Chapter 1

The Project Management Institute (PMI) is a professional organization for project managers.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. | Which of the following activities is the best example of a project?   |  |  | | --- | --- | | A. | Processing insurance claims |  |  |  | | --- | --- | | B. | Producing automobiles |  |  |  | | --- | --- | | **C.** | Writing a policy manual |  |  |  | | --- | --- | | D. | Monitoring product quality |  |  |  | | --- | --- | | E. | Overseeing customer requests |   A project is not routine, repetitive work! Ordinary daily work typically requires doing the same or similar work over and over, while a project is done only once; a new product or service exists when the project is completed. | |
| 6. | | In the \_\_\_\_\_\_\_\_\_\_\_\_\_ stage of the project life cycle, project objectives are established, teams are formed, and major responsibilities are assigned.   |  |  | | --- | --- | | A. | Identifying |  |  |  | | --- | --- | | **B.** | Defining |  |  |  | | --- | --- | | C. | Planning |  |  |  | | --- | --- | | D. | Executing |  |  |  | | --- | --- | | E. | Closing |   Specifications of the project are defined; project objectives are established; teams are formed; major responsibilities are assigned in the defining stage. | |

In the \_\_\_\_\_\_\_\_\_\_\_\_\_ stage of the project life cycle you are more likely to find status reports, changes, and the creation of forecasts.

A. Identifying

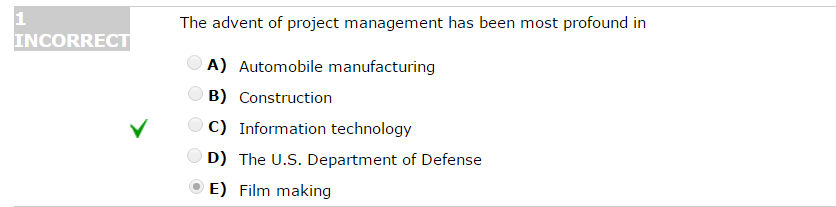
B. Defining

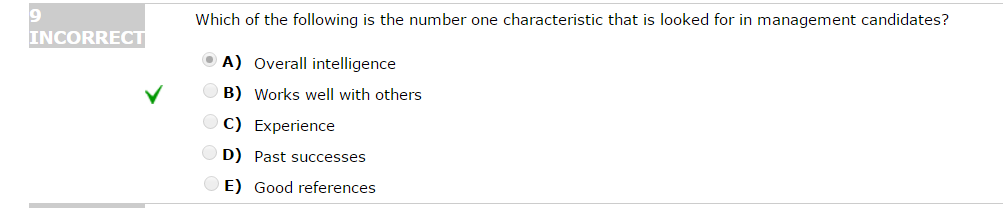
C. Planning

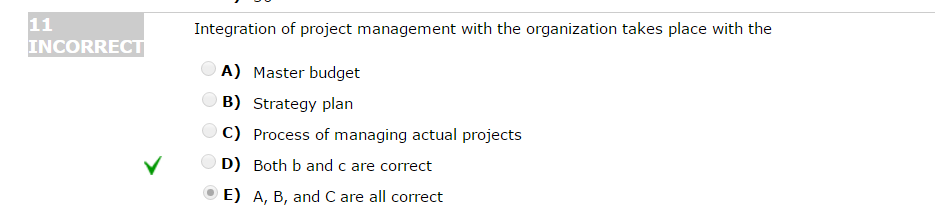
D. Executing

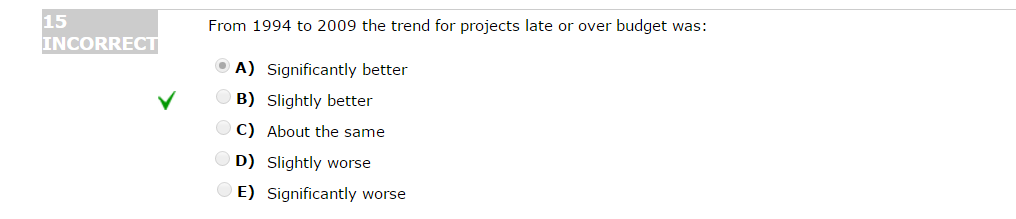
E. Closing

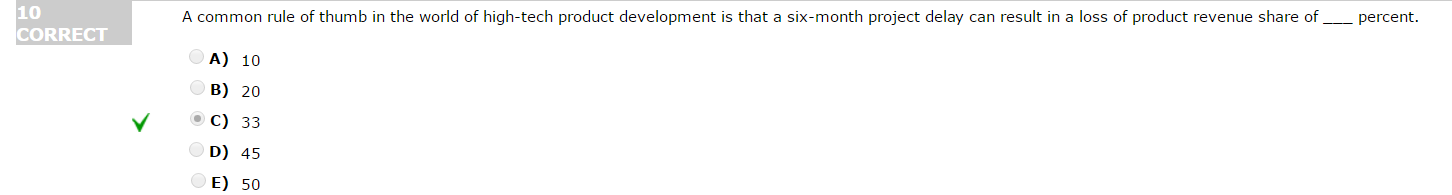
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. | In the \_\_\_\_\_\_\_\_\_\_\_\_\_ stage of the project life cycle the project's schedule and budget will be determined.      |  |  | | --- | --- | | A. | Identifying |  |  |  | | --- | --- | | B. | Defining |  |  |  | | --- | --- | | **C.** | Planning |  |  |  | | --- | --- | | D. | Executing |  |  |  | | --- | --- | | E. | Closing |   The schedule and budget are determined in the planning stage of the project life cycle. | |
| 11. | | Which of the following is NOT typical of a project manager?      |  |  | | --- | --- | | A. | Managing a temporary activity |  |  |  | | --- | --- | | **B.** | Overseeing existing operations |  |  |  | | --- | --- | | C. | Managing a nonrepetitive activity |  |  |  | | --- | --- | | D. | Responsible for time, cost and performance trade-offs |  |  |  | | --- | --- | | E. | Work with a group of outsiders, including vendors and suppliers |   Project managers manage temporary, nonrepetitive activities unlike functional managers who manage existing operations. | |
| 12. | | Which of the following is NOT one of the driving forces behind the increasing demand for project management?      |  |  | | --- | --- | | A. | Compression of the product life cycle |  |  |  | | --- | --- | | B. | Knowledge explosion |  |  |  | | --- | --- | | C. | Increasing need for multiproject management |  |  |  | | --- | --- | | **D.** | Declining need for product customization |  |  |  | | --- | --- | | E. | More sustainable business practices |   An increase in need for product customization is a driving force behind the increasing demand for project management. | |
| 15. | | Which of the following statements is true?      |  |  | | --- | --- | | A. | Project management is far from a standard way of doing business |  |  |  | | --- | --- | | **B.** | Project management is increasingly contributing to achieving organizational strategies |  |  |  | | --- | --- | | C. | Project management is being used at a consistent percentage of a firm's efforts |  |  |  | | --- | --- | | D. | Project management is a specialty that few organizations have access to |  |  |  | | --- | --- | | E. | All of these statements are false |   Project management is rapidly becoming a standard way of doing business. The future promises an increase in the importance and the role of projects in contributing to the strategic direction of organizations. | |
| 18. | | Projects should align with the organization's overall strategy in order to      |  |  | | --- | --- | | A. | Complete the project safely. |  |  |  | | --- | --- | | **B.** | Reduce waste of scarce resources. |  |  |  | | --- | --- | | C. | Ensure customer satisfaction. |  |  |  | | --- | --- | | D. | Secure funding. |  |  |  | | --- | --- | | E. | None of these are reasons why projects should align with the organization's overall strategy. |   Since projects are the modus operandi, strategic alignment of projects is of major importance to conserving and effective use of organization resources. | |
| 23. | | Which of the following is NOT a reason why project management has become a standard way of doing business?      |  |  | | --- | --- | | A. | Increased need for skilled management of stakeholders outside of organization |  |  |  | | --- | --- | | B. | Projects need to be done faster |  |  |  | | --- | --- | | **C.** | Organizations are doing more project work in-house instead of outsourcing |  |  |  | | --- | --- | | D. | Organizations are executing more and more projects |  |  |  | | --- | --- | | E. | Increased product complexity and innovation |   One of the most significant driving forces behind the demand for project management is corporate downsizing. This has also led to a change in the way organizations approach projects. Companies outsource significant segments of project work, and project managers have to manage not only their own people but also their counterparts in different organizations. | |
| 26. | | Which of the following is NOT true about project management?      |  |  | | --- | --- | | A. | It is not limited to the private sector |  |  |  | | --- | --- | | B. | Many opportunities are available for individuals interested in this career path |  |  |  | | --- | --- | | C. | It improves one's ability to plan, implement and manage activities to accomplish specific organizational objectives |  |  |  | | --- | --- | | **D.** | It focuses primarily on technical processes |  |  |  | | --- | --- | | E. | It is a set of tools |   Project management is more than a set of tools; it also focuses on building collaborative relationships among a diverse cast of individuals. | |
| 29. | | Which of the following is a good example of a program?      |  |  | | --- | --- | | A. | Planting a garden |  |  |  | | --- | --- | | **B.** | Developing a new residential area that includes six custom homes |  |  |  | | --- | --- | | C. | Developing a new marketing plan |  |  |  | | --- | --- | | D. | Taking notes each class meeting to prepare for the final |  |  |  | | --- | --- | | E. | Planning a wedding |   A program is a group of related projects designed to accomplish a common goal over an extended period of time. | |











|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. | A project selection process that is strongly linked to strategy results in      |  |  | | --- | --- | | A. | The most profit. |  |  |  | | --- | --- | | **B.** | Better utilization of the organization's resources. |  |  |  | | --- | --- | | C. | More projects. |  |  |  | | --- | --- | | D. | A larger and more diverse organization. |  |  |  | | --- | --- | | E. | Stronger core competencies. |   Without integration of projects with the strategic plan, resources are poorly utilized. Conversely, organizations that have a link of projects to strategy have more cooperation across the organization, perform better on projects and tend to have fewer projects. |
| 3. | Which of the following is NOT true about organizational politics?      |  |  | | --- | --- | | **A.** | Project managers should not engage in organizational politics |  |  |  | | --- | --- | | B. | Politics can have a significant influence on which projects receive funding |  |  |  | | --- | --- | | C. | Politics exist in every organization |  |  |  | | --- | --- | | D. | Politics can influence project selection |  |  |  | | --- | --- | | E. | Politics can play a role in the aspirations behind projects |   Many would argue that project management and politics should not mix. A more proactive response would be that projects and politics invariably mix. Effective project managers recognize that any significant project has political ramifications. |
| 4. | Which of the following terms is often used to denote a project that a powerful, high-ranking official is advocating?      |  |  | | --- | --- | | **A.** | Sacred cow |  |  |  | | --- | --- | | B. | Pet project |  |  |  | | --- | --- | | C. | Political necessity |  |  |  | | --- | --- | | D. | Special undertaking |  |  |  | | --- | --- | | E. | Strategic ploy |   The term "sacred cow" is often used to denote a project that a powerful, high-ranking official is advocating. |
| 6. | Project managers who understand the role that their project plays in accomplishing the organization's strategy are able to do all of the following EXCEPT      |  |  | | --- | --- | | A. | Demonstrate to senior management how their project contributes to the firm's mission. |  |  |  | | --- | --- | | B. | Explain to team members why certain project objectives and priorities are critical. |  |  |  | | --- | --- | | C. | Explain to stakeholders why certain project objectives and priorities are critical. |  |  |  | | --- | --- | | D. | Be able to respond appropriately to delays and/or questions about product design. |  |  |  | | --- | --- | | **E.** | Be able to focus on problems or solutions, even if the project is a low priority strategically. |   Project managers who understand the role that their project plays in accomplishing the organization's strategy will not be inclined to waste time focusing on problems that are a low priority in regard to achieving the organization's strategy. |
| 6. | Project managers who understand the role that their project plays in accomplishing the organization's strategy are able to do all of the following EXCEPT      |  |  | | --- | --- | | A. | Demonstrate to senior management how their project contributes to the firm's mission. |  |  |  | | --- | --- | | B. | Explain to team members why certain project objectives and priorities are critical. |  |  |  | | --- | --- | | C. | Explain to stakeholders why certain project objectives and priorities are critical. |  |  |  | | --- | --- | | D. | Be able to respond appropriately to delays and/or questions about product design. |  |  |  | | --- | --- | | **E.** | Be able to focus on problems or solutions, even if the project is a low priority strategically. |   Project managers who understand the role that their project plays in accomplishing the organization's strategy will not be inclined to waste time focusing on problems that are a low priority in regard to achieving the organization's strategy. |
| 8. | Which of the following problems refers to lack of understanding and consensus of organization strategy among top and middle-level managers? This also can result when top management formulates strategy and leaves implementation to functional managers.      |  |  | | --- | --- | | A. | Multitasking |  |  |  | | --- | --- | | B. | Organization politics |  |  |  | | --- | --- | | **C.** | Implementation gap |  |  |  | | --- | --- | | D. | Resource conflicts |  |  |  | | --- | --- | | E. | Employee turnover |   The implementation gap refers to the lack of understanding and consensus of organization strategy among top and middle-level management. |
