



3

Project Planning—Core Processes

Exam Prep Questions

**Quick Check**

Quick Answer: **71**
Detailed Answer: **72**

1. The new CIO for Mega Hard Drive Corporation, Roger Bigbucks, brings John into his office to discuss a new project that has been approved to improve the security access to their corporate systems worldwide. Roger explains the key objectives of the project, general time frame, and business value. The CIO assigns John to be the project manager and ends the meeting. What is the first thing John needs to do?
 - A. Determine who the key stakeholders are and have a kickoff meeting.
 - B. Find out how much money he has to use for the project.
 - C. Order new business cards that show he is the project manager.
 - D. Begin developing the scope definition.
2. Ed is asked to audit a relatively new project that creates a web interface for warranty claims processing at a manufacturing company. The project is already in trouble with a lot of new changes, and business partners are becoming frustrated. During interviews with the project team, Ed realizes that each individual has a different view of what the project is supposed to accomplish. After reviewing the project charter, he notices that individual assignments are listed, but no objectives or high-level deliverables. What should Ed recommend the project manager do to help save this project?
 - A. Have the project manager publish a description or explanation of the business need the project is going to address.
 - B. Change the project charter to include objectives and high-level deliverables with individuals assigned and time frames.
 - C. Develop a scope statement with the project stakeholders.
 - D. Hold a kickoff meeting to get everyone on the same page.

Quick Answer: **71**
Detailed Answer: **72**

Quick Check

3. Paul is given a project charter and is assigned to be the project manager. He is ready to begin progressive elaboration of the project scope and tasks. Which of the following tools and techniques is not appropriate for him to use at this time?
- A. Alternatives identification
 - B. Analogous estimating
 - C. Work breakdown structure templates
 - D. Benefit cost analysis
4. You are working on a new project to develop a new wireless product with ease-of-use features recommended by customers. It is as yet undetermined which features and the extent to which each feature will be incorporated into the product. You have a focus group that will continue to evaluate the features as the project goes forward. The focus group is authorized to suggest changes, as are your engineers and the quality department. As a project manager, what will help you most to minimize the effect of these changes?
- A. A change management plan.
 - B. A scope management plan.
 - C. Do not continue with the project until all of the features are clearly defined in the scope statement and scope definition.
 - D. This is an expected part of every project. A good project manager will have a communications plan in place to be sure everyone knows what is happening on the project.
5. In January, Connie, a marketing manager for a toy manufacturer, is preparing a new red-haired doll for release during the Christmas season. This means it needs to be ready to market by the February Toy Fair, where toy retailers make their choices about what toys to buy for the next year. The project manager for the toy development is in the process of ensuring the toy meets federal safety standards, which it does, but the product is running into a problem with additional non-federal safety issues that are only now being uncovered. Identify the assumption, constraint, and product description the project manager should have documented in the scope-supporting details.

Quick Answer: 71

Detailed Answer: 72

Quick Answer: 71

Detailed Answer: 72

Quick Answer: 71

Detailed Answer: 73

 Quick Check

- A. Assumption: The product must be ready for the market in February.
Constraint: Safety standards.
Product Description: Includes the fact that it is a Christmas toy.
 - B. Assumption: Federal safety regulations are sufficient for a safe toy.
Constraint: The product must be market ready by February.
Product Description: The toy is a red-haired doll.
 - C. Assumption: The project manager is responsible for the product's safety results.
Constraint: The toy must meet federal safety standards.
Product Description: The product is a toy.
 - D. Assumption: Non-federal safety issues might come up.
Constraint: The toy must be sold at Christmas.
Product Description: The toy must appeal to toy retailers.
6. The AAA Cleaning Service Company is in the process of developing and marketing a new yearly bundled package of cleaning services to be available in its Eastern division and has assigned Bob Brown to be the project manager for the new product rollout. There are just a few major deliverables: Develop new contracts, create an advertising campaign, provide service training, and update the ordering system to handle the new product. Management has agreed to Bob's summary of tasks and expectations, but wants Bob to tell them how much he thinks the project will cost and how long it will take to do the rollout because marketing is anxious to begin pre-selling the service. What should Bob do first?
- A. Quit. There is not enough information for Bob to be successful in this rollout.
 - B. Develop a scope statement so that he is certain he has the project well defined.
 - C. Create a work breakdown structure of the tasks to be done.
 - D. Give an estimate of six months and \$250,000 based on his prior work on other projects in different fields.

Quick Answer: 71

Detailed Answer: 73

Quick Check

7. Doug Johnson, the manager of operations at a small liquor distribution company, has contracted an outside firm to develop a new warehouse picking system. He is generally satisfied with their performance so far, but in some meetings, he feels they are going beyond the scope of the project as originally defined. Because the contract is time and materials, Doug wants to be sure only the work that is defined in the project scope is what gets done. What project documentation should Doug ask the project manager for?
- A. The scope statement, work breakdown structure (WBS), and any approved changes.
 - B. Meeting minutes from the kickoff meeting, where the project scope was discussed.
 - C. The project charter.
 - D. No documents are needed for review. Doug simply needs to clarify scope with the project manager.
8. The WBS is the foundation for all but which of the following?
- A. Coordinated and integrated planning
 - B. Performance reporting
 - C. Scope management
 - D. Project communication
9. Jenny is developing a WBS for her project. She knows that PMI believes these are important, but she is struggling with the structure and content of the WBS. Which of the following are not items that will help her?
- A. Each WBS element should represent a single tangible deliverable.
 - B. The WBS elements should be structured by organizational unit.
 - C. Think through how each component contributes to the finished deliverable.
 - D. All significant reporting items should be included in the WBS.

Quick Answer: **71**Detailed Answer: **73**Quick Answer: **71**Detailed Answer: **73**Quick Answer: **71**Detailed Answer: **73**

 Quick Check

10. Ralph is a quality control reviewer for all projects at a large clothing manufacturer. He has reviewed Sally's project and feels that the cost accuracy and duration estimates need to be improved and that the project's projected end date is too far into the year. What should Sally do first?
- A. Reinterview the subject matter experts (SMEs) and ask for better estimates.
 - B. Reexamine the WBS to see if it can be further decomposed, to allow for better estimating on cost and duration.
 - C. Tell Ralph the estimates are sufficient. He is just a quality control guy and has no real understanding of her project.
 - D. Reduce all the cost and time estimates by 10% based on Ralph's feedback.
11. Rod is new to Project Management and is trying to be sure he is following the entire set of core planning processes properly. He is in the process of developing a WBS, and realizes activity definition is next, but is confused about the difference between the two. As a seasoned project manager, and one ready to take the PMP exam, how would you describe the difference between the two to Rod?
- A. The WBS is focused on deliverables, whereas activity definition is focused on the tasks to create those deliverables.
 - B. The WBS is focused on scope, and activity definition is focused on planning.
 - C. No one really uses the WBS, and it is essentially the same as the activity definition. Most managers use a project planning software tool instead.
 - D. WBS is focused on the project, whereas activity definition is related to the Project Management activities that must take place to ensure the project is well executed.
12. During the activity definition process on his project, Jeff realizes there are some deliverables that are missing from the scope definition process. What should he do?
- A. Simply define the additional activities.
 - B. Invoke the scope change management process.
 - C. Update the WBS to include the missing deliverables, and define the appropriate activities that support creating those deliverables.
 - D. Check with his manager to determine if the deliverables in question need to be included in the project, and then convene the change control board.

