Crosswind
Learning

Crosswind Success Series:
PMP® Exam Bootcamp Manual

www.crosswindpm.com

Tony Johnson, MBA, CAPM, PMP, PgMP, PfMP

Control Scope (Continued)		
Key Outputs	Work Performance Information	Work performance information includes supplemental and contextualized information regarding the performance of the project scope in comparison to the scope baseline. The information can contain important facets of scope control such as scope variances and their causes, how those variances impact cost and schedule, and a prognosis for future scope performance.
	Change Requests	Change requests are requests for modification that have not yet been approved through the formal change control process. Evaluation of project performance may engender a change request to the cost and schedule baselines as well as other components of the project management plan.
	Scope Baseline	The scope baseline is the authorized version of the scope statement, WBS (to the level of work package with individual identification codes), and WBS dictionary. The scope baseline is subject to change control and is compared to actual results to ascertain if any changes, corrective actions, or precautionary actions are required.

Situational Question and Real World Application
Failure to effectively perform the Control Scope process can result in the team working on an unapproved change request. If the request is later rejected or modified, additional work will result. The additional work may lead to cost or schedule variances.

10.7.   Project Scope Management Formulas and Variables

There are no formulas for this chapter.

10.8. Project Scope Management Terminology

Term	Description
Acceptance	The process of formally receiving the work of the project, which should be complete and fulfill the objectives of the project
Acceptance Criteria	The contingencies that must be satisfied prior to acceptance of work
Accepted Deliverables	Products, results or capabilities that have been accepted by the customer as meeting requirements
Affinity Diagram	A tool used to gather ideas and organize them into groupings so they can be reviewed and analyzed; typically used for ideas generated from brainstorming sessions
Alternative Analysis	A technique used to evaluate project execution approaches
Alternatives Generation	A technique used to create as many project execution approaches as possible
Analogy Approach	A methodology for establishing values for the current project based on those from a previous project with similar characteristics; values obtained from this method include activity duration, required resources, and estimated costs
Brainstorming	A creative technique used to gather a large amount of information from team members and/or subject matter experts; applicable to ideas, risk identification, and solutions
Collect Requirements	The process of arranging for, determining, and documenting the needs of the stakeholders to align with project objectives
Context Diagrams	A graphical representation of the scope of a business system that includes processes, equipment, and computer systems and indicates the manner in which people and other systems interact with the business system
Control Scope	The process of observing project status and scope in order to administer scope baseline revisions
Create WBS	The process of breaking down the work of the project into minimal components for more effective management
Decomposition	The process of breaking down the work of the project into smaller, more controllable components
Define Scope	The process of developing the project scope statement, the document that details the expected results of the project
Delphi Technique	A technique used to gain concurrence from a group of experts about a specific issue; the technique is effected by using a questionnaire to solicit ideas from the experts, having the ideas summarized, having the experts add comments to the summaries, and repeating the process until a consensus is reached
Diagramming Technique	A method that indicates the logical links between data
Facilitated Workshop	A focused session involving cross-functional stakeholders and a designated leader that is conducted to achieve a specific goal, such as the creation of project requirements
Focus Group	A focused session involving prequalified stakeholders, subject matter experts (SMEs), and a designated leader that is conducted to determine expectations and views regarding a potential product, service, or result
Group Creativity Technique	A focused session involving stakeholders and a designated leader that is conducted to develop ideas

PMI, PMP, and PMBOK are registered marks of the Project Management Institute, Inc.

