidence work done and solicit feedback
Kanban	An evolutionary, incremental process improvement method
Kanban System	A pull system that uses virtual signal cards
Kano Analysis	A model for customer satisfaction that categorizes features as Must Haves, Linear (the more, the better), Exciters/Delighters, or Dissatisfiers
Lean	A methodology that emphasizes the elimination of waste, producing only what is valuable to the customer
Lean-Agile	The blending of complimentary methodologies that emphasize Inspection and adaptation, elimination of waste, building in quality, and creation of knowledge
Lost Iteration	An iteration that does not result in a deliverable
Minimum Marketable Feature (MMF)	The smallest unit of functionality required for the customer to realize value
Model	A representation of potential solutions to a problem or to one or more aspects of a problem
MoSCoW	A model for prioritization that categorizes features as Must Have, Should Have, Could Have, Won't Have
Muda	An unproductive activity
Osmotic Communication	The indirect absorption of information, often by being present, but not participating, during conversations
Pair Programming	An eXtreme programming practice that pairs two programmers at one station, typically with one programmer coding (driver) and one reviewing (navigator); an excellent cross-training device
Persona	A fictional character, created by the team to portray a user, used as a reference for determining the viability of a product
Physical Prototype	A representation of the actual environment in which the product will function
Planning Poker	A game played with cards representing tasks that uses Delphi, a method where each team member estimates the size of a task and after a series of discussions, the team arrives at a consensus for task size estimation

Term	Description
Product	An assortment of incorporated features, both tangible and intangible, that offer value to a customer
Product Owner	The primary business representative who manages the vision and ROI and has the authority to make decisions; also called the product champion and voice of the customer
Product Review	A Scrum term used to describe an end-of-the-sprint meeting where the team reviews work results with the stakeholders and the stakeholders provide feedback to the team
Product Roadmap	The description of how the project will proceed from its current state to the state described in the vision statement
Product Vision	A statement written by the product owner/customer that describes the desired future state expected to be achieved as the result of the project; used in lieu of the project charter used in traditional projects
Programmer-coach	A person, typically a senior programmer, who guides the team in applying XP practices
Proof of Concept (POC)	A model built to test a concept; a prototype
Rapid Application Development (RAD)	An iterative software methodology that relies on rapid prototyping to offset minimal planning
Rational Unified Process (RUP)	An iterative development framework that allows teams to customize the development process
Refactoring	Making changes to the source code that will not alter functionality, but will improve readability and reduce complexity in order to improve the maintainability
Regression Testing	Activities run prior to release that comprehensively validate that the system is defect free and to insure that new code segments have not corrupted the existing code
Relative Estimation	Assessing the size and complexity of a story by comparing it to previously assessed stories
Release	A deployable software package that incorporates several iterations
Release Backlog	The list of user stories, features, and bugs scheduled for the current release
Release Burndown Chart	A graphical representation of the work, represented by story points, remaining in the release
Release Planning	Defining the prioritized and estimated stories from the product backlog that will be developed in the release and determining the date of the release
Release Testing	The process of evaluating the product to determine that it is suitable for use; typically includes requires passing acceptance, functional, and integration tests
Research Spike	A technical investigation used to minimize risk and uncertainty; sometimes referred to as an analysis task
Retrospective	A meeting held at the end of each iteration in which the team discusses what worked, what didn't, and what could be improved
Roadmap	A document that contains the high-level plan of the features that will be developed during the next few releases; the product owner/customer owns and maintains the document
Sandbox	An environment that confines the impact of errors to as few people as possible; typically divided into development, project integration, demo, QA, and production