Quick Answer: 71

Detailed Answer: 74

Quick Answer: 71

Detailed Answer: 74

Quick Answer: 71

Detailed Answer: 74

Quick Check

13. *Necessary and sufficient* conditions are used in law, logic, and a number of other disciplines. In what way can a project manager benefit from the use of the necessary and sufficient concept?
- A. A project manager should check to make sure he has the necessary resources and sufficient time to complete the project.
 - B. It is a concept that can be used to verify the correct level of decomposition for WBS and activity definition.
 - C. Project managers only use this concept with projects that involve contracts with outside vendors.
 - D. There is no such concept.
14. Alyea is ready to begin activity definition for her project. She has the project scope statement, a WBS, the corporate policy of defining activities to a 20-hour period, information from a meeting with her SMEs, and a team room identified, although it is not yet available. What more does she need before she starts?
- A. To identify her assumptions
 - B. To identify her constraints
 - C. To obtain input from experts on the project
 - D. Historical information on projects similar to her own
15. RF Sportswear is undertaking the construction of a new manufacturing plant. You are working with John, the project manager who is working on the project plan. He has asked for the physical plant layout plans, which you don't have yet because the project has just started. You participated in helping to develop the WBS and the activities list with John. As a former project manager, you realize what John needs, and you send him a copy of the mock-up drawing done for the steering committee and approval of the project. Why does John need the plans at this point?
- A. John is working on activity sequencing and the plans are needed for helping to determine dependencies.
 - B. John needs to archive all the documents for the project in one project folder for future use.
 - C. You know John is not an engineer and that he was not at the steering committee meeting.
 - D. John does not need the plans, but from a management standpoint, you want to respect his authority as the project manager.

Quick Answer: 71

Detailed Answer: 74

Quick Answer: 71

Detailed Answer: 74

Quick Answer: 71

Detailed Answer: 74

 Quick Check

16. Your company has a policy of having every software project reviewed and approved by the Architecture Review Board prior to the construction phase of a project. You are currently in the process of activity sequencing. This is an example of what?

- A. Gatekeeping
- B. Milestone
- C. New scope for the project
- D. Project integration

17. Elwood is developing his project plan for a construction project, and is currently involved in determining the dependencies between activities on his project. He is also working with a just-in-time (JIT) inventory from his suppliers. In creating his project plan, he knows that his prefabricated trusses need to arrive and be installed before he can begin to lay down the roofing. However, because he has purchased the roofing materials from the same supplier as the trusses, the roofing material will arrive at the same time as the trusses.

In the preceding example, what is not true about the relationship between the truss installation and roof installation?

- A. It is hard logic.
- B. It is a start-to-finish relationship.
- C. It is an example of an external dependency.
- D. It is a finish-to-finish relationship.

18. In the hair care industry, it is considered a “best practice” to sweep the hair from a previous client’s haircut prior to seating the new client. You are a project manager, and have gone in for a haircut with your hairdresser, Jan. She has had a bad day, and has seated you before cleaning her area. This is an example of what?

- A. Bad customer service
- B. A discretionary dependency
- C. Hard logic
- D. Precedence diagramming method (PDM)

19. Joe wants to choose a tool for activity sequencing. He can use all of the following except

- A. Scoring models
- B. Activity on node (AON)
- C. Arrow diagramming method (ADM)
- D. Graphical evaluation and review technique (GERT)

Quick Answer: 71

Detailed Answer: 75

Quick Answer: 71

Detailed Answer: 75

Quick Answer: 71

Detailed Answer: 75

Quick Answer: 71

Detailed Answer: 75

Quick Check

20. Richard has a project that uses the rational unified process, and iterative tasks that loop. What would be the best sequencing method for him to use?
- A. PDM
 - B. ADM
 - C. Critical path
 - D. GERT
21. The White Paper Company is embarking on developing a new warehouse. Gregg, the project manager, knows the warehouse will require new systems, equipment, and construction. He has his work breakdown structure completed, and knows he will need staff in addition to equipment purchases. He has the company's purchasing policy and its temporary staffing policy at his desk for review, but doesn't really know what staff might be available for work on his project. He is about to call the Human Resources Department to ask for help. What should he ask for?
- A. Company human resource policies
 - B. A resource pool description
 - C. New hire information
 - D. Approved vendor information
22. After gathering the needed information from human resources, Gregg is reviewing the WBS for his new warehouse project, and is trying to separate staff needs from material needs. He needs four programmers, two construction workers who are experts in metal framing, one drywall hanger, and an electrician. He will also need the actual building materials, but he is not as familiar with construction as he is with systems development. He has looked at a couple of other similar projects, and has an idea of the manpower. What should he do to determine the material requirements?
- A. Consult other project managers who have experience in construction.
 - B. Hire a consultant for that part of the project.
 - C. Check with the construction management unit of the White Paper Company.
 - D. All of the above.

Quick Answer: **71**Detailed Answer: **75**Quick Answer: **71**Detailed Answer: **75**Quick Answer: **71**Detailed Answer: **76**

 Quick Check

23. On a systems development project, John needs two programmers. He knows Jeff and Rob were able to create a program in 40 days similar to the one he wants to create on his project. He decides to use 40 days as his estimate. This is an example of what type of estimating?
- A. Parametric modeling
 - B. Analogous
 - C. Rule of thumb
 - D. Fixed rate
24. Rich is an expert Java programmer. Eric is just out of school and is 50% as effective as Rich. Rich thinks a certain program can be completed in three weeks. Where can Ray, the project manager, find this information so that he can put both Rich and Eric on the project and have it done in two weeks?
- A. The resource pool description
 - B. Historical information
 - C. His activity duration estimates
 - D. The scope statement, which states the project must be done in two weeks
25. Nick has a 400-square-foot room to floor. He knows it takes an average of 5 man minutes per square foot based on past jobs to lay down the flooring, including the prep work, gluing, and cleanup. He figures this job will take approximately 34 man hours. At \$12 per hour, this will cost him \$400 to have the work done. This is what type of estimating?
- A. Bottom up
 - B. Quantitatively based durations
 - C. Analogous
 - D. Cost based
26. Raymond wants to give himself a few extra hours in his budgeted time for a construction project to account for problems with weather or delays in delivery. This is called
- A. Padding
 - B. Risk acceptance
 - C. Reserve time or contingency
 - D. Mitigation

Quick Answer: 71

Detailed Answer: 76

Quick Answer: 71

Detailed Answer: 76

Quick Answer: 71

Detailed Answer: 76

Quick Answer: 71

Detailed Answer: 76

Quick Check

27. Ryan wants to keep all his documentation in order, and is currently doing duration estimating for his project. In addition to his duration estimates, what else does Ryan need to do to complete his activity duration process?