336 © 2008-2020 Crosswind Learning, www.crosswindpm.com

Term	Description
Group Decision-Making Technique	A focused session involving stakeholders and a designated leader that is conducted to review decision methods available for use with specific activities such as generating, classifying, and prioritizing requirements
Interviews	A focused session involving individual stakeholders and a designated leader that is conducted to elicit specific information
Management by Objectives (MBO)	An administration method that aligns, or realigns, projects to strategic objectives
Mind-mapping	A technique used to integrate ideas created through individual brainstorming sessions into a single map in order to highlight similarities and differences in understanding and generate new ideas
Nominal Group Technique	A technique, effected by a voting process, that is used to prioritize ideas by utility for further brainstorming
Plan Scope Management	The process of creating a document that designates how the project scope will be defined, validated, and controlled; the document may also offer guidance for requirements and include the scope statement, the work breakdown structure (WBS), and the scope baseline
Planning Package	A WBS component that has no detailed scheduled activities even though it is known to have work content
Plurality	The votes of the largest block in a group when a majority is not required, typically used to denote agreement with a decision
Product	An output of the project that is quantifiable and can be described as material and goods
Product Analysis	An approach used to convert a business-defined product into project deliverables; typically involves asking business representatives questions about the intended uses and characteristics of the product
Product Life Cycle	The phases of product development, typically defined as conception through delivery, expansion, maturity, and disengagement
Product Scope	The features and functions of a project's product, service, or result
Product Scope Description	The documented depiction of the features and functions of a project's product, service, or result
Project Scope	The work executed to deliver a product, service, or result that satisfies the specified features and functions
Project Scope Management	The processes required to ensure that all the work needed to complete the project, and only that work, is included in the project
Project Scope Statement	The document that describes the major deliverables, assumptions, constraints, and scope of the project
Prototype	A working model of the product created to obtain detailed stakeholder feedback
Questionnaires	Written surveys designed to quickly gather information from a large number of respondents
Requirement	A condition or capability that must be made available through a product, service, or result in order to fulfill a contract or formal specification
Requirements Documentation	A document that describes requirements for creating a product or a feature of the product
Requirements Management Plan	The document, part of the project or program management plan, used to describe the evaluation, recording, and administration of project requirements
Requirements Traceability Matrix	A graphical representation that illustrates the relationships between the origins of the product requirements to the deliverables that fulfill the requirements
Scope	The products, services, and results expected to be provided by the project

Chapter 10
Scope

Term	Description
Scope Baseline	The authorized scope statement, WBS, and WBS dictionary that contain only those modifications authorized through a formal change control process; used as a basis for comparison
Scope Change	A change to the product or product scope accompanied by the appropriate modifications to the budget or schedule
Scope Creep	A change to the product or product scope not accompanied by the appropriate modifications to the budget or schedule
Scope Management Plan	The document, part of the project or program management plan, used to define the manner in which the project scope will be delineated, elaborated, monitored, controlled, and authenticated
Statement of Work (SOW)	A detailed description of the products, services, or results expected from a project or other initiative
Unanimity	A decision with which all group members concurred
User	The person, division, or company that will be the user or owner of the product when the project is complete
Validate Scope	The process in which the customer or sponsor reviews and accepts project deliverables as being complete and correct in accordance with the requirements
Validation	The process of determining that the results of the project are in compliance with requirements imposed by the customer and appropriate stakeholders and typically involving acceptance by them
WBS Dictionary	A document that itemizes deliverable, activity, and scheduling information for each WBS component
Work Breakdown Structure (WBS)	A decomposition of the work of the project
Work Breakdown Structure Component	Any unit of work defined in the WBS
Work Package	The smallest level of WBS work for which cost and schedule can be assessed and administered

The source for the above definitions is the Glossary of the Project Management Institute,
A Guide to the Project Management Body of Knowledge, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017

10.9.   Project Scope Management Tests and Exercises

10.9.1.   Project Scope Management Practice Test

Answers are in section 10.10.1.

1. What is the most significant benefit of having the project management team's assistance in creating the work breakdown structure?

    (A) It establishes the project manager's authority
    (B) It helps generate a more accurate budget
    (C) It helps attain buy-in from the team doing the work
    (D) It helps generate a more accurate schedule

2. The approval of the project charter has been delayed for weeks due to market fluctuation. Upon approval, you are assigned as the project manager and senior management wants you to begin the planning process group immediately. When will you schedule validate scope?