Term	Description
Scrum	An Agile methodology that delivers finished increments of a product at the end of each Sprint (a timeboxed iteration with a duration of one to four weeks)
ScrumMaster	The servant leader and facilitator who ensures that the Scrum process is followed, that Scrum is used in a positive way by the team, and that the team is continually improving in its use of Scrum
Scrum of Scrums	A planning forum used in multiple-team projects to coordinate resources and dependencies
Scrum Roles	A person's identity within the project such as product owner, ScrumMaster, or Scrum team
Scrum Team	A self-organizing, cross-functional group of individuals who do the work of the Scrum
Scrum Values	Openness, focus, commitment, courage, visibility, and humor
Self-adapting	Modification of a process as quickly as needed to bring greater efficiency and effectiveness to the project
Self-organization	A management philosophy that delegates work related decisions to those closest to the work
Servant Leader	A leader whose focus is on providing what the team needs, removing roadblocks, and performing tasks that will support and improve team productivity
Situational Leadership	The adaptation of leadership to the task at hand and in consideration of the maturity of the team
SMART Goals Activity	Objectives that are specific, measurable, attainable, relevant, and timely
Spike	A short, timeboxed research effort that is necessary to estimate the size of a specific story, usually a technical story
Sprint	An abbreviated development cycle (typically 30 days) that results in potentially shippable product
Sprint Backlog	The list of stories scheduled for the current iteration
Sprint Planning	A meeting between the product owner and the team to prioritize and identify stories for the next Sprint
Sprint Retrospective Meeting	A meeting held at the end of each Sprint in which the ScrumMaster and the team discuss what went well and what could be improved during the next Sprint; part of the inspect and adapt philosophy
Sprint Review	An informal meeting at the end of the Sprint to demonstrate to the product owner what was accomplished during the Sprint
Sprint Task	A manageable unit of work decomposed from a story and estimated in hours
Sprint Team	A self-organizing, cross-functional team that includes the product owner, developers, and testers
Story	A document describing a unit of functionality written in business language that is used as the basis of conversation between the product owner and the team to elicit functionality details
Story Board	A Scrum term used to describe a team tool that lists the sprint tasks ordered by story
Story Point	A measurement that defines the size and complexity of a story/user story relative to a previously estimated story/user story
Subject Matter Expert	Any person who has deep, specialized knowledge of a subject

Term	Description
Swarm	The assignment of all capable team members to a specific task with a high priority
Task	A decomposed portion of a story/user story
Task Board	A surface upon which tasks written on cards are grouped under their user stories and pinned in priority order; used to track the progress of the project
Task List	The list of tasks assigned to the current iteration
Team Dynamics	The manner in which team members interact with each other
Team War Room	The area where the team works, customer meetings take place, and, to promote transparency, a visual representation of project activities, data, and ideas are accessible to everyone in the room
Team Work Agreement	A document created by the team, and facilitated by the project manager, that lists ten to fifteen commitments that relate to team work, e.g., the work isn't done until it meets our definition of done
Team-Building	Activities or exercises that promote molding a group of individuals into a team
Technical Debt	An obligation incurred as a result of an opportunistic design or architectural approach which results in complexity and increased costs in the long term; can also refer to code that will be difficult to maintain as a result of ignoring the definition of done, writing poor code, or writing poor tests
Test Case	The set of conditions or variables used to evaluate the completion status and acceptability of work
Test-driven Development (TDD)	A methodology, reliant on short development cycles, where code validation is written before the code is written
Tester	The person responsible for validating and verifying that the product is done and is acceptable
Timeboxing	Allotting a fixed period of time to an activity
Unit Test	Activities that validate the smallest testable parts of the system
Use Case	A document that defines how the user will interact with the product and how the product will respond to the user
User Acceptance Test (UAT)	Activities that validate that the product behaves in accordance with the user stories
User Roles	An aggregation of attributes that characterize a group of users
User Story	A document describing a unit of functionality written in business language that is used as the basis of conversation between the product owner/customer and the team to elicit functionality details; a user story is independent, negotiable, valuable, estimable, small, and testable
Value Stream Mapping	The identification of the process steps to analyze, design, build, and deploy a product; tools are available to execute this process
Value-added	Extra features that make a product more desirable, but add little or nothing to the cost
Velocity	The rate at which stories are completed during an iteration, typically measured in story points; also known as team velocity
Vision Statement	A document that defines the goal of the project, typically referencing the target customer, the need or opportunity, and the key benefit; often includes the main alternative to the project and why the project goal is more desirable

Term	Description
Waste	Anything that does not add value for the customer
WIP Constraint	Any limitation to a work in progress
Work in Progress (WIP)	Software that is in the process of development, but has not yet been deployed; calculated by multiplying throughput (rate at which items pass through the system) by lead time (time between two successive deliveries)
Work Product	Artifact created during development that is typically thrown away or converted into a deliverable

8.10. Agile and Hybrid Management Tests and Exercises

8.10.1. Agile and Hybrid Management Practice Test

Answers are in section 8.11.1.