- A. Document assumptions made in estimating and update the activity list.
- B. Provide cost estimates.
- C. Provide resource requirement updates.
- D. A cost baseline.

28. Al is a project manager and is making activity duration estimates for his project based on his experience six years ago doing some similar tasks. He doesn't want to bother his project staff, who will be actually doing the work. Why is Al headed for a scheduling problem?

- A. He is not headed for a problem. Al has the expert knowledge and can therefore do the estimates.
- B. Al should be asking the staff to make or approve the estimates for the best outcome.
- C. Al is heading for project team problems by not involving his staff in the planning process.
- D. Al is not considering elapsed time.

29. Sally knows one of her key construction workers, Gordon, has a high probability of participating in a new reality building show. This would take him out of work for eight weeks, which is one fourth of the construction time. He is a long-term employee and well liked by all, and management supports his efforts regarding the show. Gordon has a 75% chance of making the show. Sally is working on her project plan and, specifically, task durations. How should she address the resource issue?

- A. Engage the project team to identify the effect of Gordon's absence on the baseline durations, and incorporate that into the duration estimates.
- B. Estimate the project as-is. There is always another worker to fill in for Gordon.
- C. Buy "key-man" insurance to mitigate the cost of Gordon being gone.
- D. Increase all activity durations assigned to Gordon by 75% because that is the expected probability of Gordon being on the reality show.

Quick Answer: **71**Detailed Answer: **76**Quick Answer: **71**Detailed Answer: **77**Quick Answer: **71**Detailed Answer: **77**

 Quick Check

30. You are a seasoned project manager who has taken a new job in the engineering field, about which you know very little. You are attempting to create activity durations for your project. What resources can you use to help?
- A. Prior project files from similar projects
 - B. Commercial databases with information on projects like yours
 - C. Consult your project team
 - D. All of the above
31. Activity durations should always have which of the following?
- A. Each work package identified
 - B. A range of possible quantitative results
 - C. Approval by management
 - D. An order of magnitude associated with the duration
32. Steve is asked to provide a cost estimate for a redecorating project. How should he proceed?
- A. Take the cost of raw materials and labor for each activity in the WBS. Check previous project files and consider any risks to delivery; then add 10% to account for the company profit.
 - B. Add raw materials and labor costs for each activity in the WBS.
 - C. Check competitor pricing, add the raw materials and labor from the WBS, and then decrease by 10% to be competitive.
 - D. Use the cost of raw materials from a similar project on a house with the same floor plan.
33. I am looking to estimate the cost on a project, but I don't want to spend a lot of time on a detailed analysis. I really want a ballpark figure. What options do I have?
- A. None—cost estimating requires details to be accurate.
 - B. Use the cost of similar projects.
 - C. Use a rule-of-thumb or per-square-foot estimate.
 - D. Add up the costs on the WBS.
34. The Back-Step Furniture and Kitchen Company has been asked to provide a cost estimate for a kitchen bid. To do the project, the firm will have to borrow money to finance the cost of raw materials. What item will be most important for the cost estimator to have?
- A. A low cost of materials
 - B. Good credit
 - C. Cheap labor
 - D. Accurate activity duration estimates

Quick Answer: **71**Detailed Answer: **77**Quick Answer: **71**Detailed Answer: **77**Quick Answer: **71**Detailed Answer: **77**Quick Answer: **71**Detailed Answer: **77**Quick Answer: **71**Detailed Answer: **78**


Quick Check

35. Edward, a former U.S. Army lieutenant, is estimating a project the way he used to in the Army. He is taking each activity, assigning its cost, and then aggregating it to a final cost estimate. This is an example of what type of cost estimating?
- A. Top down
 - B. Bottom up
 - C. Army method
 - D. Parametric
36. The sponsor of one of your projects wants to know how cost variances will be managed. He is very concerned because other projects have had serious cost overruns. What can you provide him that will give him a highly detailed and formal method for dealing with cost variances?
- A. A paragraph in the project plan that describes general approaches to cost management
 - B. A weekly one-on-one with the sponsor to discuss costs
 - C. Weekly vendor meetings
 - D. A formal cost management plan
37. Activity list updates happen during which project planning processes?
- A. All planning processes can result in activity list updates
 - B. Activity sequencing and activity duration estimating
 - C. Activity definition
 - D. Risk planning
38. One of the key outputs of the scope planning process is what?
- A. Project charter
 - B. Scope statement
 - C. Scope definition
 - D. WBS
39. As a project manager, you know the WBS is important. What are the key planning processes in which the WBS is an input?
- A. Cost estimating, resource planning, cost budgeting, and risk management planning
 - B. Scope definition
 - C. Activity duration estimating and activity sequencing
 - D. All planning processes

Quick Answer: **71**Detailed Answer: **78**Quick Answer: **71**Detailed Answer: **78**Quick Answer: **71**Detailed Answer: **78**Quick Answer: **71**Detailed Answer: **78**Quick Answer: **71**Detailed Answer: **78**

 Quick Check

40. You are a project manager involved in developing a project plan for the downtown redevelopment of Kokomo, Indiana. You are now beginning to do some risk planning. What are the tools and techniques you use to develop your risk management plan?
- A. Gather high-quality data on project risks.
 - B. Apply a general contingency.
 - C. Use a risk template.
 - D. Conduct a planning meeting.
41. John provides a list of key risks and how to mitigate those risks to his manager as his risk management plan. Why is his manager, Jeff, a PMP, asking him to redo his plan?
- A. A list of project risks is an output of risk identification.
 - B. The risk management plan should address approaches, tools, and data sources as well as roles and responsibilities, budgeting, timing, interpretation rules, risk thresholds, reporting formats, and tracking.
 - C. The risk list should also include triggers.
 - D. John has not involved the project team.
42. Beth is setting up a planning meeting for developing a risk management plan for her project. Who should she invite?
- A. Just the project sponsor because his perception of how the risks will be handled is the most important
 - B. The corporate risk manager
 - C. The project team leaders, key stakeholders, and anyone engaged in risk management activities for the corporation, if applicable
 - D. The entire project team, all stakeholders, and all of the corporate risk management department, if one exists

Quick Answer: 71

Detailed Answer: 78

Quick Answer: 71

Detailed Answer: 79

Quick Answer: 71

Detailed Answer: 79

Quick Check

43. Joey is new to risk management within his projects. He has typically handled risks as they come up, and adjusted time frames accordingly after discussing them with his sponsor. He is now being asked to develop a risk management plan and is complaining about having to develop a scoring and interpretation method. What advice would you give him as a seasoned PMP who is knowledgeable in risk management?
- A. Developing interpretation and scoring criteria helps to ensure consistency in handling risks as they arise. It also helps to weight multiple risks at one time.
 - B. A scoring mechanism is rarely used in real life. Just put a paragraph or two into the management plan with High, Medium, and Low.
 - C. Scoring feeds into the risk thresholds, which determine who needs to be involved in mitigating a risk.
 - D. A risk management plan is a communication tool so that all members of the project team know how risks will be handled as they are identified.
44. Why are risk tolerances and thresholds important to identify in the risk management plan?
- A. Tolerances and thresholds, when documented, can help to define the target by which the project team can measure the effectiveness of the risk response plan execution.
 - B. Tolerances and thresholds help to define how often the risk management process will be performed.
 - C. Tolerances and thresholds determine what tools and data sources will be used in risk management.
 - D. Tolerances and thresholds provide the basis for costing the risk management process as well as defining how risk activities will be recorded.
45. A risk management plan should be tailored to a given project in what ways?
- A. Some companies use predefined templates for risk management plans.
 - B. Certain companies have predefined roles and responsibilities as they relate to risk management.
 - C. Some organizations have predefined risk management policies that must be tailored to an individual project.
 - D. The risk management plan should ensure that the level and type of risk management efforts are appropriate to the level of risk and importance of the project to the company.