| 10. | Which of the following is the correct order for the strategic management process?      |  |  | | --- | --- | | A. | Strategies, mission, objectives, projects |  |  |  | | --- | --- | | B. | Objectives, projects, mission, strategies |  |  |  | | --- | --- | | **C.** | Mission, strategies, objectives, projects |  |  |  | | --- | --- | | D. | Objectives, mission, strategies, projects |  |  |  | | --- | --- | | E. | Projects, mission, strategies, objectives |   Once the mission statement has been written, strategies are formulated. After this, objectives are developed to achieve the strategy and finally strategies are implemented through projects. |
| 11. | Which of the following questions does the organization's mission statement answer?      |  |  | | --- | --- | | A. | What are our long-term strategies? |  |  |  | | --- | --- | | B. | What are our long-term goals and objectives? |  |  |  | | --- | --- | | C. | How do we operate in the existing environment? |  |  |  | | --- | --- | | **D.** | What do we want to become? |  |  |  | | --- | --- | | E. | All of these are answered by the mission statement |   The mission identifies "what we want to become," or the raison d'être. Mission statements identify the scope of the organization in terms of its product or service. They communicate and identify the purpose of the organization to stakeholders. |
| 16. | Which of the following would be classified as an organizational threat?      |  |  | | --- | --- | | **A.** | Slowing of the economy |  |  |  | | --- | --- | | B. | Excellent employees |  |  |  | | --- | --- | | C. | Poor product quality |  |  |  | | --- | --- | | D. | Declining facilities |  |  |  | | --- | --- | | E. | High labor costs |   Examples of perceived external threats could be a slowing of the economy, a maturing life cycle, exchange rates, or government regulation. |
| 19. | Which of the following is NOT a problem associated with the absence of a project portfolio system?      |  |  | | --- | --- | | A. | Organizational politics |  |  |  | | --- | --- | | **B.** | Lack of funding |  |  |  | | --- | --- | | C. | Resource conflicts |  |  |  | | --- | --- | | D. | Multitasking |  |  |  | | --- | --- | | E. | Implementation gap |   A project portfolio system can go a long way to reduce the impact the implementation gap, organization politics, resource conflicts and multitasking. |
| 23. | Projects are usually classified into all but one of the following categories. Which one is NOT one of the typical classifications?      |  |  | | --- | --- | | A. | Compliance and emergency |  |  |  | | --- | --- | | B. | Operational |  |  |  | | --- | --- | | C. | Strategic |  |  |  | | --- | --- | | **D.** | Political necessity |  |  |  | | --- | --- | | E. | All of these are typical classifications |   Many organizations find they have three different kinds of projects in their portfolio: compliance and emergency (must do), operational, and strategic projects. |
| 25. | A project screening matrix typically contains all of the following EXCEPT      |  |  | | --- | --- | | A. | The list of available projects |  |  |  | | --- | --- | | B. | Specific criteria |  |  |  | | --- | --- | | C. | Weights assigned to specific criteria |  |  |  | | --- | --- | | **D.** | Costs to complete each project |  |  |  | | --- | --- | | E. | All of these are typically contained |   Screening matrices should contain both financial and nonfinancial criteria that align with organization strategy. Weights are assigned to these criteria based on how well they align with strategy. Available projects are included in the matrix for comparison. |
| 26. | Regardless of the criteria differences among different types of projects, the most important criterion for project selection is      |  |  | | --- | --- | | A. | How the project will balance risk within the project portfolio |  |  |  | | --- | --- | | **B.** | The project's fit to the organization strategy |  |  |  | | --- | --- | | C. | Compliance |  |  |  | | --- | --- | | D. | Nonfinancial |  |  |  | | --- | --- | | E. | Profit |   The project's fit to the organization strategy is the most important criterion for project selection. This criterion should be consistent across all types of projects and carry a high priority relative to other criteria. |
| 27. | Examples of nonfinancial criteria include all of the following EXCEPT      |  |  | | --- | --- | | A. | Capturing a larger market share. |  |  |  | | --- | --- | | B. | Reducing dependency on unreliable suppliers. |  |  |  | | --- | --- | | C. | Preventing government intervention and regulation. |  |  |  | | --- | --- | | D. | Making it difficult for competitors to enter the market. |  |  |  | | --- | --- | | **E.** | Calculating the time it will take to recover the project investment. |   The payback model measures the time it will take to recover the project investment. It is considered a financial criterion. |
| 30. | The following are responsibilities of the governance team when managing a portfolio system EXCEPT      |  |  | | --- | --- | | **A.** | Deciding how they wish to balance the available organizational resources among the different types of projects. |  |  |  | | --- | --- | | B. | Publishing the priority of every project and ensuring the process is open and free of power politics. |  |  |  | | --- | --- | | C. | Evaluating the progress of the projects in the portfolio. |  |  |  | | --- | --- | | D. | Constant scanning of the external environment to determine if organizational selection criteria need to be changed. |  |  |  | | --- | --- | | E. | Communicating which projects are approved. |   Deciding how they wish to balance the available organizational resources among the different types of projects is the responsibility of senior management along with providing guidance in establishing selection criteria that strongly align with the current organization strategies. |
| 3. | All of the following are disadvantages of organizing projects within a matrix arrangement EXCEPT      |  |  | | --- | --- | | A. | Dysfunctional conflict between functional managers and project managers. |  |  |  | | --- | --- | | **B.** | Expensive. |  |  |  | | --- | --- | | C. | Infighting. |  |  |  | | --- | --- | | D. | Stressful. |  |  |  | | --- | --- | | E. | Longer project duration. |   Dysfunctional conflict, infighting, stressful situations, and longer project duration are all disadvantages of organizing projects within a matrix arrangement. High cost is a disadvantage of dedicated project teams. |
| 4. | The structure that manages projects within the existing organizational structure is \_\_\_\_\_\_\_\_\_\_ organization.      |  |  | | --- | --- | | **A.** | Functional |  |  |  | | --- | --- | | B. | Balanced matrix |  |  |  | | --- | --- | | C. | Weak matrix |  |  |  | | --- | --- | | D. | Strong matrix |  |  |  | | --- | --- | | E. | Projectized |   One approach to organizing projects is to simply manage them within the existing functional hierarchy of the organization. Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project. |
| 9. | A project team that operates with a full-time project manager as a separate unit from the rest of the organization is structured using \_\_\_\_\_\_\_\_ organization.      |  |  | | --- | --- | | A. | Functional |  |  |  | | --- | --- | | B. | Balanced matrix |  |  |  | | --- | --- | | C. | Weak matrix |  |  |  | | --- | --- | | D. | Strong matrix |  |  |  | | --- | --- | | **E.** | Projectized |   Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. The main responsibility of traditional functional departments is to assist and support these project teams. This type of organization is referred to in the literature as a Projectized Organization. |
| 10. | Which of the following combinations represents the extremes of project organization?      |  |  | | --- | --- | | A. | Strong matrix and balanced matrix |  |  |  | | --- | --- | | **B.** | Functional and projectized |  |  |  | | --- | --- | | C. | Projectized and balanced matrix |  |  |  | | --- | --- | | D. | Projectized and strong matrix |  |  |  | | --- | --- | | E. | Strong matrix and functional |   The functional organization is also commonly used when, given the nature of the project, one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project. At the other end of the structural spectrum is the creation of dedicated project teams. These teams operate as separate units from the rest of the parent organization. |
| 11. | MegaComputers Inc., has assigned a project manager for each of the five new-product teams. The managers, as well as the project team members, work on the projects on a full-time basis. The structure being used is \_\_\_\_\_\_\_\_ organization.      |  |  | | --- | --- | | A. | Functional |  |  |  | | --- | --- | | B. | Balanced matrix |  |  |  | | --- | --- | | C. | Weak matrix |  |  |  | | --- | --- | | D. | Strong matrix |  |  |  | | --- | --- | | **E.** | Projectized |   Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. |
| 12. | All of the following are organizational considerations when determining the right project management structure EXCEPT      |  |  | | --- | --- | | A. | How important project management is to the success of the organization |  |  |  | | --- | --- | | B. | What percentage of core work involves projects |  |  |  | | --- | --- | | C. | Resource availability |  |  |  | | --- | --- | | D. | Assess current practices and determine any changes that are needed to more effectively manage projects |  |  |  | | --- | --- | | **E.** | Budget constraints |   Budget constraints are a project consideration and not an organizational consideration. |
| 16. | \_\_\_\_\_\_\_\_\_ organization is a hybrid form in which a horizontal project management structure is "overlaid" in the normal functional hierarchy.      |  |  | | --- | --- | | A. | Functional |  |  |  | | --- | --- | | **B.** | Matrix |  |  |  | | --- | --- | | C. | Project |  |  |  | | --- | --- | | D. | Balanced |  |  |  | | --- | --- | | E. | Neutral |   Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy. |
| 19. | All of the following are functions culture plays in an organization EXCEPT      |  |  | | --- | --- | | A. | It provides a sense of identity. |  |  |  | | --- | --- | | B. | It helps legitimize the management system. |  |  |  | | --- | --- | | **C.** | It replaces the need for a project selection process. |  |  |  | | --- | --- | | D. | It helps create social order. |  |  |  | | --- | --- | | E. | It clarifies and reinforces standards of behavior. |   An organization's culture provides a sense of identity, helps legitimize the management system, helps create social order and clarifies and reinforces standards of behavior. |
| 24. | Factors in identifying cultural characteristics include all the following EXCEPT      |  |  | | --- | --- | | A. | Norms. |  |  |  | | --- | --- | | B. | Customs. |  |  |  | | --- | --- | | C. | Values. |  |  |  | | --- | --- | | **D.** | Attitude. |  |  |  | | --- | --- | | E. | All of these are factors in identifying cultural characteristics. |   Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings. This system is manifested by customs and habits that exemplify the values and beliefs of the organization. |
| 27. | Which of the following cultural characteristics relates to the degree to which work activities are organized around groups rather than individuals?      |  |  | | --- | --- | | A. | Member identity |  |  |  | | --- | --- | | **B.** | Team emphasis |  |  |  | | --- | --- | | C. | Managerial focus |  |  |  | | --- | --- | | D. | Unit integration |  |  |  | | --- | --- | | E. | Control |   Team emphasis is the degree to which work activities are organized around groups rather than individuals. |