    (A) At the end of every phase on the project
    (B) After the sponsor defines what they want the project to create
    (C) When the project management plan is awaiting sign-off
    (D) When the work of the project is done

3. During what processes is work decomposition performed?

    (A) Create WBS and define activities
    (B) Define scope and create WBS
    (C) Define activities and control schedule
    (D) Create WBS and control scope

4. You are a project manager at an application company. In the past, projects have been delayed and encountered many changes. Management has long been in support of improving the timeliness and results of work. The company has decided to try scrum for the next application update. Which of the following documents will likely be changed first?

    (A) Scope management plan
    (B) Project scope statement
    (C) Statement of work
    (D) Product backlog

5. Which of the following is a heuristic for WBS decomposition?

(A) Breaking down work until it is done by a single resource
(B) Using an organizational structure appearance
(C) Creating a WBS in which the summary activities are equal to the detail underneath
(D) Breaking work down to a realistic level (work packages being the lowest level)

6. The project manager is working with the customer to gain formal acceptance of the project deliverables. The customer is saying that three of the deliverables are not meeting project goals and are unusable in their present form. The team discovers this was caused by an inconsistency between the requirements, scope statement and WBS. Which process will the team use to align these documents?

(A) Analyze scope
(B) Gather requirements
(C) Control scope
(D) Validate scope

7. In comparing waterfall project management and scrum, which of the following best describes what documents would most likely hold all known project needs?

(A) Scrum uses a product backlog and a waterfall approach uses a work breakdown structure
(B) Scrum uses a sprint backlog and a waterfall approach uses a work breakdown structure
(C) Scrum uses a product backlog and a waterfall approach uses a statement of work
(D) Scrum uses a product backlog item and a waterfall approach uses a work breakdown schedule

8. Due to the complexity of the project to design touchscreen displays for use on mobile workstation tablets, a number of breakdown structures will be used. Of the following breakdown structures and descriptions, which is correct?

(A) Organizational breakdown structure, which graphically illustrates how project management is structured to accomplish project activities
(B) Risk breakdown structure, which lists risks that are grouped by probability of occurrence and listed by severity of impact
(C) Resource breakdown structure, which graphically illustrates the availability of resources
(D) Bill of materials, which lists the components, assemblies, and sub-assemblies used to build the product

9.   As the project manager establishes the scope baseline, which of the following best describes what she will create or reference?

(A) Requirements, scope statement, and WBS
(B) WBS and WBS dictionary
(C) Scope statement, WBS, and WBS dictionary
(D) Requirements, scope statement, and WBS dictionary

10.   The project to consolidate the accounting departments of two recently merged hospitals is extremely complex. The project manager and his team are keenly aware of the importance of properly decomposing the work of the project. If they decompose the work beyond work packages, what is the likely result?

(A) The application of rolling wave planning
(B) The creation of activity lists
(C) A variance in the scope definition
(D) The creation of the WBS dictionary

11.   You are a project manager for an ERP application rollout at your company. Your company is new to this type of project. There are five different business groups involved and scope validation is expected to be extremely complex. What document is the team most likely to use when testing?

(A) Requirements traceability matrix
(B) Project scope statement
(C) Work breakdown structure
(D) Work breakdown structure dictionary

12.   The medical billing system project has entered closure. As the project manager and the team prepare for closure, they are told that validate scope will be very important to the success of the project. Of the following, which best describes the importance of validate scope?

(A) Validate scope should have been done earlier in the project and since it wasn't done then, it's important to complete it before the project is complete
(B) Validate scope authenticates that the sponsor signed the project scope statement at the beginning of planning
(C) Validate scope is the process of comparing what the project created to the project scope statement, product description, and anything else that helps ensure that the results of the project will function as intended
(D) Validate scope is used to confirm that the project team understands the scope of the project

13. The project team is creating the WBS for their stadium restoration project. Which of the following best describes the layers that would likely be included?

    (A) Control accounts, planning packages, work packages
    (B) Control accounts, planning packages, work packages, activity lists
    (C) Activity packages, planning packages, work packages
    (D) Control accounts, planning packages, work packages, milestone packages

14. The project manager is working with the business analyst to create requirements for the upgrade to the security platform of the company website. Which of the following best describes the order in which the processes will be created?