Quick Answer: **71**Detailed Answer: **79**Quick Answer: **71**Detailed Answer: **79**Quick Answer: **71**Detailed Answer: **79**

 Quick Check

46. Timing, as described in a risk management plan, affects how often a risk management process should be performed during the life cycle of a project. What key factor affects timing?
- A. Timing should be defined to allow for results to be developed early enough to affect decisions.
 - B. Timing is scaled to project size.
 - C. Timing is affected by organizational policies regarding risk management.
 - D. Timing is directly related to the sponsor's risk aversion threshold.
47. You have recently been assigned to provide an accurate project schedule for a troubled data conversion project. You have reviewed the project schedule created by the previous project manager, and notice that certain task dependencies do not seem to be correctly identified. Prior to reworking the schedule, what will you need to do first?
- A. Create a network diagram to ensure task dependencies are correct.
 - B. Review the resource pool description.
 - C. Review the scope statement.
 - D. Review the project charter.
48. The Big Bank has hired you on as a new project manager for the development and rollout of new ATM software. You are now ready to develop your project schedule. Your project has the potential to be very active during the summer months, and you know that some of your key team members are planning exciting vacations during that time. What do you need to help plan the schedule accordingly?
- A. Company holiday schedule, regular work hours for each individual, and vacation times for each project team member
 - B. Where the work activity will be taking place
 - C. Develop leads and lags in the tasks assigned to individuals on vacation
 - D. Resource pool description

Quick Answer: 71

Detailed Answer: 79

Quick Answer: 71

Detailed Answer: 79

Quick Answer: 71

Detailed Answer: 79

Quick Check

49. As a seasoned project manager, you know your sponsors and executive management are keenly interested in the project delivery date. Why are you nervous when your project sponsor wants the delivery date as soon as you've developed the schedule?
- A. Schedule development is often iterated, as are the inputs to schedule development, to provide more detailed and accurate information. Therefore, the end date is likely to change until the process has been iterated sufficiently.
 - B. Your project sponsor provided you with a "drop dead" date, and your schedule does not have that date.
 - C. You have not yet incorporated contingency into the schedule.
 - D. The schedule has not been leveled.
50. Project schedule development is the discipline of determining what?
- A. The start and finish dates for each project activity
 - B. Providing a critical path by which to manage the project
 - C. Providing early and late start and finish dates for the project
 - D. Determining which resources should perform which tasks
51. In developing a project schedule, you as a project manager need to be aware of major constraints. What are the two major time constraints that must be considered during project schedule development?
- A. Project staff vacations and corporate holiday calendars
 - B. Resource capabilities and availability
 - C. Imposed dates and major milestones
 - D. Responsibility and geography for activities
52. Why are CPM, GERT, and PERT not considered sufficient to create a project schedule?
- A. All three are tools and techniques of schedule development, not the actual schedule.
 - B. As mathematical analysis tools, they simply provide the dates that are possible, and do not consider resource pool limitations.
 - C. They are sufficient. Each calculates early and late start and finish dates for each activity.
 - D. They are Monte Carlo techniques used to provide what-if analysis for adverse external factors on a project.

Quick Answer: **71**Detailed Answer: **80**Quick Answer: **71**Detailed Answer: **80**Quick Answer: **71**Detailed Answer: **80**Quick Answer: **71**Detailed Answer: **80**

 Quick Check

53. Roger is a project manager working on a schedule for the road installation for a new housing development. He knows there will be issues related to weather, as well as a big convention in town that is directly on the delivery path for his project. He is developing his schedule and realizes his first pass shows a date that is one month later than the date expected by his managers. He is fairly sure his critical path is correct, and that his key estimates are accurate. He also knows the budget amount he is estimating is close to what his managers wanted to spend. What options does Roger have?

- A. Meet with his managers and explain his assumptions and the project schedule. Get them to buy in to the new date.
- B. Determine where he can add additional resources, thereby increasing the cost of the project, but providing the date the managers want.
- C. See where certain dependencies might be moved to take place in parallel, increasing the risk and possibly rework in the project, but meeting the date.
- D. All of the above.

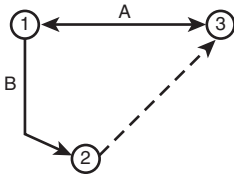
54. Which project scheduling technique focuses on float to determine tasks with the least scheduling flexibility?

- A. CPM
- B. PERT
- C. Crashing
- D. Monte Carlo

55. Jennifer wants to measure and monitor the cost performance in her project. She has prepared a cost estimate, a WBS, a project schedule, and a risk management plan. What should she do at this point to ensure she is able to monitor costs effectively?

- A. Develop a schedule baseline.
- B. Develop a cost baseline.
- C. Carefully manage her expenditures according to her cost estimates.
- D. Influence the factors that cause her costs to change.

Quick Answer: **71**Detailed Answer: **80**Quick Answer: **71**Detailed Answer: **80**Quick Answer: **71**Detailed Answer: **80**


Quick Check

56. The preceding diagram is an example of what type of activity sequencing technique?

- A. ADM
- B. PDM
- C. CPM
- D. AARP

Quick Answer: **71**

Detailed Answer: **81**

57. You are a project manager and have created a project plan with activities, duration, resources allocated, and costs associated. Your manager is now asking you for your project plan. You are confused, because you've already sent him the plan. What is your manager really looking for?

- A. A document that guides project execution and includes assumptions, planning decisions, and alternatives chosen as well as the timing of key management reviews
- B. The project charter
- C. A list of stakeholder skills and knowledge for guiding the project
- D. Organizational policies that affect project execution

Quick Answer: **71**

Detailed Answer: **81**

58. In developing your project schedule for your home remodel, you realize room painting will take three hours and is followed immediately by the trim replacement, which has a predecessor task of restraining the trim. Although this is the correct sequence, you know the paint takes four hours to dry. To correctly sequence these activities, you need to do which of the following?

- A. Add a lag time of four hours to the painting activity.
- B. Add a lead time of four hours to the trim-replacement activity.
- C. Remove the dependency between the two tasks, and manually supervise them.
- D. Change the project to have the painting done after the trim is replaced.