| 1. | The essence of positive synergy can be found in the phrase      |  |  | | --- | --- | | A. | Front of ship sink—back of ship sink. |  |  |  | | --- | --- | | B. | There is no "I" in team. |  |  |  | | --- | --- | | C. | Two heads are better than one. |  |  |  | | --- | --- | | **D.** | The whole is greater than the sum of the parts. |  |  |  | | --- | --- | | E. | If it doesn't kill you, it makes you stronger. |   The essence of positive synergy can be found in the phrase "The whole is greater than the sum of the parts." |
| 2. | Which of the following is commonly associated with high-performing project teams?      |  |  | | --- | --- | | A. | Risk taking is controlled and not allowed to jeopardize the overall project |  |  |  | | --- | --- | | B. | Roles and specific responsibilities are well-defined |  |  |  | | --- | --- | | C. | A degree of competition among team members is encouraged |  |  |  | | --- | --- | | **D.** | Mistakes are viewed as opportunities for learning |  |  |  | | --- | --- | | E. | Team members are selected with similar talents to enhance cohesion |   To encourage risk taking and creativity, mistakes are treated as opportunities for learning rather than reasons for punishment. |
| 3. | During which stage of team development do members accept that they are part of a project group but resist the constraints that the project and the group put on their individuality?      |  |  | | --- | --- | | A. | Norming |  |  |  | | --- | --- | | **B.** | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | E. | Forming |   As the name suggests, the storming stage is marked by a high degree of internal conflict. Members accept that they are part of a project group but resist the constraints that the project and group put on their individuality. There is conflict over who will control the group and how decisions are made. |
| 4. | During which stage of team development do close relationships develop and the group demonstrates cohesiveness?      |  |  | | --- | --- | | **A.** | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | E. | Forming |   The norming stage is one in which close relationships develop and the group demonstrates cohesiveness. Feelings of camaraderie and shared responsibility for the project are heightened. |
| 5. | During which stage of team development is the team fully functional and accomplishing project goals?      |  |  | | --- | --- | | A. | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | **C.** | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | E. | Forming |   In the performing stage, the team operating structure at this point is fully functional and accepted. Group energy has moved from getting to know each other and how the group will work together to accomplishing the project goals. |
| 6. | During which stage of team development is high performance not a top priority and attention is devoted to wrapping up the project?      |  |  | | --- | --- | | A. | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | **D.** | Adjourning |  |  |  | | --- | --- | | E. | Forming |   For conventional work groups, performing is the last stage of their development. However, for project teams, there is a completion or adjourning phase. During this stage, the team prepares for its own disbandment. High performance is no longer a top priority. Instead attention is devoted to wrapping up the project. Responses of members vary in this stage. Some members are upbeat, basking in the project team's accomplishments. Others may be depressed over loss of camaraderie and friendships gained during the project's life. |
| 7. | During which stage of team development do team members establish ground rules and try to find out what behaviors are acceptable and what performance expectations are?      |  |  | | --- | --- | | A. | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | **E.** | Forming |   During the forming stage, the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is complete once members begin to think of themselves as part of a group. |
| 8. | Sam is the coach of a high school soccer team and has noticed that some close relationships have formed as well as feelings of camaraderie and shared responsibilities for the team's success. Which stage of development is the team in?      |  |  | | --- | --- | | **A.** | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | E. | Forming |   The norming stage is one in which close relationships develop and the group demonstrates cohesiveness. Feelings of camaraderie and shared responsibility for the project are heightened. The norming phase is complete when the group structure solidifies and the group establishes a common set of expectations about how members should work together. |
| 10. | Tom is managing a project team responsible for building a new office building that started this week. He notices that team members are trying out different behaviors to see what is acceptable to the project and personal relations. Which stage of development is the team in?      |  |  | | --- | --- | | A. | Norming |  |  |  | | --- | --- | | B. | Storming |  |  |  | | --- | --- | | C. | Performing |  |  |  | | --- | --- | | D. | Adjourning |  |  |  | | --- | --- | | **E.** | Forming |   During the forming stage, the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is complete once members begin to think of themselves as part of a group. |
| 11. | Experience and research indicate that high-performance project teams are much more likely to develop under all the following conditions EXCEPT      |  |  | | --- | --- | | A. | Members are assigned to the project full time. |  |  |  | | --- | --- | | B. | Members report solely to the project manager. |  |  |  | | --- | --- | | C. | There are 10 or fewer members per team. |  |  |  | | --- | --- | | **D.** | Team members are selected by their managers. |  |  |  | | --- | --- | | E. | The project involves a compelling objective. |   Instead of managers selecting team members, high performance is more likely to develop when members volunteer to serve on the project team. |
| 13. | There are two important factors that affect the recruitment of project members. Which of the following is one of those factors?      |  |  | | --- | --- | | A. | The budget available |  |  |  | | --- | --- | | B. | The size of the project |  |  |  | | --- | --- | | **C.** | The management structure being used to complete the project |  |  |  | | --- | --- | | D. | The level of innovation and technical expertise needed |  |  |  | | --- | --- | | E. | Organizational culture |   The process of selecting and recruiting project members will vary across organizations. Two important factors affecting recruitment are the importance of the project and the management structure being used to complete the project. |
| 17. | Researchers have found that high-performance teams have norms for team interaction. Which of the following is NOT one of those norms?      |  |  | | --- | --- | | A. | Hard work does not get in the way of having fun |  |  |  | | --- | --- | | B. | No information is shared outside the team unless all agree to it |  |  |  | | --- | --- | | C. | It is acceptable to be in trouble, but not to surprise others |  |  |  | | --- | --- | | **D.** | When a decision has to be made, everyone should agree before moving forward |  |  |  | | --- | --- | | E. | There is no tolerance for bulling a way through a problem or issue |   Agree to disagree. When a decision has been made, regardless of personal feelings, move forward. |
| 18. | All of the following have been found to be good for running effective project meetings EXCEPT      |  |  | | --- | --- | | A. | Start meetings on time regardless of whether everyone is present. |  |  |  | | --- | --- | | **B.** | Allow a time period for socializing to support the development of a team identity. |  |  |  | | --- | --- | | C. | Thoroughly document all decisions. |  |  |  | | --- | --- | | D. | Prepare and distribute an agenda prior to the meeting. |  |  |  | | --- | --- | | E. | Identify an adjournment time. |   It is recommended that time for socialized be scheduled at a time other than at a project meeting. |
| 21. | Which of the following would be considered the MOST effective project reward?      |  |  | | --- | --- | | A. | Desirable job assignments |  |  |  | | --- | --- | | B. | Lump-sum cash award |  |  |  | | --- | --- | | **C.** | All-expenses-paid trip for team members and their families |  |  |  | | --- | --- | | D. | Using negative reinforcement to motivate adequate performance |  |  |  | | --- | --- | | E. | Public recognition |   Project managers should reward the entire project team and not give individual rewards unless the team agrees that an individual deserves special acknowledgement. Furthermore, to have more value, rewards need to have lasting significance. Many companies convert cash into vacation rewards, sometimes with corresponding time off. For example, there is one firm that rewarded a project team for getting the job done ahead of schedule with a four-day, all-expenses-paid trip to Walt Disney World for the members' entire families. |
| 22. | Individual rewards for outstanding work would NOT include      |  |  | | --- | --- | | A. | Letters of commendation. |  |  |  | | --- | --- | | B. | Public recognition. |  |  |  | | --- | --- | | C. | Desirable job assignments. |  |  |  | | --- | --- | | D. | Judiciously making exceptions to the rules. |  |  |  | | --- | --- | | **E.** | All of these are examples of individual rewards for outstanding work. |   Letters of commendation, public recognition for outstanding work, desirable job assignments and flexibility are all good examples of individual rewards for outstanding work. |
| 23. | The first step in facilitating group decision making is to      |  |  | | --- | --- | | A. | Call a meeting to discuss the problem. |  |  |  | | --- | --- | | **B.** | Identify the problem. |  |  |  | | --- | --- | | C. | Agree that there is a problem. |  |  |  | | --- | --- | | D. | Quantify the problem. |  |  |  | | --- | --- | | E. | Generate alternatives. |   The project manager needs to be careful not to state the problem in terms of choices (e.g., should we do X or Y?). Rather, the project manager should identify the underlying problem to which these alternatives and probably others are potential solutions. This allows group members to generate alternatives, not just choose among them. |
| 24. | Strategies to manage dysfunctional conflict do NOT include \_\_\_\_\_ the conflict.      |  |  | | --- | --- | | A. | Control |  |  |  | | --- | --- | | B. | Arbitrate |  |  |  | | --- | --- | | C. | Mediate |  |  |  | | --- | --- | | D. | Accept |  |  |  | | --- | --- | | **E.** | Encourage |   Encouraging conflict is not a strategy to manage dysfunctional conflict. |
| 26. | Which of the following would be an appropriate situation to require facilitating group decision making?      |  |  | | --- | --- | | A. | A mechanical engineer is stuck trying to meet performance criteria for a prototype |  |  |  | | --- | --- | | **B.** | When strong group commitment is needed to decide methods to reduce project scope |  |  |  | | --- | --- | | C. | Expectations are unclear regarding a specific task |  |  |  | | --- | --- | | D. | Materials needed to finish a custom kitchen have not been determined |  |  |  | | --- | --- | | E. | Dysfunctional conflict between two project team members needs to be resolved |   Most decisions on a project do not require a formal meeting to discuss alternatives and determine solutions. Instead decisions are made in real time as part of the daily interaction between project managers, stakeholders, and team members. Group decision making should be used when it will improve the quality of important decisions. This is often the case with complex problems that require the input of a variety of different specialists. Group decision making should also be used when strong commitment to the decision is needed and there is a low probability of acceptance if only one person makes the decision. |