    (A) Business requirements, solution requirements, stakeholder requirements, transition requirements
    (B) Stakeholder requirements, business requirements, solution requirements, transition requirements
    (C) Business requirements, stakeholder requirements, solution requirements, transition requirements
    (D) Transition requirements, business requirements, stakeholder requirements, solution requirements

15. You are the project manager for a building restoration project. You are creating the project scope statement. Which of the following documents do you need to review to create this document?

    (A) Requirements documentation
    (B) Project exclusions
    (C) Work breakdown structure
    (D) Activity lists

16. You are the project manager for a TV studio rebuilding project. You are creating the project scope statement. Which of the following documents do you create next?

    (A) Requirements documentation
    (B) Project exclusions
    (C) Work breakdown structure
    (D) Activity lists

17. All the following are true about a work breakdown structure (WBS) except…

    (A) The project management team and the project manager should be involved in creating it
    (B) It will resemble an organizational chart in appearance when complete
    (C) Activity sequencing of WBS components requires parallel or concurrent dependencies
    (D) It is a decomposition of the work of the project

18. The project manager is in the process of creating the scope statement. There are a number of items that can exist both in the requirements and scope statement. Which of the following items are most likely to be only in the scope statement?

(A) The systems involved in the project
(B) Items to be excluded from the project
(C) Items that are required for the project
(D) The areas of the company impacted by the project

19. Which of the following requirement types can contain both functional and non-functional requirements?

(A) Stakeholder requirements
(B) Solution requirements
(C) Transition requirements
(D) Business requirements

20. Project A is two months long, has three stakeholders, and has completed the planning process group. Project B is 12 months long, has 10 stakeholders, and is in the monitoring and controlling process group. Project C is 12 months long, has three stakeholders, and is in the planning process group. Which project is most likely to experience scope creep?

(A) Project A
(B) Project B
(C) Project C
(D) Not enough information

21. The project to create a new database system is approximately halfway complete when a senior manager says that a major change needs to occur with the scope of the project or the system will not function in his department when it's rolled out. He further explains this change is going to delay the anticipated finish date of the project. After he explains the details of the proposed change in scope, what do you do first?

(A) Let him know what the delay to the project will be
(B) Implement change control to incorporate the new work
(C) Tell him "no" because it will change the finish date of the project
(D) Meet with the team to determine the impact

22. Which of the following is the tool or technique the project manager will use in the process of creating a WBS?

(A) Work packages
(B) Decomposition
(C) Stakeholder management
(D) WBS dictionary

23. A project manager is beginning the collect requirements process. Which of the following is the most important activity he should perform?

(A) Create a list of preferred vendors for outsourcing
(B) Create the work breakdown structure (WBS)
(C) Create the project scope statement in sufficient detail to enable further planning
(D) Verify that all key stakeholders have provided their input

24. The validate scope process has been started at the end of phase 3 of the project. The main deliverable was sent to the customer. Three weeks have passed and the customer acts as if the deliverable was never received. Which of the following is the best action to take?

(A) Stop work on the project until the customer acknowledges and approves the deliverable
(B) Ask the sponsor for assistance
(C) Document the issue in the issue log
(D) Ask the customer's supervisor why the deliverable has not been acknowledged

25. You are the project manager in the testing phase of a project. You are working with your customer doing the validate scope process and testing project deliverables. Which process will provide the deliverables you are testing?

(A) Control quality
(B) Direct and manage project work
(C) Control scope
(D) Create WBS

26. Which of the following tools and techniques are not used by the project manager during the process of creating a scope statement?

(A) Product analysis
(B) Expert judgment
(C) Facilitation
(D) Requirements documentation

27. Dirk, the project manager, is leading the team during the execution of the project management plan. His testing manager, Sarah, has just completed deliverable testing, which resulted in deliverables that met all requirements. What have Dirk and Sarah created and what is the next process the deliverables will undergo?