Quick Answer: **71**

Detailed Answer: **81**

 Quick Check

59. You are developing a project schedule, and your manager has asked you for the coding structure. How does the coding structure benefit your project schedule?
- A. The coding structure enables you to sort activities and provide clear reporting to the individuals on the project.
 - B. The coding structure is aligned with the chart of accounts to appropriately allocate the costs to the corporate accounting system.
 - C. The coding structure is related only to system development projects.
 - D. A and B.
60. John is studying for his PMP exam and is ready to take the test. Because he is confident about his test preparation, he asks his friend, Portia, to quiz him on several topics. Portia asks, “What part of the planning process is staff acquisition?” John’s response should be
- A. Staff acquisition is not the responsibility of the project manager.
 - B. Staff acquisition is a human resources knowledge area.
 - C. Staff acquisition is a core planning process.
 - D. Staff acquisition is a facilitating planning process.
61. A WBS is a deliverables-oriented grouping of project elements that organizes and defines the total scope of the project. How is the WBS developed?
- A. As a pictorial representation of the project team’s organization
 - B. As a scope artifact that is archived after completion
 - C. By outside parties
 - D. By defining project work in terms of deliverables and components

Quick Answer: 71

Detailed Answer: 81

Quick Answer: 71

Detailed Answer: 81

Quick Answer: 71

Detailed Answer: 81


Quick Check

62. Experienced project managers understand the importance of detailed planning and how a WBS can be a good tool to provide direction and support to the project. How does a WBS help a project stakeholder?
- A. Stakeholders do not use a WBS—only the project team references the WBS.
 - B. Stakeholders use a WBS to enforce contractual agreements.
 - C. The elements assist stakeholders in developing a clear vision of the product and the overall steps to produce it.
 - D. The WBS functions as the organizational breakdown structure (OBS) for stakeholders.
63. Getting the definition of success for the project combined with feedback and buy-in from the team members of the WBS can assist you in determining what tasks need to be done throughout the project. The WBS supports effective Project Management in all but which of the following ways?
- A. Separating deliverables into component parts to ensure project plan matches scope
 - B. Assisting in determining resource needs
 - C. Supporting resource assignments and planning
 - D. Providing the basis for the communications plan
64. Identification of inputs and outputs to the various phases and the WBS can assist with identifying deliverables and other project-related work products. A WBS is an input to all but which of the following processes?
- A. Resource planning
 - B. Risk management planning
 - C. Activity definition
 - D. Organizational planning
65. Decomposing tasks into smaller activities can be helpful in reducing the amount of stress associated with overwhelmingly large milestones. What is a feature of the hierarchical nature of the WBS?
- A. A WBS hierarchy prevents duplication.
 - B. A WBS can be rolled up or collapsed to provide information at the appropriate level for a particular audience.
 - C. The decomposition of tasks provides a detailed planning tool.
 - D. The depth of a WBS is restricted to three levels, which avoids overplanning.

Quick Answer: **71**Detailed Answer: **81**Quick Answer: **71**Detailed Answer: **81**Quick Answer: **71**Detailed Answer: **82**Quick Answer: **71**Detailed Answer: **82**

 Quick Check

66. Integrated analysis of cost, schedule, and performance can only be accomplished when
- A. Proper linking between the WBS and associated cost and schedule is made
 - B. A performance budget baseline is created
 - C. Goal achievement is measured
 - D. Integration and assembly elements are included
67. Every project has its share of problems and challenges. All of the following are challenges in creating a WBS except
- A. Defining excessive levels in a WBS
 - B. Ensuring WBS elements are deliverable focused
 - C. Identifying all key project deliverables
 - D. Cost of effort to create a WBS
68. At his Indonesia-based software manufacturing company, Daniel realizes that risk management has become more important as the company continues to evolve. He needs to begin the process of incorporating risk management into all of his new projects. What is the first step in using a WBS as an effective tool for risk management?
- A. Determine the probability of occurrence of risks.
 - B. Review WBS elements and segment into risk events.
 - C. Further define high-risk areas in the WBS.
 - D. Include contingency activities in the WBS.
69. Scheduling the right resources at the right place at the right time is a project manager's responsibility and is a critical success factor for the project's successful completion. What is a key element to consider in developing a WBS when factoring in resource planning?
- A. Can the quality of work be evaluated by testing?
 - B. Are WBS elements compatible with accounting and payroll structures?
 - C. How will element completion be determined?
 - D. Can individual work assignments be managed from the reporting structure indicated by the WBS?

Quick Answer: **71**Detailed Answer: **82**Quick Answer: **71**Detailed Answer: **82**Quick Answer: **71**Detailed Answer: **82**Quick Answer: **71**Detailed Answer: **82**

Quick Check

70. Because he is the president of a minority-owned business, Albert has first rights to many government contracts for the new city infrastructure projects. Albert also realizes that dealing with political bureaucracy can be one of the constraints of working on government-related projects. Which of the following is a key assumption of a government design-bid-build project?
- A. The WBS must be more detailed.
 - B. Alternatives must be included in the WBS.
 - C. Of qualified bidders, the lowest bidder performs the construction.
 - D. Real property must always be included in the WBS.

Quick Answer: **71**Detailed Answer: **82**

Quick Check Answer Key

- | | | |
|-------|-------|-------|
| 1. A | 28. B | 55. B |
| 2. C | 29. A | 56. A |
| 3. B | 30. D | 57. A |
| 4. B | 31. B | 58. A |
| 5. B | 32. B | 59. A |
| 6. C | 33. B | 60. D |
| 7. A | 34. D | 61. D |
| 8. D | 35. B | 62. C |
| 9. B | 36. D | 63. D |
| 10. B | 37. B | 64. D |
| 11. A | 38. B | 65. B |
| 12. C | 39. A | 66. A |
| 13. B | 40. D | 67. D |
| 14. D | 41. B | 68. B |
| 15. A | 42. C | 69. D |
| 16. B | 43. A | 70. C |
| 17. D | 44. A | |
| 18. B | 45. D | |
| 19. A | 46. A | |
| 20. D | 47. C | |
| 21. B | 48. A | |
| 22. D | 49. A | |
| 23. B | 50. A | |
| 24. A | 51. C | |
| 25. B | 52. B | |
| 26. C | 53. D | |
| 27. A | 54. A | |

Answers and Explanations

1. **Answer A** is the best answer. A kickoff meeting is indeed one of the first things a project manager should schedule and is in fact the initial task in scope planning. Answer B is tempting, because the amount of money for use on the project could indeed be a constraint; ideally, however, a project manager will determine the scope, activities, and resources needed, and then develop the budget needed. Answer C is also tempting in terms of showing authority to do a project; however, John's CIO just authorized him to do the project, and a business card does not necessarily give him the authority. Answer D is incorrect because scope definition is after scope planning, and requires as input the scope statement, which is defined in scope planning.
2. **Answer C** is correct because a scope statement addresses the description of the business need, high-level objectives and deliverables, and a brief description of the project. This will help to get everyone on the same page. Answer A does not address everything that a scope statement addresses, so it is not the best answer. Answer B is incorrect because the project charter does not include resource assignments and time frames. Answer D is tempting because holding a kickoff meeting does indeed serve that purpose, but the scope statement is what will help to get the project focused correctly.
3. **Answer B** is the best answer because it is a technique associated with cost estimating. Answers A, C, and D are incorrect; because Paul is ready to begin progressive elaboration of scope and tasks, he is ready for scope planning and scope definition, and these are tools and techniques used for those tasks.
4. **Answer B** is correct. Answer A is tempting because the problem focuses on changes. However, because we are talking about the elaboration of the product's characteristics, we are talking about scope changes, and therefore Answer B is the best answer. Answer C is also tempting because it is difficult to move forward on a project until the scope is clearly defined (especially in systems development projects), but with products and certain types of web development, scope changes can be frequent, and a formal scope management plan is needed. Answer D is true from a project perspective, but does not address the scope issues.