| 27. | During the delivery phase of a project's life cycle, the most significant source of conflict is      |  |  | | --- | --- | | **A.** | Schedules. |  |  |  | | --- | --- | | B. | Priorities. |  |  |  | | --- | --- | | C. | Technical. |  |  |  | | --- | --- | | D. | Procedures. |  |  |  | | --- | --- | | E. | Costs. |   During the delivery phase, schedules continue as the biggest source of conflict as schedule slippages make it more difficult to meet target completion dates. |
| 28. | When reaching a decision during the group decision-making process, the project manager must build a consensus among the group and can do this by all of the following EXCEPT      |  |  | | --- | --- | | **A.** | If time becomes a factor, they must make an informed final decision after everyone's ideas have been heard. |  |  |  | | --- | --- | | B. | Provide periodic summaries to help the group keep track of its progress. |  |  |  | | --- | --- | | C. | Protect those members who represent the minority view. |  |  |  | | --- | --- | | D. | Guarantee that everyone has the opportunity to share opinions. |  |  |  | | --- | --- | | E. | Manage any conflict that may arise. |   Project managers play a pivotal role in guiding the group decision-making process. They must remind themselves that their job is not to make a decision but to facilitate the discussion within the group so that the team reaches a consensus on the best possible solution. |
| 29. | Symptoms of groupthink include      |  |  | | --- | --- | | A. | Encouraged functional conflict. |  |  |  | | --- | --- | | **B.** | Negative stereotypes of outsiders. |  |  |  | | --- | --- | | C. | Optimized critical thinking. |  |  |  | | --- | --- | | D. | Failed projects. |  |  |  | | --- | --- | | E. | Positive synergy. |   Symptoms of groupthink are the illusion of invulnerability, whitewash of critical thinking, negative stereotypes of outsiders, and direct pressure being applied to any dissenter. |
| 30. | When project managers impose a solution to dysfunctional conflict after listening to each party, they are \_\_\_\_\_\_\_\_\_\_ the conflict.      |  |  | | --- | --- | | A. | Eliminating |  |  |  | | --- | --- | | B. | Controlling |  |  |  | | --- | --- | | C. | Mediating |  |  |  | | --- | --- | | **D.** | Arbitrating |  |  |  | | --- | --- | | E. | Encouraging |   When the project manager imposes a solution to the dysfunctional conflict after listening to each party, this is arbitrating the conflict. The goal is not to decide who wins but to have the project win. |
| 31. | When project managers reduce the intensity of the conflict by smoothing over differences or interjecting humor when dysfunctional conflict arises, they are attempting to \_\_\_\_\_\_\_\_\_ the conflict.      |  |  | | --- | --- | | A. | Eliminate |  |  |  | | --- | --- | | **B.** | Control |  |  |  | | --- | --- | | C. | Mediate |  |  |  | | --- | --- | | D. | Arbitrate |  |  |  | | --- | --- | | E. | Encourage |   When a project manager reduces the intensity of the conflict by smoothing over differences or interjecting humor when dysfunctional conflict arises, he or she is attempting to control the conflict. If feelings are escalating, the manager can adjourn the interaction and hope cooler heads prevail the next day. |
| 32. | When not going through normal protocols of the parent organization becomes habit and results in rejection of policies and procedures, this is known as which of the following project pitfalls?      |  |  | | --- | --- | | A. | Groupthink |  |  |  | | --- | --- | | B. | Going native |  |  |  | | --- | --- | | **C.** | Bureaucratic bypass syndrome |  |  |  | | --- | --- | | D. | Projectitis |  |  |  | | --- | --- | | E. | The privileged parameter |   Project teams are often licensed to get things done without having to go through normal protocols of the parent organization. If this becomes habit, it results in the rejection of bureaucratic policies and procedures, which provide glue for the overall organization. This is known as the bureaucratic bypass syndrome. |
| 33. | How can a project manager support and encourage functional conflict?      |  |  | | --- | --- | | A. | Conflict should not be encouraged or supported |  |  |  | | --- | --- | | **B.** | By asking tough questions and by challenging the rationale behind recommendations |  |  |  | | --- | --- | | C. | By imposing a solution to the conflict after listening to each party |  |  |  | | --- | --- | | D. | By negotiating a resolution by reasoning and persuasion |  |  |  | | --- | --- | | E. | As soon as emotions flare, he or she can intervene and attempt to control conflict because it has become dysfunctional |   Many times project managers need to encourage healthy dissent in order to improve problem solving and innovation. They can demonstrate this process by asking tough questions and challenging the rationale behind recommendations. They can also orchestrate healthy conflict by bringing in people with different points of view to critical meetings. Project managers should also model an appropriate response when someone disagrees or challenges their ideas. They need to avoid acting defensively and instead encourage critical debate. |
| 34. | Which of the following is NOT one of the tips for alleviating communication problems of virtual teams?      |  |  | | --- | --- | | **A.** | Insist team members travel at least once during the project for a face-to-face meeting |  |  |  | | --- | --- | | B. | Keep team members informed on how well the overall project is going |  |  |  | | --- | --- | | C. | Share the pain when team members reside in different time zones |  |  |  | | --- | --- | | D. | Establish clear norms and protocols for surfacing assumptions and conflicts |  |  |  | | --- | --- | | E. | Establish a code of conduct to avoid delays |   Although there are circumstances when traveling to get key team members together may be necessary, this is not always a reasonable option. |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. | The ability of a 911 emergency system to identify the caller's phone number and location is considered to be a      |  |  | | --- | --- | | **A.** | Technical requirement. |  |  |  | | --- | --- | | B. | Milestone. |  |  |  | | --- | --- | | C. | Project limit. |  |  |  | | --- | --- | | D. | Project exclusion. |  |  |  | | --- | --- | | E. | Project deliverable. |   More frequently than not, a product or service will have technical requirements to ensure proper performance. |
| 15. | Scott has just been given a project that has a specific completion date. After a discussion with top management he finds that while the date is important the cost is more important and a slip in delivery would be acceptable if required to meet the cost targets. The completion date is best classified as      |  |  | | --- | --- | | A. | Constrained. |  |  |  | | --- | --- | | B. | Reduced. |  |  |  | | --- | --- | | **C.** | Accepted. |  |  |  | | --- | --- | | D. | Limited. |  |  |  | | --- | --- | | E. | Optional. |   For which criterion is it tolerable or acceptable not to meet the original parameters? When trade-offs have to be made, is it permissible for the schedule to slip, to reduce the scope and performance of the project, or to go over budget? In this incident cost is constrained and the date will be accepted. |
| 18. | The highest element in the hierarchical breakdown of the WBS is      |  |  | | --- | --- | | A. | A work package. |  |  |  | | --- | --- | | B. | Subdeliverables. |  |  |  | | --- | --- | | C. | A cost account. |  |  |  | | --- | --- | | D. | Major deliverables. |  |  |  | | --- | --- | | **E.** | The project. |   The WBS begins with the final deliverable, which is the project itself and the highest element in the hierarchical breakdown of the WBS. Major project work deliverables are identified first and then the subdeliverables necessary to accomplish the larger deliverables are defined. The process is repeated until the subdeliverable detail is small enough to be manageable and where one person can be responsible. This subdeliverable is further divided into work packages, which is the lowest element in the hierarchical breakdown of the WBS. |
| 19. | All of the following are ways the WBS helps in managing projects EXCEPT      |  |  | | --- | --- | | A. | With cost and time estimates the WBS makes it possible to plan, schedule and budget the project. |  |  |  | | --- | --- | | B. | It provides management with information appropriate to each level. |  |  |  | | --- | --- | | C. | Can be used to define communication channels. |  |  |  | | --- | --- | | **D.** | Allows the project manager to establish the overall objective of the project. |  |  |  | | --- | --- | | E. | As it is developed, organizational units and individuals can be assigned responsibility of work packages. |   The overall objective of the project must be established before creating the WBS. |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. | All of the following are usually included in a work package EXCEPT       |  |  | | --- | --- | | A. | What will be done. |  |  |  | | --- | --- | | B. | The time needed to complete the work. |  |  |  | | --- | --- | | C. | A single person who is responsible for its completion. |  |  |  | | --- | --- | | D. | All the costs for the work package. |  |  |  | | --- | --- | | **E.** | All of these are included in a work package. |   Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost. Each work package is a control point. A work package manager is responsible for seeing that the package is completed on time, within budget, and according to technical specifications. |
| 23. | When work packages are integrated with organizational units, a control point is created called a      |  |  | | --- | --- | | A. | Responsibility matrix. |  |  |  | | --- | --- | | B. | Priority matrix. |  |  |  | | --- | --- | | C. | Work package. |  |  |  | | --- | --- | | **D.** | Cost account. |  |  |  | | --- | --- | | E. | Project overlap. |   The intersection of work packages and the organizational unit creates a project control point (cost account) that integrates work and responsibility. |
| 24. | The WBS is best suited for projects that have a tangible outcome. Which of the following is used when the final outcome of the project is less tangible or is a product of a series of steps or phases?      |  |  | | --- | --- | | A. | Responsibility matrix |  |  |  | | --- | --- | | B. | Organization breakdown structure |  |  |  | | --- | --- | | C. | A work breakdown structure is still effective for these types of projects |  |  |  | | --- | --- | | D. | Priority matrix |  |  |  | | --- | --- | | **E.** | Process breakdown structure |   Process projects are driven by performance requirements and not plans or blueprints. Some practitioners choose to utilize what we refer to as a process breakdown structure (PBS) instead of the classic WBS. |
| 25. | If a project is small and does not require an elaborate system to assign tasks, which of the following is a good choice?      |  |  | | --- | --- | | **A.** | Responsibility matrix |  |  |  | | --- | --- | | B. | Organization breakdown structure |  |  |  | | --- | --- | | C. | Work breakdown structure |  |  |  | | --- | --- | | D. | Priority matrix |  |  |  | | --- | --- | | E. | Process breakdown structure |   The responsibility matrix (sometimes called a linear responsibility chart) summarizes the tasks to be accomplished and who is responsible for what on a project. |