(A) Quality Audits and Control Quality
(B) Control Quality and Change Requests
(C) Validate Scope and Close Project or Phase
(D) Verified Deliverables and Validate Scope

Chapter 10 Scope

28. The product owner is working with the development team to finalize items in the current iteration. The product owner has just changed priority on a few items in the backlog. The approach being used is most likely?

(A) Change-driven
(B) Plan driven
(C) Gantt Chart
(D) Program Management

29. Which of the following are created as a result of validating project scope?

(A) Accepted deliverables
(B) Change requests
(C) Approved change requests
(D) Accepted deliverables and change requests

30. You are a project manager for an agile project. You are working with the product owner to identify all the details of the product to be created. Which of the following will the product owner use to document their requirements?

(A) Project scope statement
(B) Product backlog
(C) Sprint backlog
(D) Requirements documentation

10.10. Project Scope Management Answers for Tests and Exercises

10.10.1. Project Scope 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. What is the most significant benefit of having the project management team's assistance in creating the work breakdown structure?

    Correct Answer: (C) It helps attain buy-in from the team doing the work
    Explanation: Having the project team assist in the creation of the WBS has a number of positive benefits. The most positive benefit is obtaining buy-in from the people doing the work. Though the WBS is reviewed later in the planning process group to create the budget and schedule, it is the team's buy-in (and experience) that drives the accuracy of all future documents. As a minor point, schedule and budget are equally important, and thus neither answer by itself could be the "best" answer. Authority comes from the project charter. [Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

2. The approval of the project charter has been delayed for weeks due to market fluctuation. Upon approval, you are assigned as the project manager and senior management wants you to begin the planning process group immediately. When will you schedule validate scope?

    Correct Answer: (A) At the end of every phase on the project
    Explanation: It is better to schedule scope validation more frequently on a project instead of simply waiting until the end. Such validation makes it possible to detect issues early in the project, facilitating adjustment of work as the project evolves. Scheduling the process after the sponsors define what they want the project to create is too early in the project to do scope validation. [Crosswind Manual 10.5; *PMBOK® Guide* 5.5]

3. During what processes is work decomposition performed?

    Correct Answer: (A) Creating the WBS and define activities
    Explanation: The work of the project is decomposed in the Create WBS process to establish work packages and in the Define Activities process (Schedule knowledge area) to create activity lists. No other process involves the systematic break down of work elements. [Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

4. You are a project manager at an application company. In the past, projects have been delayed and encountered many changes. Management has long been in support of improving the timeliness and results of work. The company has decided to try scrum for the next application update. Which of the following documents will likely be changed first?

    Correct Answer: (A) Scope management plan
    Explanation: The scope management plan will be structured based on the development approach. As a result, that document would be updated to reflect a scrum approach. The project scope statement and product backlog, if used, would follow the scope management plan. Statement of work is a distracter. [Crosswind Manual 10.1, *PMBOK® Guide* 5.1]

5. Which of the following is a heuristic for WBS decomposition?

Correct Answer: (D) Breaking work down to a realistic level (work packages being the lowest level)
Explanation: A general rule of thumb is to break down the work of the project into work packages. Breaking work packages or activities down to a single resource assigned is not always practical. Creating a WBS where the summary activities are equal to the detail underneath is a characteristic of a WBS. Using an organizational structure appearance is a distracter. [Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

6. The project manager is working with the customer to gain formal acceptance of the project deliverables. The customer is saying that three of the deliverables are not meeting project goals and are unusable in their present form. The team discovers this was caused by an inconsistency between the requirements, scope statement and WBS. Which process will the team use to align these documents?

Correct Answer: (C) Control scope
Explanation: Control Scope is used to review, then approve or reject, project scope change requests. A change request would be created to align the inconsistencies with the requirements, scope statement, and WBS. Analyze Scope and Gather Requirements are distracters. Validate Scope determines that project deliverables have fulfilled acceptance criteria and have received formal sign-off from the authorized party or parties. [Crosswind Manual 10.6; *PMBOK® Guide* 5.6]

7. In comparing waterfall project management and scrum, which of the following best describes what documents would most likely hold all known project needs?