-
5. **Answer B** is correct. This is an example of a PMI question that tells you what the work product or output is, but expects you to know how to use business knowledge to apply to the question. Arguments can be made for many assumptions, but in this case, the best answer is Answer B. The biggest assumption, and an incorrect one (which might have been avoided had it been stated), was that federal safety standards were sufficient to make a toy safe. The constraint is the time frame in which the toy must be ready, and part of the product description should include that the toy is a red-haired doll. Answer A is incorrect because the statement “the product must be ready for the market in February” is a constraint and not an assumption. Answer C is incorrect because the statement “the product is a toy” does not provide enough information to be considered a product description. Answer D is incorrect because the statement “the toy must appeal to toy retailers” is not a product description.
 6. **Answer C** is correct. Bob has a pretty clear scope and defined deliverables. In order to be able to estimate project cost and time, the next step would be to create a work breakdown structure of the deliverables decomposed into component tasks. Answer A is incorrect because even though Bob doesn’t have a lot of information at this point, as a project manager, it is his job to progressively elaborate the project. Answer B is incorrect because Bob’s summary of tasks and expectations is essentially his scope statement. Answer D is incorrect because Bob cannot rely solely on his personal experience to deliver an accurate cost and time estimate.
 7. **Answer A** is the best answer. Because the scope statement and WBS define the work to be done and the WBS is intended to also ensure no unnecessary work is done, Doug can look at these with the project manager to understand any differences he perceives. Answer B is incorrect because meeting minutes, although helpful historical documents, do not define the “contracted” scope. Answer C is also a helpful document, but will not tell Doug the details of what he needs to know. Answer D is tempting, but not the best answer. Reviewing the actual WBS provides a documented and clear definition vision of the end product of the project. A conversation does not.
 8. **Answer D** is correct. This is tricky, because the WBS helps to facilitate communication, but is not the foundation of communication. Answers A, B, and C are all supported directly by the WBS.
 9. **Answer B** is correct. A WBS should be structured with a deliverable focus. PMI feels project failure can result from nondeliverable focused WBS elements. Answers A, C, and D are incorrect because they are items that can help in the development of a WBS.

10. **Answer B** is the best answer. Although it might be true that Ralph does not have the insight into her project, Sally's first step should be to review the WBS and be sure it is at a sufficient level of detail to provide the accuracy of estimates. Answer A is incorrect because reinterviewing SMEs does not address the root of the problem. Sally can do so after she has examined the WBS. Answer C is incorrect because a good project manager will always want to produce the best quality project, and the quality control function—if it is auditing a project—probably has some knowledge of the corporate projects and general expectations. Answer D is incorrect, although it does happen often in real life.
11. **Answer A** is correct. Answer B is incorrect because, although the WBS is part of scope definition, both scope definition and activity definition are part of project planning. Answer C might be the attitude that is encountered sometimes in the real world, and Answer D describes project control processes, not activity definition.
12. **Answer C** is correct. Often in the planning process, and particularly during progressive elaboration and decomposition, missing deliverables can be identified. This does not mean they are out of scope. The WBS needs to be updated and the activities to support creating that deliverable need to be planned. Answer A is incorrect because it fails to update the WBS. Answers B and D are incorrect because failing to identify a deliverable in the scope definition process does not mean a scope change has occurred.
13. **Answer B** is correct. Using the necessary and sufficient test is a technique of decomposition. Are the lowest levels identified both necessary and sufficient to accomplish the deliverable? If not, there might be activities that need to be removed or added. Answer A is tempting because it is true, but it is not an example of the necessary and sufficient concept. Answer C can be true in that contracts often use the necessary and sufficient test as criteria for completeness, but it is not the best answer. Answer D is incorrect because *necessary and sufficient* conditions is used in law, logic, and a number of other disciplines.
14. **Answer D** is correct. Alyea has five of the six inputs to activity definition. Her constraints are the corporate 20-hour work package policy; her expert judgment comes from her SMEs, or subject matter experts; and she is assuming her team room will be ready in time for the project to start. Answers A, B, and C are incorrect because identifying assumptions, identifying constraints, and obtaining input from experts on the project are not inputs to the activity definition process.
15. **Answer A** is correct. The plans are part of the product description, which needs to be reviewed as input into the activity sequencing process. Answers B and C may be true, but they are not the best answer. Answer D is false, and therefore incorrect.

-
16. **Answer B** is correct. The approval by the Architecture Review Board is a milestone you want to include in activity sequencing so that you can ensure the requirements for meeting the review board's approval are met. Answer A is tempting because the question references phase-end activities; however, it is not an example of gatekeeping because the project is not being authorized to continue based only on the architecture review. Gatekeeping often involves the review of other factors as well. Answer C is incorrect because the requirement of a review board approval does not affect scope. Answer D is incorrect because project integration planning involves project plan development, execution, and integrated change control, which are not related to a review board.
 17. **Answer D** is correct. The trusses must be completed before the roofing can start; therefore, the roofing has a dependency on the installation of the trusses and is a start-to-finish relationship. Answer A is incorrect because it is hard logic. Answer B is incorrect because it is not a start-to-start relationship. Answer C is incorrect because this problem is an example of an external dependency because the project depends on the supplier for the trusses and the roofing. Because they are correct statements, they are incorrect answers for this question.
 18. **Answer B** is the best answer because it is related to Project Management. Although Answer A may be true, it is not the best answer. Answer C is another term for a mandatory dependency. Answer D is the acronym for precedence diagramming method, which is a technique used in activity sequencing in which activities are represented in boxes (also known as *nodes*) and are linked by precedence relationships to show the coordination of the activities that are to be performed.
 19. **Answer A** is correct. Scoring models are not used with activity sequencing. Answers B, C, and D are activity sequencing tools and therefore incorrect answers to this question. Activity on node (AON) is also known as the precedence diagramming method in which activities are represented by the node. The arrow diagramming method or activity on arrow (AOA) shows the activities on the arrow. GERT is a conditional diagramming method.
 20. **Answer D** is correct. Answers A, B, and C are incorrect because none of those methods allow for nonsequential activities.
 21. **Answer B** is the best answer. Although company human resource policies might be useful, he already has the policies on his desk for review. New hire information provides no value added for his resourcing decisions and approved vendors are in the policies on his desk, therefore Answers A, C, and D are incorrect.