| 26. | The project scope statement indicates that the client is responsible for training the people who will be using the equipment and that the project team will train the client's trainers. This is an example of      |  |  | | --- | --- | | A. | Project objectives. |  |  |  | | --- | --- | | B. | Deliverables. |  |  |  | | --- | --- | | **C.** | Limits and exclusions. |  |  |  | | --- | --- | | D. | Technical requirements. |  |  |  | | --- | --- | | E. | Milestones. |   The limits of scope should be defined. Failure to do so can lead to false expectations and to expending resources and time on the wrong problem. |
| 29. | Which of the following is least likely to be included in a work package?      |  |  | | --- | --- | | A. | How long the work package should take to complete |  |  |  | | --- | --- | | B. | A description of work to be performed |  |  |  | | --- | --- | | **C.** | Overhead expenses |  |  |  | | --- | --- | | D. | How much the work package should cost to complete |  |  |  | | --- | --- | | E. | The person responsible for the work package |   Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost. Work packages consist of what, how long, cost, resources, who and how well. Overhead costs are not typically found within a work package. |
| 4. | A good starting point for developing time and cost estimates is      |  |  | | --- | --- | | **A.** | Past experience. |  |  |  | | --- | --- | | B. | Work packages. |  |  |  | | --- | --- | | C. | Task analysis. |  |  |  | | --- | --- | | D. | Time and motion studies. |  |  |  | | --- | --- | | E. | Work breakdown structure. |   Past experience is a good starting point for developing time and cost estimates. But past experiences must almost always be refined to reach an acceptable level of accuracy. |
| 5. | Which of the following is NOT one of the factors that need to be considered to improve quality of estimates for project times and costs?      |  |  | | --- | --- | | A. | Planning horizon |  |  |  | | --- | --- | | B. | People |  |  |  | | --- | --- | | C. | Padding estimates |  |  |  | | --- | --- | | **D.** | Profit |  |  |  | | --- | --- | | E. | Project structure |   Factors that need to be considered to improve the quality of estimates are the planning horizon, the project duration, the people responsible for making the estimates, project management structure and organization, padding estimates, and the organizational culture. |
| 10. | Richard is collecting estimates for a house that he will have the funding to build in 12 months. Which of the following factors does Richard need to consider in regard to the quality of these estimates?      |  |  | | --- | --- | | A. | Padding estimates |  |  |  | | --- | --- | | **B.** | Planning horizon |  |  |  | | --- | --- | | C. | Project structure |  |  |  | | --- | --- | | D. | People |  |  |  | | --- | --- | | E. | Project duration |   If Richard will not have funding to start the project for 12 months, he needs to consider the planning horizon. The accuracy of the time and cost estimates decrease as the planning horizon expands. |
| 11. | Which of the following does NOT help describe a bottom-up estimating approach?      |  |  | | --- | --- | | **A.** | They are made by someone who uses experience and/or information from someone else to determine overall project cost and duration |  |  |  | | --- | --- | | B. | They establish low-cost, efficient methods for completing activities |  |  |  | | --- | --- | | C. | They typically comes from the people actually doing the work and who are most knowledgeable about the task at hand |  |  |  | | --- | --- | | D. | Estimates are made at the work package level and then "rolled up" to determine estimates for major deliverables and for the project itself |  |  |  | | --- | --- | | E. | They can take place after the project has been planned in detail |   Top-down estimates usually are derived from someone who uses experience and/or information to determine the project duration and total cost. |
| 12. | Which of the following methods is NOT considered a top-down approach to estimating project time and cost?      |  |  | | --- | --- | | A. | Ratio |  |  |  | | --- | --- | | **B.** | Template |  |  |  | | --- | --- | | C. | Apportion |  |  |  | | --- | --- | | D. | Function point |  |  |  | | --- | --- | | E. | Learning curve |   Template methods are used in bottom-up approach to estimating. |
| 13. | Jose is forecasting project time and cost for constructing a new building by multiplying the total square footage by a given dollar amount. Which of the following methods is he using?      |  |  | | --- | --- | | **A.** | Ratio |  |  |  | | --- | --- | | B. | Template |  |  |  | | --- | --- | | C. | Apportion |  |  |  | | --- | --- | | D. | Function point |  |  |  | | --- | --- | | E. | Learning curve |   Top-down methods (sometimes called parametric) usually use ratios, or surrogates, to estimate project times or costs. Top-down approaches are often used in the concept or "need" phase of a project to get an initial duration and cost estimate for the project. For example, contractors frequently use the number of square feet to estimate the cost and time to build a new house. |
| 14. | Sean is forecasting the time and cost of developing a customized software program by looking at the number of inputs, outputs, inquiries, files, and interfaces. Which of the following methods is he using?      |  |  | | --- | --- | | A. | Ratio |  |  |  | | --- | --- | | B. | Template |  |  |  | | --- | --- | | C. | Apportion |  |  |  | | --- | --- | | **D.** | Function point |  |  |  | | --- | --- | | E. | Learning curve |   In the software industry, software development projects are frequently estimated using weighted macro variables called "function points" or major parameters such as number of inputs, number of outputs, number of inquiries, number of data files, and number of interfaces. |
| 15. | Laura is forecasting the time and cost of developing an intranet for a new customer. Her department has completed six such intranets for customers during the last two years. Although the proposed system is about the same size as the others, she estimates that it will take about 10 percent less time and money. Which of the following methods is she using?      |  |  | | --- | --- | | A. | Ratio |  |  |  | | --- | --- | | B. | Template |  |  |  | | --- | --- | | C. | Apportion |  |  |  | | --- | --- | | D. | Function point |  |  |  | | --- | --- | | **E.** | Learning curve |   This is a phenomenon of tasks that are labor intensive. In these circumstances the pattern of improvement phenomenon can be used to predict the reduction in time to perform the task. From empirical evidence across all industries, the pattern of this improvement has been quantified in the learning curve (also known as improvement curve, experience curve, and industrial progress curve). |
| 17. | Which of the following describes the consensus method?      |  |  | | --- | --- | | A. | Should be used only for projects that require the same task, group of tasks, or product to be repeated several times |  |  |  | | --- | --- | | B. | Uses several people with relevant experience regarding the task at hand to make time and cost estimates |  |  |  | | --- | --- | | **C.** | Uses pooled experience of senior and/or middle managers to estimate the total project duration and cost |  |  |  | | --- | --- | | D. | Uses the number of square feet to estimate the total cost and time of the project |  |  |  | | --- | --- | | E. | Uses weighted macro variables or major parameters such as the number of inputs or outputs to estimate the total cost and time of the project |   The consensus method simply uses the pooled experience of senior and/or middle managers to estimate the total project duration and cost. This typically involves a meeting where experts discuss, argue, and ultimately reach a decision as to their best guess or estimate. |
| 19. | Which of the following would be the best method for projects where the final product is not known and the uncertainty is very large?      |  |  | | --- | --- | | A. | Function point |  |  |  | | --- | --- | | B. | Template |  |  |  | | --- | --- | | C. | Learning curve |  |  |  | | --- | --- | | **D.** | Phase estimating |  |  |  | | --- | --- | | E. | Apportion |   Phase estimating is used when an unusual amount of uncertainty surrounds a project and it is impractical to estimate times and costs for the entire project. |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24. | Accounting would be an example of which of the following costs typically found in a project?      |  |  | | --- | --- | | A. | Labor |  |  |  | | --- | --- | | B. | Direct |  |  |  | | --- | --- | | C. | Direct project overhead |  |  |  | | --- | --- | | **D.** | General and administrative overhead |  |  |  | | --- | --- | | E. | Salary |   Accounting is an example of a cost that is carried out for the duration of the project and cannot be linked to a specific work package or even the project itself. These costs are called general and administrative overhead. |
| 26. | Which of the following is NOT one of the recommended guidelines for developing useful work package estimates?      |  |  | | --- | --- | | A. | Estimates should be made by those responsible for the work |  |  |  | | --- | --- | | B. | Use several people to estimate the same work |  |  |  | | --- | --- | | C. | Estimates should be based on normal conditions |  |  |  | | --- | --- | | **D.** | Estimates should include a normal level of contingency |  |  |  | | --- | --- | | E. | Estimates should be independent of other projects |   Estimates should be made by the individuals responsible for the work, should involve several people with relevant experience and knowledge of the tasks, should be made based on normal conditions and should not include any allowances for contingencies, should be created with consistent time units, and should be independent of other projects. |
| 31. | Refining estimates may be necessary for a number of reasons. For example, resource shortages, in the form of people, equipment, or materials, can extend original estimates. This is a good example of      |  |  | | --- | --- | | A. | Hidden interaction costs. |  |  |  | | --- | --- | | B. | Things going wrong on a project. |  |  |  | | --- | --- | | **C.** | Normal conditions not applying. |  |  |  | | --- | --- | | D. | Changes in project scope. |  |  |  | | --- | --- | | E. | The customer not being clear about their expectations. |   Estimates are supposed to be based on normal conditions. While this is a good starting point, it rarely holds true in real life. This is especially true when it comes to the availability of resources. Resource shortages, whether in the form of people, equipment, or materials, can extend original estimates. |
| 32. | Refining estimates may be necessary for a number of reasons. For example, people working on prototype development needing time to interact with the design engineers after the design is completed is a good example of      |  |  | | --- | --- | | **A.** | Hidden interaction costs. |  |  |  | | --- | --- | | B. | Things going wrong on a project. |  |  |  | | --- | --- | | C. | Normal conditions not applying. |  |  |  | | --- | --- | | D. | Changes in project scope. |  |  |  | | --- | --- | | E. | The customer not being clear about their expectations. |   Interaction costs are hidden in estimates. According to the guidelines, each task estimate is supposed to be done independently. However, tasks are rarely completed in a vacuum. Work on one task is dependent upon prior tasks, and the hand-offs between tasks require time and attention. For example, people working on prototype development need to interact with design engineers after the design is completed, whether to simply ask clarifying questions or to make adjustments in the original design. |