Correct Answer: (A) Scrum uses a product backlog and a waterfall approach uses a work breakdown structure
Explanation: Scrum uses a variety of items to show work, but the document that contains everything currently wanted is the product backlog. Each item is a product backlog item (PBI). The sprint backlog is a subset of the product backlog. Statement of work (SOW) is a distracter. [Crosswind Manual 8.2, No *PMBOK® Guide* Reference]

8. Due to the complexity of the project to design touchscreen displays for use on mobile workstation tablets, a number of breakdown structures will be used. Of the following breakdown structures and descriptions, which is correct?

Correct Answer: (D) Bill of materials, which lists the components, assemblies, and sub-assemblies used to build the product
Explanation: The bill of materials lists the components, assemblies, and sub-assemblies used to build the product or service of the project. The organizational breakdown structure shows how the project organization is structured to accomplish project activities. The risk breakdown structure shows the risks that can potentially occur on a project, broken down by risk category. The resource breakdown structure shows the type of resources used on a project. [Crosswind Manual 10.4.5; *PMBOK® Guide* 9.1.2.2]

9. As the project manager establishes the scope baseline, which of the following best describes what she will create or reference?

Correct Answer: (C) Scope statement, WBS, and WBS dictionary
Explanation: The scope baseline consists of the scope statement, WBS, and WBS dictionary.
[Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

10. The project to consolidate the accounting departments of two recently merged hospitals is extremely complex. The project manager and his team are keenly aware of the importance of properly decomposing the work of the project. If they decompose the work beyond work packages, what is the likely result?

Correct Answer: (B) The creation of activity lists
Explanation: If they decompose the work beyond work packages, the creation of activity lists is the likely result. This occurs in the Define Activities process in the Schedule knowledge area. [Crosswind Manual 11.2; *PMBOK® Guide* 6.2]

11. You are a project manager for an ERP application rollout at your company. Your company is new to this type of project. There are five different business groups involved and scope validation is expected to be extremely complex. What document is the team most likely to use when testing?

Correct Answer: (A) Requirements traceability matrix
Explanation: In setting up testing, especially when it's a complex situation, a requirements traceability matrix helps align stakeholders, requirements, and test cases. The project scope statement describes what the project should create. The work breakdown structure shows a decomposition of the entire project work. The work breakdown structure dictionary contains the various attributes of each piece of the work breakdown structure. [Crosswind Manual 10.2.2, *PMBOK® Guide* 5.2.3]

12. The medical billing system project has entered closure. As the project manager and the team prepare for closure, they are told that validate scope will be very important to the success of the project. Of the following, which best describes the importance of validate scope?

Correct Answer: (C) Validate scope is the process of comparing what the project created to the project scope statement, product description, and anything else that helps ensure that the results of the project will function as intended
Explanation: Validate Scope is used to compare the work the project created to that which was planned to build, and to ensure that the results of the project will function as intended. It can include using the project management plan, requirements documentation, and validated deliverables. If the validation process is satisfactory, the work of the project is typically viewed as acceptable. [Crosswind Manual 10.5; *PMBOK® Guide* 5.5]

13. The project team is creating the WBS for their stadium restoration project. Which of the following best describes the layers that would likely be included?

Correct Answer: (A) Control accounts, planning packages, work packages
Explanation: The three layers that would likely be included in various levels of decomposition are the control account, planning package, and work package. The activity list and milestone list are created in the Define Activity process. The activity package and milestone package are distracters (they do not exist). [Crosswind Manual 10.4.1; *PMBOK® Guide* 5.4.3.1]

14. The project manager is working with the business analyst to create requirements for the upgrade to the security platform of the company website. Which of the following best describes the order in which the processes will be created?

Correct Answer: (C) Business requirements, stakeholder requirements, solution requirements, transition requirements
Explanation: The order in which requirements are created is: business requirements, stakeholder requirements, solution requirements, and then transition requirements. Business requirements define business needs; stakeholder requirements align with specific stakeholder needs; solution requirements are created from the stakeholder requirements; and transition requirements are established to move to the new product, service, or result from the project to a business environment. [Crosswind Manual 10.2.1 *PMBOK® Guide* 5.2.3.1]

15. You are the project manager for a building restoration project. You are creating the project scope statement. Which of the following documents do you need to review to create this document?