1. Of the following, which best describes the manner in which the project charter can be used?
 - (A) To determine the high-level scope
 - (B) To authorize the project
 - (C) To create the budget
 - (D) All of the answers

2. Jesse is a scrummaster on a product called New Blue. He is using scrum as a development approach with two week sprints. Which of the following would he use to show the total points still to do in the current sprint?
 - (A) Sprint backlog
 - (B) Product backlog
 - (C) Burnup chart
 - (D) Burndown chart

3. Which of the following describes the purpose of a story map?
 - (A) To identify the activities the users will perform
 - (B) To prioritize user stories
 - (C) To depict the manner in which the user stories fit to perform a releasable product
 - (D) To match users with the activities they will perform

4. A sprint is the equivalent of...
 - (A) A phase
 - (B) An iteration
 - (C) A release
 - (D) A burn-down chart

5. Which of the following is the definition of done in relation to a user story?
 - (A) All unit, integration, and customer tests for the code representing the user story have been passed
 - (B) The code representing the user story has been integrated into the software
 - (C) The customer has accepted the code representing the user story
 - (D) The functionality expressed in the user story is ready to deploy

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6. What is the primary responsibility of the scrummaster?
 - (A) To ensure adherence to Agile principles
 - (B) To undertake the role of the coach/facilitator
 - (C) To ensure the project is on schedule
 - (D) To minimize changes to the project

 7. What does a burnup chart depict?
 - (A) Number of features to be completed for the project
 - (B) Number of story points to be completed for the project
 - (C) Number of story points completed for the project
 - (D) Number of features completed for the project

 8. Walter is a product owner on a product called New Blue. He is using scrum as a development approach with two week sprints. Which of the following would he and Jesse the scrummaster use to show the total points done so far and still to do?
 - (A) Sprint backlog
 - (B) Product backlog
 - (C) Burnup chart
 - (D) Burndown chart

 9. Of the following, which best describes the documentation for an Agile project?
 - (A) No documentation
 - (B) Full documentation
 - (C) An appropriate, but not excessive, level of documentation
 - (D) The backlog only

 10. Verification and validation occur at a number of levels. Which of the following levels only occurs during verification?
 - (A) User story level
 - (B) Release level
 - (C) Task level
 - (D) Iteration level

 11. The term for an organized group of sprints is...
 - (A) A phase
 - (B) An iteration
 - (C) A release
 - (D) A burn-down chart

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12. Which prioritization method designates each feature as a threshold, linear, or exciter and delighter?
- (A) Kano
 - (B) Moscow
 - (C) Tied
 - (D) Bliss
13. Walter is a product owner on a product called New Blue. He is using scrum as a development approach with two-week sprints. How will Jesse and the team estimate their work?
- (A) Duration
 - (B) Hours
 - (C) Dollars
 - (D) Story Points
14. eXtreme Programming (XP) roles consist of...
- (A) Coach, customer, and tracker
 - (B) Coach, product owner, programmer, and tracker
 - (C) Coach, customer, and programmer
 - (D) Programmer, coach, and tracker
15. Which of the following best describes a good user story?
- (A) Independent, negligible, valuable, estimable, small, and transparent
 - (B) Independent, negligible, variable, estimable, small, and transparent
 - (C) Independent, negotiable, valuable, estimable, small, and testable
 - (D) Independent, negotiable, valuable, estimable, short, and testable
16. The best description of the approach utilized for a lean-agile project is...
- (A) Maximize speed
 - (B) Maximize velocity
 - (C) Maximize work not yet done
 - (D) Maximize deliverables
17. Which tool can be used to evaluate what could potentially cause defects in a project or process?
- (A) Ishikawa diagram
 - (B) Cumulative flow diagram
 - (C) Effect diagram
 - (D) Kanban board

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18. Who is primarily responsible for updating the product backlog?
- (A) The product owner
 - (B) The team
 - (C) The scrummaster
 - (D) The project manager
19. Jessie is a scrummaster on a New Blue marketing campaign project. What will Jessie and his team use as a reference to the work in the current iteration?
- (A) Sprint backlog
 - (B) Product backlog
 - (C) Burnup chart
 - (D) Burndown chart
20. Who is responsible for updating the Kanban board?
- (A) The scrummaster
 - (B) The change manager
 - (C) The team
 - (D) The test department
21. What unit of measurement depicts the size of a user story in relation to the other user stories in the project?
- (A) Relative size
 - (B) Story size
 - (C) Story point
 - (D) Story density
22. What is generally thought of as the most popular Agile framework?
- (A) Crystal
 - (B) Lean
 - (C) Kanban
 - (D) Scrum
23. Walter and Jesse are having issues on the product at the sprint review meeting. Walter, the product owner is saying that the iteration doesn't do what is expected. Jesse, the scrummaster says it does what is expected. What is the core problem most likely here?
- (A) Inconsistent requirements
 - (B) Incorrect user story
 - (C) No clear definition of done
 - (D) Walter changed his mind

