Chapter 2 Answers

1. c) Increasing rose bouquet production in anticipation of Mother's Day demand. Accommodating high demand still falls under the realm of operations. Anticipating and scheduling daily, monthly, seasonal, or cyclical fluctuations are common duties for “operational” individuals. All other answers involve a project impacting the day-to-day operations in some significant way. [*Crosswind Manual 3.1.2; PMBOK® Guide 1.5.1]

2. c) A team comprised of participants from all groups across the company. Explanation: A team comprised of participants from all groups across the company is a cross-functional work team. Utilizing such teams on a project allows the project manager and his team to take advantage of the knowledge and skills available. [*Crosswind Manual 3.4.6; PMBOK® Guide 2.1.3]

3. c) An initiative that has a specific purpose, creates specific results, has a definite start and end date, and is temporary. Explanation: A project is an initiative that has a specific purpose, creates specific results, has a definite start and end date, and is temporary. [*Crosswind Manual 3.1; PMBOK® Guide 3.1]

Chapter 3 Answers

1. a) Both focus on continuous improvement, management responsibility, customer satisfaction, and prevention over inspection. Explanation: The relationship between project management and quality management is that both focus on continuous improvement, management responsibility, customer satisfaction, and prevention over inspection. [*Crosswind Manual 8.2; PMBOK® Guide Chapter 8 Intro]

2. b) Product life cycle. Explanation: The product life cycle focuses on the overall ownership cost of the product of the project, not just the project cost to create the product. The project management life cycle is the project management approach to the project. The project life cycle involves the processes used to create the product of the project such as the steps to build a house or a computer system. "Program management life cycle" is noise. [*Crosswind Manual 3.3.3; PMBOK® Guide 2.4.2.2]

Chapter 5 Answers

1. a) Conflicting goals of the Sponsors. If there were conflicting goals of the Sponsors this could significantly impact the project as the attempt to build what would work for all involved could radically alter the plan. The creation of the WBS would be a challenge as well, but not as big as the best answer. The other two answers are noise.
2. a) Stakeholder management  
Stakeholder management involves determining the needs and expectations of the  
Stakeholders and management of those needs and expectations. Stakeholder  
identification involves determining the impacted Stakeholders. The other two  
answers are noise.

3. b) Project Manager and team  
The Project Manager and team are the best selection to create the project  
management plan and the estimates that feed into it. They are the people doing  
the work, so they should have the opportunity to estimate and plan it as well as  
possible. The Sponsor pays for the project. The Project Manager or the team only  
wouldn’t be a good choice as both are needed for a realistic plan.

4. d) Meet with the Sponsor and find out what their concerns are  
Meeting with the Sponsor to figure out their concerns is the best solution; it is the  
most proactive and can provide either an immediate fix or clearest information  
you can use to identify a concern or problem. The answers involving Senior  
Management are noise; they don’t deal with addressing the problem. The Triple  
Constraint answer is noise as well.

5. b) Evaluate the impact to the project and let the customer know the options and  
impact of the change.  
The Project Manager needs to evaluate the impact to the project and let the  
customer know the options. The Project Manager is there to do what the customer  
needs according to the plan or modified plan. Telling the customer the project is  
too close to being complete to integrate the change wouldn’t be the Project  
Manager’s decision to make, neither would defining the work as a new project.  
Ignoring the customer and hoping things disappear is professionally irresponsible.

Chapter 6 Answers

1. c) The team will know who is responsible for what work  
Explanation: The responsibility assignment matrix shows who is responsible for  
what work on the project. The Gantt chart shows who does what work and  
when they are to do it. The network diagram provides the sequence that the  
resources are to perform the activities in. "At what location the work is done" is  
noise. [*Crosswind Manual 9.1.3; PMBOK® Guide 9.1.2.1]

2. a) Defines the scope statement  
Explanation: The scope statement is an output from the Collect Requirements  
process. The other answers are included in the charter. [*Crosswind Manual 5.3;  
PMBOK® Guide 5.3]

3. b) Confusion on who is responsible for doing what  
The Responsibility Assignment Matrix shows who is responsible for what areas on  
the project. The Network diagram would provide guidance on what order the  
tasks occur. The organizational structure would confirm who is on the team, and
what the reporting structure is. The Gantt chart or schedule will show how long the tasks are.

4. **c) Assumptions**

Assumptions are created when there is an absence of certain information on a project. It's an educated guess. As the project evolves, the assumptions should be fewer. Constraints are items that limit a project environment. Team development and staff acquisition are noise.