Correct Answer: (A) Requirements documentation
Explanation: Collect requirements is the process that precedes the define scope process. Collect requirements creates requirements documentation and define scope creates the project scope statement. The create work breakdown structure follows the define scope process. Activity lists are created with the define activities process, which is part of the schedule creation. [Crosswind Manual 10.2, *PMBOK® Guide* 5.2]

16. You are the project manager for a TV studio rebuilding project. You are creating the project scope statement. Which of the following documents do you create next?

Correct Answer: (C) Work breakdown structure
Explanation: The create work breakdown structure follows the define scope process. Collect requirements is the process that precedes the define scope process. Collect requirements creates requirements documentation and define scope creates the project scope statement. Activity lists are created with the define activities process, which is part of the schedule creation. [Crosswind Manual 10.4, *PMBOK® Guide* 5.4]

17. All the following are true about a work breakdown structure (WBS) except…

Correct Answer: (C) Activity sequencing of WBS components requires parallel or concurrent dependencies
Explanation: Answer C is a distracter because it makes no logical sense. The other answers are characteristics of a work breakdown structure (WBS). [Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

18.   The project manager is in the process of creating the scope statement. There are a number of items that can exist both in the requirements and scope statement. Which of the following items are most likely to be only in the scope statement?

Correct Answer: (B) Items to be excluded from the project
Explanation: There can be some overlap between requirements and the scope statement. The scope statement is typically a summary of intent: what the project will do, include, and exclude. The requirements typically references what the project needs, should do, and should accomplish, with a focus on systems and areas of the company. [Crosswind Manual 10.3.1; *PMBOK® Guide* 5.3.3.1]

19.   Which of the following requirement types can contain both functional and non-functional requirements?

Correct Answer: (B) Solution requirements
Explanation: Solution requirements can be both functional and non-functional. The other requirements (business, stakeholder, and transition) do not differentiate between functional and non-functional. [Crosswind Manual 10.2.1; *PMBOK® Guide* 5.2.3.1]

20.   Project A is two months long, has three stakeholders, and has completed the planning process group. Project B is 12 months long, has 10 stakeholders, and is in the monitoring and controlling process group. Project C is 12 months long, has three stakeholders, and is in the planning process group. Which project is most likely to experience scope creep?

Correct Answer: (B) Project B
Explanation: Project B is tied for the longest project but has the most stakeholders. The longer the project and the greater the number of stakeholders involved, the more an environment is prone to scope creep. The process group is a distracter. [Crosswind Manual 6.1; *PMBOK® Guide* Chapter 13 Introduction]

21.   The project to create a new database system is approximately halfway complete when a senior manager says that a major change needs to occur with the scope of the project or the system will not function in his department when it's rolled out. He further explains this change is going to delay the anticipated finish date of the project. After he explains the details of the proposed change in scope, what do you do first?

Correct Answer: (D) Meet with the team to determine the impact
Explanation: Meet with the team to determine the impact to the project plus discovery of any solutions and any violation of the finish date that was defined in the project charter. Then pass solution options to senior management and the sponsor so they can select the best one. You should never tell a senior manager or sponsor "no." Instead, you should let them know the options and impact associated with the request. You cannot explain a project delay until the team helps determine what the project impacts are. Change control of this size is not likely to be implemented by a project manager, but more likely by the senior management or sponsor. [Crosswind Manual 6.1.2; No *PMBOK® Guide* Reference]

22. Which of the following is the tool or technique the project manager will use in the process of creating a WBS?

Correct Answer: (B) Decomposition
Explanation: The tool or technique used during the Create WBS process is decomposition. Work packages are the lowest level of decomposition within the WBS. The WBS dictionary is one of the outputs of the Create WBS process since it is part of the scope baseline. Stakeholder management is a distracter. [Crosswind Manual 10.4; *PMBOK® Guide* 5.4]

23. A project manager is beginning the collect requirements process. Which of the following is the most important activity he should perform?