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24. What organization was responsible for the creation of the Agile Manifesto?
- (A) Agile alliance
 - (B) Scrum alliance
 - (C) Agile management institute
 - (D) Scrum management institute
25. In an Agile project, who is most likely to make decisions regarding scope trade-offs?
- (A) Sponsor
 - (B) Team
 - (C) Scrummaster
 - (D) Product owner/customer
26. Which of the following is used to apply iterations to an Agile project?
- (A) Iteration 0 (zero)
 - (B) Phases
 - (C) Phase gates
 - (D) Process groups
27. What best describes the information expected from each team member during the daily stand-up?
- (A) Work status and roadblocks
 - (B) Work status and concerns
 - (C) Work status and new information the team should know
 - (D) Work status
28. Which of the following is generally considered the opposite of an Agile approach?
- (A) Scrum
 - (B) XP
 - (C) Waterfall
 - (D) Kanban
29. Which of the following is an alternate name for the team space?
- (A) Collaboration area
 - (B) War room
 - (C) Planning area
 - (D) Arena

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30. Dak is the scrummaster and Amari is the product owner on a web app called Blue Star. They are having a disagreement on who should add items to the product backlog and who should do estimates for items on the product backlog. Which of the following statements is MOST correct?
- (A) The product owner will do estimates and the scrummaster will add items
 - (B) The product owner will add items and the scrummaster will do the estimates
 - (C) The product owner will typically add items, but anyone can and the team will do the estimates
 - (D) The scrummaster will add items and the team will do estimates

8.11. Agile and Hybrid Management Answers for Tests and Exercises

8.11.1. Agile and Hybrid Management Practice Test Answers

We recommend that you download answer sheets from the Crosswind website, so you can practice the test as many times as you like.

1. Of the following, which best describes the manner in which the project charter can be used?

- (A) To determine the high-level scope
- (B) To authorize the project
- (C) To create the budget

Correct Answer: (D) All of the answers

Explanation: The project charter describes the project scope, is used to authorize the project, and contains the charge and funding codes needed for the budget. The project charter is used for both a traditional and an Agile project. [Crosswind Manual 9.6; No *PMBOK® Guide* Reference]

2. Jesse is a scrummaster on a product called New Blue. He is using scrum as a development approach with two week sprints. Which of the following would he use to show the total points still to do in the current sprint?

Correct Answer: (D) Burndown chart

Explanation: The burndown chart shows the points still remaining to do, and done points in a sprint so far. The sprint backlog lists all items in the current sprint that the team commits to doing. The product backlog lists all current items that the product owner potentially wants the team to complete. The burnup chart shows points total done across all sprints. [Crosswind Manual 8.5.8; No *PMBOK® Guide* Reference]

3. Which of the following describes the purpose of a story map?

Correct Answer: (C) To depict the manner in which the user stories fit to perform a releasable product

Explanation: The purpose of a story map is to depict the manner in which the user stories fit to perform a releasable product. The other answers represent steps taken to create the story map. [Crosswind Manual 8.5.17; No *PMBOK® Guide* Reference]

4. A sprint is the equivalent of...

Correct Answer: (B) An iteration

Explanation: A sprint, a timeboxed duration of project work, is the equivalent of an iteration. A phase is a term associated with a traditional project. A release consists of an organized group of sprints/iterations. A burn-down chart is the visual representation of the rate at which work is being completed. [Crosswind Manual 8.3; No *PMBOK® Guide* Reference]

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5. Which of the following is the definition of done in relation to a user story?