| 33. | Refining estimates may be necessary for a number of reasons. For example, a manager getting further into a project and obtaining a better understanding of what needs to be done to accomplish a project and meet the needs of the customer is an example of      |  |  | | --- | --- | | A. | Hidden interaction costs. |  |  |  | | --- | --- | | B. | Things going wrong on a project. |  |  |  | | --- | --- | | C. | Normal conditions not applying. |  |  |  | | --- | --- | | **D.** | Changes in project scope. |  |  |  | | --- | --- | | E. | There is never a good reason to refine estimates. |   As he or she gets further and further into the project, the manager obtains a better understanding of what needs to be done to accomplish the project. This may lead to major changes in project plans and costs. Likewise, if the project is a commercial project, changes often have to be made midstream to respond to new demands by the customer and/or competition. |
| 34. | Refining estimates may be necessary for a number of reasons. For example, design flaws being revealed after the fact, extreme weather conditions, and accidents occurring are good examples of      |  |  | | --- | --- | | A. | Hidden interaction costs. |  |  |  | | --- | --- | | **B.** | Things going wrong on a project. |  |  |  | | --- | --- | | C. | Normal conditions not applying. |  |  |  | | --- | --- | | D. | Changes in project scope. |  |  |  | | --- | --- | | E. | None of these are correct. |   Design flaws are revealed after the fact, extreme weather conditions occur, accidents happen, and so forth. Although you shouldn't plan for these risks to happen when estimating a particular task, the likelihood and impact of such events need to be considered. |
| 3. | Arrows on an activity-on-node (AON) project network represent      |  |  | | --- | --- | | A. | An activity. |  |  |  | | --- | --- | | B. | Project flow. |  |  |  | | --- | --- | | C. | Dependency. |  |  |  | | --- | --- | | **D.** | Project flow and dependency. |  |  |  | | --- | --- | | E. | An activity and dependency. |   The node depicts an activity, and the arrow shows dependency and project flow. |
| 4. | When translated into a project network, a work package will become      |  |  | | --- | --- | | A. | A single activity. |  |  |  | | --- | --- | | **B.** | One or more activities. |  |  |  | | --- | --- | | C. | A milestone. |  |  |  | | --- | --- | | D. | A critical path. |  |  |  | | --- | --- | | E. | An arrow. |   Work packages from the work breakdown structure (WBS) are used to build the activities found in the project network. An activity can include one or more work packages. The activities are placed in a sequence that provides for orderly completion of the project. |
| 5. | Which of the following is provided by both the project network and the work breakdown structure?      |  |  | | --- | --- | | A. | Dependencies |  |  |  | | --- | --- | | B. | Sequencing |  |  |  | | --- | --- | | C. | Interrelationships |  |  |  | | --- | --- | | **D.** | Activity duration |  |  |  | | --- | --- | | E. | Timing |   Project networks are developed from the work breakdown structure (WBS). The project network is a visual flow diagram of the sequence, interrelationships, dependencies and timing of all the activities that must be accomplished to complete the project. Both the WBS and the work packages will include the duration of the activity. |
| 6. | On a project network, the activity times are derived from the      |  |  | | --- | --- | | A. | Organization breakdown structure. |  |  |  | | --- | --- | | **B.** | Work packages. |  |  |  | | --- | --- | | C. | Budget. |  |  |  | | --- | --- | | D. | Project proposal. |  |  |  | | --- | --- | | E. | Responsibility matrix. |   Work packages from the work breakdown structure (WBS) are used to build the activities found in the project network. An activity is an element in the project that consumes time—for example, work or waiting. |
| 7. | Which of the following does NOT help describe a project network?      |  |  | | --- | --- | | A. | A graphic display of the flow and sequence of work through the project |  |  |  | | --- | --- | | B. | Provides the basis for scheduling labor and equipment |  |  |  | | --- | --- | | C. | Gives the times when activities can start and finish and when they can be delayed |  |  |  | | --- | --- | | **D.** | Highlights major deliverables and identifies their completion dates |  |  |  | | --- | --- | | E. | Identifies critical activities |   The work breakdown structure (WBS) will highlight major deliverables. Since major deliverables are a summary of the tasks below them, they do not directly consume time or resources; therefore, they are not included in the network. |
| 8. | An activity that has more than one dependency arrow flowing into it is termed a(n)      |  |  | | --- | --- | | A. | Parallel activity. |  |  |  | | --- | --- | | B. | Critical path. |  |  |  | | --- | --- | | C. | Burst activity. |  |  |  | | --- | --- | | **D.** | Merge activity. |  |  |  | | --- | --- | | E. | Independent activity. |   Merge activity is an activity that has more than one activity immediately preceding it (more than one dependency arrow flowing to it). |
| 16. | \_\_\_\_\_\_\_\_ activities must be completed immediately before a particular activity.      |  |  | | --- | --- | | A. | Merge |  |  |  | | --- | --- | | B. | Burst |  |  |  | | --- | --- | | **C.** | Predecessor |  |  |  | | --- | --- | | D. | Successor |  |  |  | | --- | --- | | E. | Parallel |   Which activities must be completed immediately before this activity? These activities are called predecessor activities. |
| 17. | \_\_\_\_\_\_\_\_ activities are to be completed immediately following a particular activity.      |  |  | | --- | --- | | A. | Merge |  |  |  | | --- | --- | | B. | Burst |  |  |  | | --- | --- | | C. | Predecessor |  |  |  | | --- | --- | | **D.** | Successor |  |  |  | | --- | --- | | E. | Parallel |   Which activities must immediately follow this activity? These activities are called successor activities. |
| 18. | The forward pass in project network calculations determines all of the following EXCEPT      |  |  | | --- | --- | | A. | Earliest time an activity can begin. |  |  |  | | --- | --- | | B. | Earliest time an activity can finish. |  |  |  | | --- | --- | | C. | Duration of the project. |  |  |  | | --- | --- | | **D.** | The critical path. |  |  |  | | --- | --- | | E. | How soon the project can finish. |   The forward pass starts with the first project activity(ies) and traces each path (chain of sequential activities) through the network to the last project activity(ies). It calculates how soon an activity can start, how soon it can finish and the project duration or how soon the project will be finished. |
| 19. | The backward pass in project network calculations determines all of the following EXCEPT      |  |  | | --- | --- | | A. | Latest time an activity can begin. |  |  |  | | --- | --- | | **B.** | Earliest time an activity can finish. |  |  |  | | --- | --- | | C. | The critical path. |  |  |  | | --- | --- | | D. | How long an activity can be delayed. |  |  |  | | --- | --- | | E. | Latest time an activity can finish. |   The backward pass calculates how late an activity can start, how late it can finish, the critical path or longest path through the network and how long an activity can be delayed without delaying the project. |
| 22. | The amount of time an activity can be delayed and yet not delay the project is termed      |  |  | | --- | --- | | **A.** | Total slack. |  |  |  | | --- | --- | | B. | Free slack. |  |  |  | | --- | --- | | C. | Critical float. |  |  |  | | --- | --- | | D. | Float pad. |  |  |  | | --- | --- | | E. | Slip pad. |   Total slack tells us the amount of time an activity can be delayed and yet not delay the project. Stated differently, total slack is the amount of time an activity can exceed its early finish date without affecting the project end date or an imposed completion date. |
| 24. | The likelihood the original critical path(s) will change once the project is initiated is referred to as      |  |  | | --- | --- | | A. | Flexibility. |  |  |  | | --- | --- | | B. | Resilience. |  |  |  | | --- | --- | | **C.** | Sensitivity. |  |  |  | | --- | --- | | D. | Concurrent engineering. |  |  |  | | --- | --- | | E. | Rigidity. |   We use the term sensitivity to reflect the likelihood the original critical path(s) will change once the project is initiated. Sensitivity is the function of the number of critical paths and the level of slack for noncritical activities. |
| 25. | Which of the following is true about hammock activities?      |  |  | | --- | --- | | **A.** | They are used to identify the use of fixed resources or costs over a segment of a project |  |  |  | | --- | --- | | B. | They are a combination of Start to Start and Start to Finish lags |  |  |  | | --- | --- | | C. | They are activities in which the costs are not subject to change |  |  |  | | --- | --- | | D. | They are an alternative description for the critical path |  |  |  | | --- | --- | | E. | They are highly sensitive |   Hammock activities are frequently used to identify the use of fixed resources or costs over a segment of the project. Typical examples of hammock activities are inspection services, consultants, or construction management services. A hammock activity derives its duration from the time span between other activities. For example, a special color copy machine is needed for a segment of a tradeshow publication project. A hammock activity can be used to indicate the need for this resource and to apply costs over this segment of the project. |
| 26. | If, for some reason, the project must be expedited to meet an earlier date, which of the following actions would the project manager take first?      |  |  | | --- | --- | | A. | Check to see which activities cost the least |  |  |  | | --- | --- | | B. | Check to see which activities have the longest duration |  |  |  | | --- | --- | | **C.** | Check to see which activities are on the critical path |  |  |  | | --- | --- | | D. | Check to see which activities have the most slack |  |  |  | | --- | --- | | E. | Check to see which activities have the highest risk |   If for some reason the project must be expedited to meet an earlier date, it is possible to select those activities, or combination of activities, that will cost the least to shorten the project. Similarly, if the critical path is delayed and the time must be made up by shortening some activity or activities on the critical path to make up any negative slack, it is possible to identify the activities on the critical path that cost the least to shorten. If there are other paths with very little slack, it may be necessary to shorten activities on those paths also. |