Correct Answer: (D) Verify that all key stakeholders have provided their input
Explanation: Verifying that all key stakeholders have provided their input is the most important item. If this doesn't occur, the project could be delayed or derailed. The WBS isn't addressed in the Plan Scope process. Creating the project scope statement in sufficient detail is valid, but still less important than having the right requirements from the right stakeholders. The other answers are distracters. [Crosswind Manual 10.2; *PMBOK® Guide* 5.2]

24. The validate scope process has been started at the end of phase 3 of the project. The main deliverable was sent to the customer. Three weeks have passed and the customer acts as if the deliverable was never received. Which of the following is the best action to take?

Correct Answer: (B) Ask the sponsor for assistance
Explanation: If the customer is not responding and the project manager has already communicated with him, then the sponsor is the role that should provide assistance, particularly since this is an escalation issue. Stopping work and asking the customer's supervisor is unprofessional. Documenting the issue and doing nothing else is inappropriate because a project manager should be proactive in addressing problems. [Crosswind Manual 6.1.2; No *PMBOK® Guide* Reference]

25. You are the project manager in the testing phase of a project. You are working with your customer doing the validate scope process and testing project deliverables. Which process will provide the deliverables you are testing?

Correct Answer: (A) Control quality
Explanation: Project deliverables are created in the direct and manage work process. Those deliverables are tested by the team in the control quality process. Once those deliverables are deemed passing, they go to the validate scope process for customer acceptance testing. Control scope follows validate scope. Create WBS creates the scope baseline. [Crosswind Manual 10.5, *PMBOK® Guide* 5.5.1]

26. Which of the following tools and techniques are not used by the project manager during the process of creating a scope statement?

Correct Answer: (D) Requirements documentation
Explanation: The tools and techniques used during the Define Scope process are expert judgment, product analysis, decision making, alternatives analysis, multi-criteria decision analysis, interpersonal and team skills, and facilitation. [Crosswind Manual 10.3; *PMBOK® Guide* 5.3]

27. Dirk, the project manager, is leading the team during the execution of the project management plan. His testing manager, Sarah, has just completed deliverable testing, which resulted in deliverables that met all requirements. What have Dirk and Sarah created and what is the next process the deliverables will undergo?

Correct Answer: (D) Verified deliverables and validate scope

Explanation: The question references both the Control Quality process, which creates verified deliverables, and the Validate Scope process, which occurs later and results in customer acceptance of those deliverables. Quality audits occur during the Manage Quality process. The Close Project or Phase results in the transition of the project outcome. Verified Deliverables is not a project management process. [Crosswind Manual 10.5 and 13.10; *PMBOK® Guide* 5.5 and 8.3]

28. The product owner is working with the development team to finalize items in the current iteration. The product owner has just changed priority on a few items in the backlog. The approach being used is most likely?

Correct Answer: (A) Change-driven

Explanation: A product owner working within an iteration with a backlog is a change-driven approach such as agile, scrum, or Kanban. Plan driven is a more traditional project management approach. A Gantt chart is typically used more in plan driven approaches. Program management is for initiatives that consist of multiple projects. [Crosswind Manual Chapter 8 Introduction, *PMBOK® Guide* Chapter 5 Introduction]

29. Which of the following are created as a result of validating project scope?

Correct Answer: (D) Accepted deliverables and change requests

Explanation: The outputs of Validate Scope are accepted deliverables and change requests. [Crosswind Manual 10.5; *PMBOK® Guide* 5.5]

30. You are a project manager for an agile project. You are working with the product owner to identify all the details of the product to be created. Which of the following will the product owner use to document their requirements?

Correct Answer: (B) Product backlog

Explanation: In an agile environment a product backlog is what holds all the requirements or "wants" of the product owner. The project scope statement is a waterfall document that describes what is to be created. The requirements documentation is a list of needs of the project, typically used in a waterfall environment. The sprint backlog is a subset of the product backlog. [Crosswind Manual 8.3.1, No *PMBOK® Guide* Reference]