Correct Answer: (D) The functionality expressed in the user story is ready to deploy

Explanation: The definition of done, in relation to a user story, is that the functionality expressed in the user story is ready to deploy. The other answers are items likely to be included in a checklist created to ensure that all members of the team understand the definition of done. [Crosswind Manual 8.5.18; No *PMBOK® Guide* Reference]

6. What is the primary responsibility of the scrummaster?

Correct Answer: (A) To ensure adherence to Agile principles

Explanation: The primary responsibility of the ScrumMaster is to ensure that Agile principles are followed by the development team. Agile projects typically embrace scope changes, adjusting schedule and budget in accordance with the wishes of the product owner/customer. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

7. What does a burnup chart depict?

Correct Answer: (C) Number of story points completed for the project

Explanation: The burnup chart depicts the number of story points that have been completed for the project. The other answers are distracters. [Crosswind Manual 8.5.9; No *PMBOK® Guide* Reference]

8. Walter is a product owner on a product called New Blue. He is using scrum as a development approach with two week sprints. Which of the following would he and Jesse the scrummaster use to show the total points done so far and still to do?

Correct Answer: (D) Burndown chart

Explanation: The burndown chart shows the points still remaining to do, and done points in a sprint so far. The sprint backlog lists all items in the current sprint that the team commits to doing. The product backlog lists all current items that the product owner potentially wants the team to complete. The burnup chart shows points total done across all sprints. [Crosswind Manual 8.5.8; No *PMBOK® Guide* Reference]

9. Of the following, which best describes the documentation for an Agile project?

Correct Answer: (C) An appropriate, but not excessive, level of documentation

Explanation: A common misconception regarding documentation for Agile projects is that documentation should be eliminated. Documentation for an Agile project is appropriately minimized. [Crosswind Manual 8.1.1; No *PMBOK® Guide* Reference]

10. Verification and validation occur at a number of levels. Which of the following levels only occurs during verification?

Correct Answer: (C) Task level

Explanation: Verification occurs at the task level, the user story level, the iteration level, the release level, and the completed product level; validation occurs at the user story level, the iteration level, the release level, and the completed product level. [Crosswind Manual 8.5.22; No *PMBOK® Guide* Reference]

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11. The term for an organized group of sprints is...

Correct Answer: (C) A release

Explanation: A release consists of an organized group of sprints/iterations. A sprint, a timeboxed duration of project work, is the Scrum equivalent of an iteration. A phase is a term associated with a traditional project. A burn-down chart is the visual representation of the rate at which work is being completed. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

12. Which prioritization method designates each feature as a threshold, linear, or exciter and delighter?

Correct Answer: (A) Kano

Explanation: The Kano method designates each feature as a threshold, linear, or exciter and delighter. The MoSCoW method designates each feature as a must have, should have, could have, or would have. The other answers are distracters. [Crosswind Manual 8.5.30; No *PMBOK® Guide* Reference]

13. Walter is a product owner on a product called New Blue. He is using scrum as a development approach with two-week sprints. How will Jesse and the team estimate their work?

Correct Answer: (D) Story Points

Explanation: In agile projects, it's common to use story points to estimate work. For example: 1, 2, 3, 5, 8, 13, 20, 40, 100 are modified Fibonacci numbers. Estimates of duration or hours can cause issues with ideal vs. real time. Dollars are generally tracked outside of the sprint. [Crosswind Manual 8.5.13; No *PMBOK® Guide* Reference]

14. eXtreme Programming (XP) roles consist of...

Correct Answer: (C) Coach, customer, and programmer

Explanation: The roles used in eXtreme Programming (XP) are coach, customer, and programmer. Some XP projects include a tracker and designated tester, but those roles may fall to the programmer. [Crosswind Manual 8.3; No *PMBOK® Guide* Reference]

15. Which of the following best describes a good user story?

Correct Answer: (C) Independent, negotiable, valuable, estimable, small, and testable

Explanation: The characteristics that describe a good user story are represented by the acronym INVEST: independent, negotiable, valuable, estimable, small, and testable. The other answers are distracters. [Crosswind Manual 8.5.18; No *PMBOK® Guide* Reference]

16. The best description of the approach utilized for a lean-agile project is...

Correct Answer: (C) Maximize work not yet done

Explanation: The approach utilized for Lean-Agile projects is maximization of work not yet done. That means that you should do only what needs to be done when it needs to be done. [Crosswind Manual 8.3.2; No *PMBOK® Guide* Reference]

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17. Which tool can be used to evaluate what could potentially cause defects in a project or process?

Correct Answer: (A) Ishikawa diagram

Explanation: An Ishikawa diagram can be used to evaluate what could potentially cause defects in a project or process. A cumulative flow diagram charts the progress of each significant product feature. The effect diagram is a distracter. The Kanban board is used to track workflow. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

18. Who is primarily responsible for updating the product backlog?

Correct Answer: (A) The product owner

Explanation: The product owner is responsible for managing the backlog. The team is responsible for completing sprint work. The ScrumMaster is responsible for maintaining Scrum principles in the project environment. The project manager is responsible for delivering project results in a traditional project environment. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

19. Jessie is a scrummaster on a New Blue marketing campaign project. What will Jessie and his team use as a reference to the work in the current iteration?