### Chapter 7 Answers

1. **c) The finance company could purchase 100 acres of land abutting the development land based on its projections that the area will appreciate in value upon completion of the project**

   Explanation: Exploiting the risk is to undertake activity that grows or expands the positive aspects of the risk. Sharing the risk is to work with someone else to maximize the risk. Mitigate attempts to minimize the bad or maximize the good impact of the risk. Accepting the risk is to tolerate whatever occurred. [*Crosswind Manual 11.6.5; PMBOK® Guide 11.5.2.1, 11.5.2.2, 11.5.2.3]*

2. **d) Project risk events that cannot logically be forecasted**

   Explanation: Management reserves are created for unknown unknowns: risk events you cannot forecast for the project. Many companies do not set these funds aside and, when funds are needed to respond to unknown unknowns, management must find the funds from sources outside of the project. Contingency reserves are created for known unknowns: risk events you know can occur during the project. The other answers are noise. [Crosswind Manual 11.6; PMBOK® Guide 11.5]

3. **b) External, internal, technology, personnel**

   Explanation: Categorization of risk groups risks together by defining categories where they can fit. The correct answer fits this description. The other answers are noise because they relate to project management Process Groups or interpretations of the triple constraint. [*Crosswind Manual 11.2.2; PMBOK® Guide 11.1.3.1]*

4. **d) Risk transference, which avoids negative risk by transferring or reassigning responsibilities**

   Explanation: Risk transference assigns or transfers the risk to an external party. Risk mitigation attempts to minimize bad risk or maximize good risk. Risk acceptance deals with the risk if it occurs. Risk avoidance involves doing what can be done to eliminate the risk. [*Crosswind Manual 11.2.6; No PMBOK® Guide Reference]*

5. **d) Risk is a positive or negative event that may or may not occur**

   Explanation: Risk is a positive or negative event that may or may not occur. Risk always carries a degree of uncertainty and has not yet occurred. [*Crosswind Manual 11.1; PMBOK® Guide Chapter 11 Intro]*
Chapter 8 Answers

1. d) 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 5.4.1; PMBOK® Guide 5.4.3.1]

2. d) All the answers
   Explanation: The WBS serves as a primary input for determining what types of resources are needed on a project, how long those resources will be needed, the estimated high level costs of the project, and the shape of the schedule.
   [*Crosswind Manual 5.4.1; PMBOK® Guide 5.4.3.1]

3. d) Identifies special work packages that can be created outside the WBS, but within the project
   Explanation: If the work is not in the WBS, it is not part of the project. All other answers represent benefits of using a WBS. [*Crosswind Manual 5.4; PMBOK® Guide 5.4]

4. a) It has a duration of zero (0)
   Explanation: The milestone has a duration of zero. The milestone is typically used to define the start or completion of a series of activities. The other answers are noise. [*Crosswind Manual Glossary; PMBOK® Guide Glossary]

Chapter 9 Answers

1. d) BDG
   Explanation: The critical path is the longest path in the diagram. Of the four paths, BDG is the longest at 22 days. ACE is 15 days long. BDE is 21 days. BFG is 21 days. [*Crosswind Manual 6.6.5; PMBOK® Guide 6.6.2.2]

2. b) One day
   Explanation: The longest path with Activity F on it is path BFG with a duration of 21 days. The critical path of BDG is 22 days. Subtracting the length of BFG from the critical path (22-21) shows a difference of one day. This is the slack of Activity F. [*Crosswind Manual 6.6.5; PMBOK® Guide 6.6.2.2]

3. d) BDG, 23 days
   Explanation: By increasing Activity D from four days to five days the path BDG increases to 23 days. This is the longest of the paths on the network diagram. [*Crosswind Manual 6.6.5; PMBOK® Guide 6.6.2.2]
4. c) Late finish-early finish (LF-EF) or late start-early start (LS-ES)
   Explanation: Float is calculated by subtracting either the early finish (EF) from the
   late finish (LF), or the early start (ES) from the late start (LS). [*Crosswind Manual
   6.8; No PMBOK® Guide Reference]

Chapter 11 Answers
1. a) Parametric
   Explanation: The parametric estimate involves using a parameter of an amount
   per unit. In this case, $100 per square foot is the parameter. The analogous
   estimate is a top-down type of estimate. The bottom-up estimate is the detail that
   is created by the team. Gut-feel is a distracter. [*Crosswind Manual 6.5; PMBOK®
   Guide 6.5]

2. b) Bottom-up estimating
   Explanation: Bottom-up estimating involves creating a very detailed and accurate
   estimate based on estimating the lowest levels of work and rolling them up into a
   total estimate. Parametric estimating involves using a parameter such as $5.00 a
   square yard for material. Fast tracking involves re-sequencing already defined
   tasks to compress the overall duration of the schedule. Analogous estimating
   involves creating a relatively quick, high-level estimate. [*Crosswind Manual
   6.4.2; PMBOK® Guide 7.2.2.2]