| 28. | If a project has more than one activity that can begin when the project is to start, a common start node should be used to indicate a clear project beginning on the network. Without a common start node, each path is a      |  |  | | --- | --- | | A. | Critical path. |  |  |  | | --- | --- | | B. | Parallel path. |  |  |  | | --- | --- | | **C.** | Dangler path. |  |  |  | | --- | --- | | D. | Multiple start path. |  |  |  | | --- | --- | | E. | Confused path. |   If a project has more than one activity that can begin when the project is to start, each path is a dangler path. The same is true if a project network ends with more than one activity. Dangler paths give the impression that that project doesn't have a clear beginning or ending. Using a common start or end node helps to identify the total planning period for all projects. |
| 29. | Tom is responsible for ordering hardware for a custom home his company is building. The contractor installing the hardware is scheduled to start in 5 working days, but the hardware is on backorder and will not arrive for another 9 working days. Fortunately, Tom has 10 days of slack; however, he shares this slack with the hardware installer. He will have to let the contactor know that the hardware will be ready 4 days later than expected and that the slack for the installer has been reduced by 4 days. Tom and the installer share 10 days of      |  |  | | --- | --- | | A. | Free Slack. |  |  |  | | --- | --- | | B. | Shared Slack. |  |  |  | | --- | --- | | **C.** | Total Slack. |  |  |  | | --- | --- | | D. | Critical Slack. |  |  |  | | --- | --- | | E. | Functional Slack. |   Total slack tells us the amount of time an activity can be delayed and not delay the project. The use of total slack must be coordinated with all participants in the activities that follow in the chain. |
| 31. | The requirement for a freshly poured foundation to cure before beginning construction is an example of which of the following type of lag?      |  |  | | --- | --- | | A. | Start to Start |  |  |  | | --- | --- | | B. | Start to Finish |  |  |  | | --- | --- | | C. | Finish to Finish |  |  |  | | --- | --- | | **D.** | Finish to Start |  |  |  | | --- | --- | | E. | Any of these could be correct |   There are situations in which the next activity in a sequence must be delayed even when the preceding activity is complete. For example, removing concrete forms cannot begin until the poured cement has cured for two time units. |
| 32. | Concurrent engineering, which has dramatically reduced the development time for new products, relies on what kind of lag?      |  |  | | --- | --- | | **A.** | Start to Start lags |  |  |  | | --- | --- | | B. | Start to Finish lags |  |  |  | | --- | --- | | C. | Finish to Finish lags |  |  |  | | --- | --- | | D. | Finish to Start lags |  |  |  | | --- | --- | | E. | Any of these could be correct |   Concurrent engineering basically breaks activities into smaller segments so that work can be done in parallel and the project expedited. Start-to-start relationships can depict the concurrent engineering conditions and reduce network detail. |
| 34. | When completing a backward pass, you carry the LS to the next preceding activity to establish the LF, unless the next preceding activity is a burst activity, in which case you select      |  |  | | --- | --- | | **A.** | The smallest LS of all its immediate successor activities to establish the LF. |  |  |  | | --- | --- | | B. | The largest ES of all its immediate successor activities to establish the LF. |  |  |  | | --- | --- | | C. | The average LS of all its immediate successor activities to establish the LF. |  |  |  | | --- | --- | | D. | The smallest ES of all its immediate successor activities to establish the LF. |  |  |  | | --- | --- | | E. | The largest LS of all its immediate successor activities to establish the LF. |   When completing a backward pass, you carry the LS to the next preceding activity to establish the LF, unless the next preceding activity is a burst activity, in which case you select the smallest LS of all its immediate successor activities to establish the LF. |
| 15. | Technical constraints have been carefully considered when developing a project network. Which of the following is true at this point?      |  |  | | --- | --- | | A. | Resources have been assigned to each activity so they are adequate to complete the project on time |  |  |  | | --- | --- | | **B.** | Technical dependencies between activities are known |  |  |  | | --- | --- | | C. | The project completion date can be established |  |  |  | | --- | --- | | D. | The project is ready to be implemented |  |  |  | | --- | --- | | E. | All of these are true statements once technical constraints have been established |   After considering technical constraints, all you know at this point is the sequence of activities based on logical considerations. You must consider both resource constraints and physical constraints in addition to technical constraints before your schedule is an actual schedule. These constraints can change the timing and/or sequencing of activities. |
| 14. | All resource leveling techniques involve      |  |  | | --- | --- | | **A.** | Delaying noncritical activities. |  |  |  | | --- | --- | | B. | Delaying critical activities. |  |  |  | | --- | --- | | C. | Using negative slack. |  |  |  | | --- | --- | | D. | Delaying the project. |  |  |  | | --- | --- | | E. | Adding resources. |   All leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources. |
| 20. | In a resource-constrained project, the first priority in assigning resources is usually given to activities with the      |  |  | | --- | --- | | A. | Smallest duration. |  |  |  | | --- | --- | | **B.** | Least slack. |  |  |  | | --- | --- | | C. | Most slack. |  |  |  | | --- | --- | | D. | Lowest identification number. |  |  |  | | --- | --- | | E. | Highest cost. |   The first activity placed in the schedule would be the activity with the least slack (rule 1). |
| 24. | All of the following are benefits of scheduling resources before project implementation EXCEPT      |  |  | | --- | --- | | A. | It allows time for considering reasonable options if resource constraints do exist. |  |  |  | | --- | --- | | B. | The project completion date can be established. |  |  |  | | --- | --- | | C. | Work packages can be time-phased. |  |  |  | | --- | --- | | D. | It allows managers to share resources with other project managers if it is requested without negatively impacting their project. |  |  |  | | --- | --- | | **E.** | It ensures low network sensitivity. |   Often after scheduling resources, if resource constraints exist, network sensitivity will increase. All resource leveling techniques delay noncritical activities which decrease slack levels within the project. This increases the number of critical and/or near critical activities. |
| 29. | Why is it necessary to have a time-phased budget baseline?      |  |  | | --- | --- | | A. | It allows proper resource allocation |  |  |  | | --- | --- | | **B.** | It shows how much work was accomplished for the money spent |  |  |  | | --- | --- | | C. | It reduces schedule slippage when scheduling multiproject resources |  |  |  | | --- | --- | | D. | It is not necessary to have a time-phased budget baseline |  |  |  | | --- | --- | | E. | It reduces fluctuations in cash flow during the project |   It is necessary to have a time-phased budget baseline so you know how much work has been accomplished for the money spent. Without time-phasing cost to match your project schedule, it is impossible to have reliable information for control purposes. |
| 30. | Project budgets are developed by time-phasing which of the following?      |  |  | | --- | --- | | A. | Resource schedules |  |  |  | | --- | --- | | **B.** | Work packages |  |  |  | | --- | --- | | C. | The network diagram |  |  |  | | --- | --- | | D. | Critical activities |  |  |  | | --- | --- | | E. | None of these are time-phased to develop a project budget |   Using your project schedule, you can time-phase work packages and assign them to their respective scheduled activities to develop a budget schedule over the life of your project. |
| 2. | Nancy tells her supervisor that as of right now, $1.05 worth of work has been accomplished for each $1 worth of scheduled work. Nancy got this information from viewing the      |  |  | | --- | --- | | A. | SV. |  |  |  | | --- | --- | | B. | TCPI. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | **D.** | SPI. |  |  |  | | --- | --- | | E. | PCIB. |   The SPI would tell Nancy that $1.05 worth of work has been accomplished for each $1 worth of scheduled work. |
| 8. | In monitoring project time (schedule) performance, actual performance should be compared to      |  |  | | --- | --- | | A. | Budgets for the current year. |  |  |  | | --- | --- | | B. | Top management's targets. |  |  |  | | --- | --- | | **C.** | Project network schedule derived from the WBS/OBS. |  |  |  | | --- | --- | | D. | Progress on similar past projects. |  |  |  | | --- | --- | | E. | Previous status reports. |   A major goal of progress reporting is to catch any negative variances from plan as early as possible to determine if corrective action is necessary. Fortunately, monitoring schedule performance is relatively easy. The project network schedule, derived from the WBS/OBS, serves as the baseline to compare against actual performance. |
| 9. | A \_\_\_\_\_\_\_\_\_\_\_ Gantt chart is a simple and effective way to depict progress on a project.      |  |  | | --- | --- | | A. | Baseline |  |  |  | | --- | --- | | B. | Control |  |  |  | | --- | --- | | C. | Variance |  |  |  | | --- | --- | | **D.** | Tracking |  |  |  | | --- | --- | | E. | Simple |   Gantt charts (bar charts) and control charts are the typical tools used for communicating project schedule status. The Gantt chart is the most favored, used and understandable. This kind of chart is commonly referred to as a tracking Gantt chart. |
| 10. | A tool used to monitor past project schedule performance and current performance, and to estimate future schedule trends is a simple line chart known as a      |  |  | | --- | --- | | **A.** | Project control chart. |  |  |  | | --- | --- | | B. | Gantt chart. |  |  |  | | --- | --- | | C. | PERT chart. |  |  |  | | --- | --- | | D. | Network diagram. |  |  |  | | --- | --- | | E. | Milestone chart. |   The control chart is another tool used to monitor past project schedule performance and current performance and to estimate future schedule trends. |
| 11. | The earned value system starts with the time-phased costs that provide the project baseline, which is called the      |  |  | | --- | --- | | **A.** | Planned budgeted value of work scheduled. |  |  |  | | --- | --- | | B. | Planned budgeted value of work completed. |  |  |  | | --- | --- | | C. | Earned value of work scheduled. |  |  |  | | --- | --- | | D. | Scheduled value of work scheduled. |  |  |  | | --- | --- | | E. | Scheduled value of work completed. |   The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems. |
| 15. | Baseline project budgets are derived from      |  |  | | --- | --- | | A. | The organization's overall budget. |  |  |  | | --- | --- | | **B.** | Time-phasing the work packages. |  |  |  | | --- | --- | | C. | Top management directions. |  |  |  | | --- | --- | | D. | The total direct, direct project overhead and G&A overhead costs. |  |  |  | | --- | --- | | E. | The earned value system. |   The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems. |
| 16. | Of the following costs, which are NOT included in baseline?      |  |  | | --- | --- | | A. | Suppliers |  |  |  | | --- | --- | | B. | Equipment |  |  |  | | --- | --- | | C. | Labor |  |  |  | | --- | --- | | **D.** | Budget reserves |  |  |  | | --- | --- | | E. | Contractors |   The baseline (PV) is the sum of the cost accounts, and each cost account is the sum of the work packages in the cost account. Three direct costs are typically included in baselines—labor (contractors), equipment, and materials (suppliers). |