Correct Answer: (A) Sprint Backlog

Explanation: The sprint backlog lists all items in the current sprint that the team commits to doing. The product backlog lists all current items that the product owner potentially wants the team to complete. The burnup chart shows points total done across all sprints. The burndown chart shows the points still remaining to do, and done points in a sprint so far. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

20. Who is responsible for updating the Kanban board?

Correct Answer: (C) The team

Explanation: A Kanban board can be used to track progress on work pieces. As work moves from one stage to another the team is responsible for updating the board. The ScrumMaster maintains Scrum principles. The change manager and test department are distracters. [Crosswind Manual 8.5.6; No *PMBOK® Guide* Reference]

21. What unit of measurement depicts the size of a user story in relation to the other user stories in the project?

Correct Answer: (C) Story point

Explanation: The story point is used to depict the size of a user story relative to the size of the other user stories in the project. The other answers are distracters. [Crosswind Manual 8.5.13; No *PMBOK® Guide* Reference]

22. What is generally thought of as the most popular Agile framework?

Correct Answer: (D) Scrum

Explanation: Scrum is generally considered the most popular Agile framework. It utilizes sprints and daily scrums to accomplish work in the backlog. [Crosswind Manual 8.3; No *PMBOK® Guide* Reference]

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23. Walter and Jesse are having issues on the product at the sprint review meeting. Walter, the product owner is saying that the iteration doesn't do what is expected. Jesse, the scrummaster says it does what is expected. What is the core problem most likely here?

Correct Answer: (C) No clear definition of done

Explanation: The issue appears to be a lack of clear definition of done. Definition of done is a very clear, non-ambiguous description of what the product iteration should look, work and feel like when done. All the other answers would be offset, or could be worked through with a clear definition of done. [Crosswind Manual 8.5.20; No *PMBOK® Guide* Reference]

24. What organization was responsible for the creation of the Agile Manifesto?

Correct Answer: (A) Agile alliance

Explanation: The Agile Alliance of 17 people created the Agile Manifesto in 2001. The Scrum Alliance is a Scrum organization. The other two answers are distracters. [Crosswind Manual 8.1; No *PMBOK® Guide* Reference]

25. In an Agile project, who is most likely to make decisions regarding scope trade-offs?

Correct Answer: (D) Product owner/customer

Explanation: In an Agile project, the product owner/customer typically makes decisions regarding scope trade-offs because that role is responsible for the user story backlog. The other answers are distracters. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

26. Which of the following is used to apply iterations to an Agile project?

Correct Answer: (A) Iteration 0 (zero)

Explanation: Iteration 0 occurs before the first project iteration and is used for planning. The other answers are distracters. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

27. What best describes the information expected from each team member during the daily stand-up?

Correct Answer: (C) Work status and new information the team should know

Explanation: During the daily stand-up, each team member is expected to provide work status information and any new information the team should know. The other answers are incomplete. [Crosswind Manual 8.3.1; No *PMBOK® Guide* Reference]

28. Which of the following is generally considered the opposite of an Agile approach?

Correct Answer: (C) Waterfall

Explanation: Scrum and XP are Agile frameworks and Kanban is an approach used with Agile frameworks. Waterfall is a traditional approach and is considered the opposite of Agile. [Crosswind Manual Chapter 8 Introduction; No *PMBOK® Guide* Reference]

29. Which of the following is an alternate name for the team space?

Correct Answer: (B) War room

Explanation: War room is another name for the team space. The other answers are distracters. [Crosswind Manual 8.5.1; No *PMBOK® Guide* Reference]

30. Dak is the scrummaster and Amari is the product owner on a web app called Blue Star. They are having a disagreement on who should add items to the product backlog and who should do estimates for items on the product backlog. Which of the following statements is MOST correct?

Correct Answer: (C) The product owner will typically add items, but anyone can and the team will do the estimates

Explanation: The product owner will start building the product backlog and likely add most items to it. Technically, anyone can add items to a product backlog. The team would do the points estimates for the product backlog items. [Crosswind Manual Chapter 8 Glossary; No *PMBOK® Guide* Reference]