-
22. **Answer D** is the best answer. Gregg should get some expert advice or expert judgment in finalizing the materials requirements. Answers A, B, and C are correct statements and represent opportunities to find expert judgment and are therefore incorrect answers to this question.
 23. **Answer B** is the best answer. John is using an estimate based on a project very similar to his own with staff he will be using. Answer A is incorrect because parametric modeling involves using a mathematical model to predict costs, such as dollars per line of code. Answer C is incorrect, although close; if the development project is a common item, such as putting down new flooring, a rule-of-thumb measurement can be used, although it is less accurate. Answer D is incorrect because it is not a form of estimating, but a type of pricing.
 24. **Answer A** is correct. The characteristics of the resource pool, of which Rich is an expert and Eric is new, are available in the resource pool description. Answers B and C are incorrect but helpful in the resource planning tasks because they both give information on how to plan for resources. Answer D is incorrect because a scope statement, although part of inputs to resource planning, will not help Ray decide which resources to put on the project. Further, a scope statement should not indicate time frames.
 25. **Answer B** is correct. Nick is using quantity of time for each work category (that is, minutes per foot). Answer A is incorrect because bottom-up estimating takes each work package and estimates it, and then rolls up to a total. Answer C is incorrect because Nick is using quantifiable data rather than a project just like the one he is doing. Answer D is incorrect because there is no such thing.
 26. **Answer C** is correct. Providing additional hours as a contingency is a risk mitigation strategy; therefore, Answer C is the best answer because we are talking about time. Answer A is incorrect because padding has no basis and is not quantified as a risk or other type of estimate. Padding is highly discouraged by PMI. Answer B is incorrect because adding contingency is not acceptance of a risk, it is simply mitigation. Answer D is not the best answer, although what Raymond is doing is a form of mitigation.
 27. **Answer A** is correct. In addition to duration estimates, Ryan needs to provide and document the assumptions made in doing the estimates as well as any updates to the activity list that were uncovered. Answer B is incorrect because cost estimates are an output of cost estimating. Answer C is incorrect because updates to resource requirements are an output of schedule development. Answer D is incorrect because a cost baseline is the output of cost estimating.

-
28. **Answer B** is correct. Al's experience is dated. He should be engaging the people doing the work to help with the estimating; therefore, Answer A is incorrect. Answer C is incorrect because it is not the best answer for this question, although it may be true. Answer D may be true, but we have not mentioned anything in the question that involves elapsed time versus actual work.
29. **Answer A** is correct. Engaging the project team and adjusting the estimates based on a possible change is the best answer. Answer B is tempting, and many companies choose to go this route, but if Gordon is a key team member, the loss and learning curves will need to be addressed. Answer C is incorrect because buying the insurance does not solve the schedule problem. Answer D is mathematically incorrect. The probability that Gordon would be gone does not translate into changing duration by the same amount.
30. **Answer D** is the best answer because Answers A, B, and C are all correct. PMI highly recommends historical data on similar projects. Commercial databases are also another source of information, as is your project team, which is assumed to have the knowledge of working on similar projects. Although Answers A, B, and C are individually correct, the combination of all three statements is the best answer.
31. **Answer B** is correct. A range of possible results +/- is the best answer. Answer A is good to have for appropriate estimating, but the estimate of a given work package does not require that all work packages be identified. Further, work packages that are identified in the activity duration process are added to the activities list as an output of activity duration estimating. Answer C is incorrect; in general, activity durations need to be done by or approved by the people actually doing the work. Answer D is tempting because order of magnitude is an estimating term; however, it is associated with cost estimates.
32. **Answer B** is correct. Answer A is tempting, but adds the profit margin, which has to do with pricing, not cost. Answer C is similar, but is dealing with competitive pricing. Answer D is tempting, but in a decorating project, the raw materials can be significantly different, even if it is the same size and type of house. Also, Answer D does not factor in labor.
33. **Answer B** is correct. Although it is less accurate than adding up individual costs from the WBS, it is less time consuming. The trade-off is accuracy. Answer A is incorrect (but tempting) because to do a more accurate cost estimate, you need to delve into the details. Answer C is tempting also, and possible, except we don't really know if the project in question can use parametric modeling. Answer D is incorrect because it takes the most time, but it is most accurate.

-
34. **Answer D** is correct. Accurate duration estimates are key because the Back-Step Furniture and Kitchen Company is borrowing money. The longer it borrows, the greater the cost of the job. The sooner it can collect for service rendered, the better. Answers A, B, and C are all true, but not the best answer for this question.
35. **Answer B** is correct. Estimating at the activity level and aggregating is an example of bottom-up estimating. Answer A is incorrect because top-down estimating is a more general technique. Answer C is incorrect because the Army issue in this problem is a red herring. Answer D is incorrect because parametric estimating involves quantitative measures that can be applied to any scale project.
36. **Answer D** is correct. Although a cost management plan can be informal, this is an appropriate scenario for a formal cost management plan, in which a sponsor is very concerned about costs. Answer A is incorrect because it does not adequately address the sponsor's concerns. Answers B and C may actually be part of your cost management plan, but they are not the best answers because both could be in the cost management plan.
37. **Answer B** is the best answer. Updates to the activity list are done during activity sequencing and activity duration estimating. Answer A is tempting but not correct because some of the planning processes do not focus on activity list updates. Answer C is incorrect because the output of activity definition is the creation of the activity list, not updating the activity list. Answer D is incorrect because risk planning focuses on how to approach and plan risk management activities.
38. **Answer B** is correct. The scope statement is the key output of the scope planning process. Supporting detail (assumptions) and a scope management plan are also outputs from the scope planning process, but not listed. Answer A is incorrect because that is the key output of the initiating process. Answer C is incorrect because scope definition is a planning process. Answer D is incorrect because the WBS is the key output of scope definition.
39. **Answer A** is the best answer. Answer B is incorrect because the WBS is the key output of the scope definition process. Answer C is also tempting because people often associate the WBS and activity lists. Activity duration estimating and activity sequencing rely on the activity lists that are generated from the WBS, but they are not the same thing. Although Answer D is tempting, the WBS is a key input only to the processes listed in Answer A.
40. **Answer D** is correct. A planning meeting is the technique by which you develop your risk management plan. Answer A shows a commitment to risk management, but is not a technique for planning. Answer B is used for unknown risks as a mitigation strategy. Answer C is one of the inputs to risk planning.