3. a) The less known, the wider the range
   Explanation: The less known, the wider the range is the key principle in any
   environment. This occurs early in the project. As the progresses, the range
   narrows. -25% to +75% is the range of a rough order of magnitude (ROM)
   estimate. The other answers are incorrect. [*Crosswind Manual 7.12; PMBOK®
   Guide 7.2]

4. b) The estimate takes a great amount of time to create
   Explanation: Taking a great amount of time to create is not an advantage. All the
   other answers represent the advantages of creating a bottom-up estimate.
   [*Crosswind Manual 6.4.2; PMBOK® Guide 7.2.2.2, 7.2.2.3]

Chapter 12 Answers
1. c) Sunk cost
   Explanation: Sunk cost is the cost that has been spent on the project. It shouldn’t
   be taken into consideration when determining whether to continue with the
   project. Opportunity cost doesn’t apply here. The budgeted cost of work
   performed is the earned value (EV). There is nothing in the situation about
   phasing the project. [*Crosswind Manual 7.5; No PMBOK® Guide Reference]

2. b) Crashing
   Explanation: Crashing is the process of putting more resources on critical path
   items. Fast tracking is re-sequencing the critical path activities to achieve
schedule compression. Staff acquisition and re-planning are distracters.
[*Crosswind Manual 6.6.10; PMBOK® Guide 6.6.2.7]

3. d) Proposals that use fixed-price

Explanation: Proposals that use fixed-price contain the least amount of risk for the buyer; the seller assumes all the risk. In cost-plus-fixed-fee, the buyer pays all the cost, but the fee is fixed at a specific amount. In cost-plus-incentive-fee, the buyer pays all the cost, but the fee is paid if the incentive was met. For time and materials, the buyer pays the cost on a per hour basis plus any material.
[*Crosswind Manual 12.1.4; PMBOK® Guide 12.1.1.9]

4. a) Time and materials because it lends itself to small initiatives and staff supplementation

Explanation: A time and materials contract is typically used for smaller projects or staff augmentation, such as this example. The fixed-price contract has a seller doing work for a set price. The cost-plus contract pays a seller costs plus a negotiated fee. The cost-plus-incentive-fee pays a seller costs plus an incentive fee for meeting performance goals. [*Crosswind Manual 12.1.4; PMBOK® Guide 12.1.1.9]

5. d) If the longest paths are the same length, there can be multiple critical paths and the more critical paths there are on a project, the greater the increase of risk to the project

Explanation: The critical path is the longest path on the project. If the longest paths are the same length, there can be multiple critical paths and the more critical paths there are on a project, the greater the risk to the project.
[*Crosswind Manual 6.6.5; PMBOK® Guide 6.6.2.2]

Chapter 13 Answers

1. c) An agenda should be created and published and the meeting leader established

Explanation: Creating and publishing an agenda and knowing who is in charge of a meeting are two ways to have a highly organized effective meeting. Though the project manager may organize a meeting, he or she may not necessarily be in charge of the meeting. [*Crosswind Manual 10.4.5; PMBOK® Guide 10.1.2.5]

2. a) Problem solving

Explanation: Problem solving is the most proactive and lasting solution. Reward is a type of power. Compromise waters down the solution. Withdrawing is professionally irresponsible. [*Crosswind Manual 9.4.2; PMBOK® Guide 9.4.2.3]

3. d) Group norms, ground rules, and project management practices

Explanation: The common set of tools the project manager can utilize to minimize conflict are group norms, ground rules, and project management practices. [*Crosswind Manual 9.4.2; PMBOK® Guide 9.4.2.3]

4. Correct Answer: (B) Directing, coaching, facilitation, and support

Explanation: The evolution of leadership and managerial style starts with directing. As the project gains momentum, coaching is applied. When significant
work is completed facilitation comes into play. Support is applied as the project is closing. [*Crosswind Manual 9.1.6; No PMBOK® Guide Reference]

**Chapter 14 Answers**

1. b) Minimizing conflict  
   Explanation: Interpersonal or soft skills applicable to managing stakeholder engagement are building trust, resolving conflict, active listening, and overcoming resistance to change. While resolving conflict and minimizing conflict might appear to be similar, resolving eliminates the conflict and minimizing conflict merely makes the conflict less acute. [*Crosswind Manual 13.4; PMBOK® Guide 13.3]