| 17. | When someone familiar with each task estimates what percent of the task has been completed or how much of the task remains, they are creating a method for assigning costs to the baseline called the      |  |  | | --- | --- | | A. | 0/100 percent rule. |  |  |  | | --- | --- | | B. | Task complete rule. |  |  |  | | --- | --- | | C. | Degree complete rule. |  |  |  | | --- | --- | | D. | Work complete rule. |  |  |  | | --- | --- | | **E.** | Percent complete rule. |   The percent complete rule is the heart of any earned value system. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms. |
| 18. | Which performance index is the most potentially misleading?      |  |  | | --- | --- | | A. | CPI |  |  |  | | --- | --- | | B. | EV |  |  |  | | --- | --- | | C. | CV |  |  |  | | --- | --- | | **D.** | SV |  |  |  | | --- | --- | | E. | EAC |   Many times it is determined that a positive SV indicates the project is ahead of schedule and a negative SV indicates that a project is behind schedule. This is not always the case. Schedule variance does indicate whether or not the work that was planned to be completed has been completed, but it doesn't tell you if that work is critical or not. If more work than what was planned was completed, but this work was noncritical, it is possible to have a positive SV and still be behind schedule. |
| 20. | Which of the following methods of variance analysis is the best indicator of how far off the budget a project will be at completion?      |  |  | | --- | --- | | A. | BAC |  |  |  | | --- | --- | | B. | EAC |  |  |  | | --- | --- | | C. | ETC |  |  |  | | --- | --- | | **D.** | VAC |  |  |  | | --- | --- | | E. | TCPI |   The cost variance at completion (VAC) indicates expected actual over- or under-run cost at completion. |
| 25. | The indicator that tells you the amount each remaining dollar must earn in order for the project to stay within budget is the      |  |  | | --- | --- | | A. | PCIC. |  |  |  | | --- | --- | | B. | VAC. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | **E.** | TCPI. |   The indicator that tells you the amount each remaining dollar must earn in order for the project to stay within budget is the TCPI. A number greater than 1 means there is more work than there is budget left. A number less than 1 means there is less work than there is budget left. |
| 26. | A project manager learns that the project is only earning $.90 of planned work for each dollar spent by looking at the      |  |  | | --- | --- | | A. | EV. |  |  |  | | --- | --- | | B. | BAC. |  |  |  | | --- | --- | | C. | SV. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | **E.** | CPI. |   A CPI of .90 would indicate that the project is earning $.90 of planned work for each dollar spent. |
| 1. | Without any formal planning, the president of a software company remarks in a speech that new technologically advanced software will be available in one year. This may lead to a project that must be done faster than anticipated. This is an example of reducing project duration caused by      |  |  | | --- | --- | | **A.** | Imposed project deadlines. |  |  |  | | --- | --- | | B. | Time to market. |  |  |  | | --- | --- | | C. | Unforeseen project delays. |  |  |  | | --- | --- | | D. | High overhead. |  |  |  | | --- | --- | | E. | Incentive contracts. |   Imposed deadlines are another reason for accelerating project completion. For example, the president of a software company remarks in a speech that new advanced software will be available in one year. Such statements too often become imposed project duration dates—without any consideration of the problems or cost of meeting such a date. The project duration time is set while the project is in its "concept" phase before or without any detailed scheduling of all the activities in the project. This phenomenon occurs very frequently in practice. |
| 3. | A contractor finished a bridge across a lake 18 months early and received more than $6 million for the early completion. This is an example of reducing project duration caused by      |  |  | | --- | --- | | A. | Imposed project deadlines. |  |  |  | | --- | --- | | B. | Time to market. |  |  |  | | --- | --- | | C. | Unforeseen project delays. |  |  |  | | --- | --- | | D. | High overhead. |  |  |  | | --- | --- | | **E.** | Incentive contracts. |   Incentive contracts can make reduction of project time rewarding—usually for both the project contractor and owner. For example, a contractor finished a bridge across a lake 18 months early and received more than $6 million for the early completion. The availability of the bridge to the surrounding community 18 months early to reduce traffic grid-lock made the incentive cost to the community seem small to users. |
| 10. | As a project is crashed and project duration is reduced, direct costs typically      |  |  | | --- | --- | | **A.** | Increase. |  |  |  | | --- | --- | | B. | Become unstable. |  |  |  | | --- | --- | | C. | Decrease. |  |  |  | | --- | --- | | D. | Become unreliable. |  |  |  | | --- | --- | | E. | Stay the same. |   When project durations are imposed, direct costs may no longer represent low-cost methods. Costs for the imposed duration date will be higher than for a project duration developed from ideal normal times for activities. |
| 15. | Which of the following correctly calculates an activity's cost slope?      |  |  | | --- | --- | | A. | (normal cost - crash cost)/(normal time - crash time) |  |  |  | | --- | --- | | **B.** | (crash cost - normal cost)/(normal time - crash time) |  |  |  | | --- | --- | | C. | (normal time - crash time)/(crash cost - normal cost) |  |  |  | | --- | --- | | D. | (normal time - crash time)/(normal cost - crash cost) |  |  |  | | --- | --- | | E. | (crash cost - normal cost)/(crash time - normal time) |   The activity's cost slope is calculated by rise/run or (crash cost - normal cost)/(normal time - crash time). |
| 20. | When determining which activity to crash, there are other factors that should be assessed beyond cost. Which of the following is NOT one of these factors?      |  |  | | --- | --- | | A. | The inherent risk associated with the activity |  |  |  | | --- | --- | | B. | How crashing will impact the morale and motivation of the individuals working on that activity |  |  |  | | --- | --- | | C. | Resource availability after crashing that activity |  |  |  | | --- | --- | | **D.** | The level of difficulty involved in completing the activity |  |  |  | | --- | --- | | E. | When during the project the activity will occur |   The level of difficultly is not a major factor that needs to be assessed before determining which activity to crash. |
| 21. | Reducing project duration      |  |  | | --- | --- | | A. | Involves crashing all activities to their crash point. |  |  |  | | --- | --- | | B. | Can only be done when resources are not constrained. |  |  |  | | --- | --- | | C. | Is always more expensive. |  |  |  | | --- | --- | | **D.** | Tends to increase network sensitivity. |  |  |  | | --- | --- | | E. | Should be considered for all projects. |   Compression of projects reduces scheduling flexibility and increases the risk of delaying the project. |
| 23. | The relationship between the normal point and the crash point is assumed to be      |  |  | | --- | --- | | **A.** | Linear. |  |  |  | | --- | --- | | B. | Curvilinear. |  |  |  | | --- | --- | | C. | Variable. |  |  |  | | --- | --- | | D. | Conversely related. |  |  |  | | --- | --- | | E. | Exponentially related. |   The cost-time relationship is assumed to be linear. |
| 24. | When a project manager must reduce project duration but resources are constrained, creating a software program that will have fewer features than originally planned or building a house without the bonus room the owner originally specified in the plans would both be examples of      |  |  | | --- | --- | | A. | Fast-tracking. |  |  |  | | --- | --- | | B. | Using critical-chain project management. |  |  |  | | --- | --- | | **C.** | Reducing project scope. |  |  |  | | --- | --- | | D. | Compromising quality. |  |  |  | | --- | --- | | E. | Doing it twice—first fast and then correctly. |   Probably the most common response for meeting unattainable deadlines is to reduce or scale back the scope of the project. This invariably leads to a reduction in the functionality of the project. For example, the new car will average only 25 mpg instead of 30. |
| 26. | Sometimes very high \_\_\_\_\_\_\_\_\_\_ costs are recognized before a project begins and reducing these costs through shorter project durations becomes a high priority.      |  |  | | --- | --- | | A. | Labor |  |  |  | | --- | --- | | B. | Direct |  |  |  | | --- | --- | | C. | Project |  |  |  | | --- | --- | | **D.** | Overhead |  |  |  | | --- | --- | | E. | Interest |   Sometimes very high overhead costs are recognized before the project begins. In these cases it is prudent to examine the direct costs of shortening the critical path versus the overhead cost savings. |
| 29. | Which of the following is NOT one of the more commonly used options for cutting project costs?      |  |  | | --- | --- | | A. | Reduce project scope |  |  |  | | --- | --- | | B. | Have owner take more responsibility |  |  |  | | --- | --- | | **C.** | Move the completion date further out |  |  |  | | --- | --- | | D. | Brainstorm cost savings options |  |  |  | | --- | --- | | E. | Outsource project activities |   Ways to cut costs are to reduce project scope, have the owner take more responsibility, outsource project activities or even the entire project, brainstorm cost savings options. |
| 30. | All of the following are disadvantages of scheduling overtime EXCEPT      |  |  | | --- | --- | | **A.** | Overtime is associated the with additional costs of coordination and communication. |  |  |  | | --- | --- | | B. | Sustained overtime work by salaried employees may incur burnout. |  |  |  | | --- | --- | | C. | Productivity is reduced the longer one is working. |  |  |  | | --- | --- | | D. | More hours results in higher expenses if paying workers hourly. |  |  |  | | --- | --- | | E. | Continued overtime can lead to a higher turnover rate. |   By scheduling overtime you avoid the costs of coordination and communication encountered when new people are added. This is an advantage to scheduling overtime. |
| 31. | According to Brooks' Law, adding more people to a late project is most likely to have which of the following impacts?      |  |  | | --- | --- | | A. | Keep the project from slipping any further |  |  |  | | --- | --- | | B. | Get the project back on schedule |  |  |  | | --- | --- | | **C.** | Make the project slip further |  |  |  | | --- | --- | | D. | Lead to burnout |  |  |  | | --- | --- | | E. | Decrease team motivation |   Brooks' law: Adding manpower to a late project makes it later. |
| 34. | When the project team is salaried, which of the following is the preferred choice for accelerating project completion?      |  |  | | --- | --- | | A. | Assigning additional staff and equipment |  |  |  | | --- | --- | | B. | Subcontract work |  |  |  | | --- | --- | | **C.** | Schedule overtime |  |  |  | | --- | --- | | D. | Outsource project work |  |  |  | | --- | --- | | E. | Establish a core project team |   Overtime and working longer hours is the preferred choice for accelerating project completion, especially when the project team is salaried. |