-
41. **Answer B** is correct. A risk management plan is the process by which risks will be handled during the project. Answer A is tempting, and true, but not the best answer. Answer C is also tempting because triggers are an output of risk identification. Answer D may or may not be true—we do not have sufficient information.
 42. **Answer C** is the best answer. Using the key stakeholders and team leaders as well as a representative of risk management is sufficient for developing a project risk plan. Answers A and B are incorrect because they provide too narrow a viewpoint. Answer D is tempting, but an unnecessary use of time for the risk planning session. A broader group is appropriate for risk identification.
 43. **Answer A** is the best answer. Although Answer B may be true, high, medium, and low is a method of scoring. Answers C and D are also true, but not the best answers.
 44. **Answer A** is correct. Answer B defines the timing that should be addressed in the risk management plan. Answer C defines the methodology that should be identified in a risk management plan. Answer D touches on the budgeting and tracking that should be defined in the risk management plan.
 45. **Answer D** is the best answer. The risk management plan should be appropriate to the level of risk, size of project, and importance to the company. A high risk project that is a strategic imperative for a company should have a more detailed risk management plan. Answers A, B, and C are tempting because they represent inputs to the risk management plan development.
 46. **Answer A** is the best answer. Although Answers B, C, and D are true, the key factor is ensuring the risk management processes take place so that results are developed early enough to make decisions. Decisions should then be revisited periodically throughout the project.
 47. **Answer C** is the best answer. The first place to start with a troubled project is to ensure the activities leading up to schedule development are accurate. Therefore, reviewing the scope statement is the first step. Answer A is tempting because dependencies are incorrect in the schedule. As a good turnaround project manager, you should also do Answers B and D and become familiar with the project.
 48. **Answer A** is the best answer. Although you will need the activity attributes described in Answer B, and the resource pool from Answer D, your resource calendars are the best way to include vacation time into a schedule and develop it appropriately. Answer C is incorrect because leads and lags are used to identify real delays from order time to arrival, or curing time for cement.

-
49. **Answer A** is the best answer. Schedules often need to be iterated to provide accurate information. Answer B is all too often the real-world experience. However, good communication and negotiation with the project sponsor can help mitigate those types of issues. Answers C and D may be true, but we do not have enough information.
 50. **Answer A** is correct. Answer B is tempting because a critical path does help to manage a project, but it is not the best answer. Answer C focuses on the project, not the activities, and therefore is incorrect. Answer D is part of scheduling, but not the primary focus.
 51. **Answer C** is correct. Answer A is tempting because calendar activities relate to time and can be constraints. Answer B is incorrect because resource capabilities are not related to time. Answer D is incorrect because responsibility and geography are not related to time.
 52. **Answer B** is correct. Answer A is tempting because it is true by definition, but Answer B is correct because it properly answers the question, in that these techniques do not take into account resource pool constraints. Answer C is incorrect because it provides possible early and late start and finish dates, but not the actual schedule. Answer D is incorrect because none of the three are simulation techniques.
 53. **Answer D** is correct. Answer A represents good negotiating techniques for a project manager, in which given the scope, cost, and resources, a particular date is determined. Answer B represents the technique of crashing, in which additional costs are incurred to get the same work done more quickly. Answer C represents fast tracking, in which normally sequential tasks are done in parallel, increasing risk and rework.
 54. **Answer A** is correct. Critical path method is a project-scheduling technique that focuses on float to determine tasks with the least scheduling flexibility. Answer B is incorrect because PERT focuses on weighted average duration estimates. Answer C is incorrect because crashing is a duration compression technique. Answer D is incorrect because Monte Carlo is a simulation technique that is used in duration estimations.
 55. **Answer B** is correct. A cost baseline is used to measure and monitor project progress. Answer A is tempting because schedule baselines are often done at the same time. Answers C and D are incorrect because those activities are a part of cost control.

-
56. **Answer A** is correct. Answer B is incorrect because PDM (precedence diagramming method) puts the activities on the node. Answer C is incorrect because the critical path method generally involves durations as well as activities on node. Answer D is incorrect because it is the acronym for American Association of Retired Persons.
57. **Answer A** is correct. Answer B is tempting, but a project charter initiates a project and does not provide the execution guidelines (although in real life the charter often includes these items). Answers C and D are incorrect because they are inputs to the project plan development.
58. **Answer A** is correct because the time for drying has a dependency with the painting. Answer B is incorrect because you might have some unusual consequences to adding lead time to the task that the drying is not associated with. Answer C is incorrect and will lead to a bad schedule. Answer D is possible, but not the best answer.
59. **Answer A** is correct. A schedule coding structure enables the users of the schedule to sort and use it better. Answer B is tempting, but the chart of accounts is related to the WBS, not the schedule. Answer C is incorrect because the coding structure is not only related to system development projects. Answer D is incorrect because it ties incorrect Answer B with correct Answer A and is therefore also incorrect.
60. **Answer D** is correct. Answers A and B are true statements, but not the best answers. Answer C is incorrect because staff acquisition is not a core planning process.
61. **Answer D** is correct. Answer A is incorrect because it is a description for an organizational chart. Answer B is true in that a WBS is a scope definition artifact, but it is not archived. The WBS is a living document throughout a project. Answer C is incorrect because the project team likely develops the WBS.
62. **Answer C** is correct. The WBS helps to focus communication and accountability at a level of detail required to manage a project. Answer A is incorrect because stakeholders do use a WBS. Answer B is incorrect but tempting because a WBS does define scope. However, it is not used to enforce a contractual agreement. Only courts can do that. Answer D is incorrect because an OBS is an organizational breakdown structure, and is not related to project elements.
63. **Answer D** is correct. A WBS does not provide the basis for a communications plan; however, it does facilitate communication and provide a framework on which to base reporting. Answers A, B, and C are all pieces of project management that a WBS supports and are correct statements; therefore, they are incorrect answers to this question.

64. **Answer D** is correct. Answers A, B, and C are all correct statements because they use the WBS as an input to the process and are therefore incorrect answers to this question.
65. **Answer B** is correct. Answer A is incorrect because the WBS hierarchy does not prevent duplication by itself. Answer C is incorrect because a WBS is focused on deliverables and components or work packages and not on tasks. Answer D is incorrect because a WBS can be sized appropriately to the project size with as many levels as necessary.
66. **Answer A** is correct. Answer B is what is created when the proper linking takes place. Answer C is not recommended—measuring work accomplishment is preferred by PMI. Answer D is incorrect because integration tasks only need to be included in a WBS when several components are being brought together to create a higher-level deliverable.
67. **Answer D** is correct. The cost of the WBS effort creation is not a factor considered by PMI as a challenge to create a WBS and is assumed as part of a project. Answers A, B, and C are correct statements and are challenges to creating a well-defined WBS. Therefore, they are incorrect answers to this question.
68. **Answer B** is correct. Answers A, C, and D are incorrect because they are done after risk events are identified.
69. **Answer D** is correct because it is a general factor to consider in periodic reviews of the WBS. Answer A is incorrect because it is a consideration for risk and the WBS. Answer B is incorrect because it is a general consideration with regard to accounting and payroll structures are not considered in a WBS. Answer C is incorrect because determination of element completion is not a key element when developing a WBS.
70. **Answer C** is correct because this assumption will have a major impact upon how you approach the bidding on a government project. Limits on power and the use of eminent domain to obtain real property are the other two key assumptions in this example. Answer A may or may not be true, depending on the project. Answer B is incorrect because alternatives are not included in the WBS, regardless if it is a government project. Answer D is incorrect because real property is not included in the WBS.