2. c) High power/high interest  
   Explanation: The positions of CIO and CFO imply a high degree of power. Their involvement in ensuring regulatory compliance and the alignment of requirements imply a very high degree of interest. [*Crosswind Manual 13.2.1; PMBOK® Guide 13.1.2.1]

3. d) Approximately 90%  
   Explanation: Approximately 90% of a project manager's time is spent communicating. This could be via email, meetings, listening, speaking, Web conference, etc. [*Crosswind Manual 10.3.2; No PMBOK® Guide Reference]

4. c) Communications management plan  
   Explanation: The communications management plan helps determine the stakeholders' communication needs. The other answers are noise. [*Crosswind Manual 10.3.1; PMBOK® Guide 10.1.3.1]

**Chapter 15 Answers**

1. c) Issue log  
   Explanation: The issue log is used to track issues that arise and provide key information about the issue. The stakeholder register is used to identify stakeholders and provide key information about them. The stakeholder management plan is used to provide direction for managing stakeholder engagement. [*Crosswind Manual 13.4; PMBOK® Guide 13.3]

2. a) Network diagram  
   Explanation: The network diagram shows the sequencing and length of the diagram. The responsibility assignment matrix shows who is responsible for what, and doesn’t include time. The WBS shows what work is in the project but doesn’t focus on how long it should take. The budget deals with the costs of the project, not time. [*Crosswind Manual 6.3.2; PMBOK® Guide 6.3.3.1]

3. c) Issues and risks are different and should be managed accordingly  
   Explanation: Risks are uncertain events or conditions that, if they occur, have a positive or negative effect on one or more project objectives. Risks are considered and responses formulated for execution if the risk occurs. Issues are disputed or
unsettled conditions. They are considered and addressed when they occur. [*Crosswind Manual 13.4; PMBOK® Guide 13.3]

Chapter 16 Answers

1. a) $950.00
   Explanation: The planned value as of day 3 is $950.00. Obtain this value by adding the planned value of Activities A, B, and C, which should have been done as of day 3 on the project. [*Crosswind Manual 7.14.1; PMBOK® Guide 7.4.2.1, 7.4.2.2, 7.4.2.3, 7.4.2.4]

2. d) 0.84
   Explanation: To calculate this value, calculate earned value (EV) and actual cost (AC) first. Multiply the percent complete of each activity by its planned value (PV) to obtain the earned value (EV) for each activity. Sum the earned value (EV) $1670.00 of each activity to determine the total earned value. Sum the actual cost of each activity to determine the total actual cost (AC) $1980.00. Divide the earned value of $1670.00 by the actual cost of $1980.00 to produce a CPI of 0.84. This value means that the project is getting $0.84 cents value for every dollar it is spending. [*Crosswind Manual 7.14.1; PMBOK® Guide 7.4.2.1, 7.4.2.2, 7.4.2.3, 7.4.2.4]

3. b) Schedule performance index
   Explanation: The schedule performance index (SPI) shows the rate at which the schedule is progressing. The SPI is established by showing the ratio between work done, also known as earned value (EV) and work scheduled, also known as planned value (PV). The schedule variance (SV) is the difference between work done, also known as earned value (EV) and work scheduled, also known as planned value (PV). The Gantt chart shows the schedule of the project. A variance report shows the difference between two items being measured. [*Crosswind Manual 7.14.1; PMBOK® Guide 7.4.2.1, 7.4.2.2, 7.4.2.3, 7.4.2.4]

4. b) To check for variances from the plan and make appropriate adjustments when variances are encountered
   Explanation: Monitoring and controlling consists of monitoring for variances from the plan and making appropriate adjustments when variances are encountered [*Crosswind Manual 3.3.1; PMBOK® Guide 2.4]

5. 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. [*Crosswind Manual 5.6; PMBOK® Guide 5.6]
Chapter 18 Answers

1. b) Portfolio management
   Explanation: Portfolio management focuses on aligning project by business unit or product line where there is some common overlap and subject matter expertise in the area of the projects. Project management involves creating products via projects. Operations management involves the day-to-day repetitive tasks of a business. Management by objectives is a goal setting technique. [*Crosswind Manual 3.1.5; PMBOK® Guide 1.4.2]

2. d) Project management office
   Explanation: The project management office (PMO) can define standards, audit projects, and help mentor project managers or perform any other activity needed, within reason, for the management of projects within an organization. [*Crosswind Manual 3.1.7; PMBOK® Guide 1.4.4]

3. b) A PMO typically controls project policies, project documentation, and project managers
   Explanation: The project management office (PMO) can control project managers, documentation and policies or anything else needed within reason for the management of projects within an organization. [*Crosswind Manual 3.1.7; PMBOK® Guide 1.4.4]