

PMI-SP

PMI-SP
PMI Scheduling Professional

Version 3.5

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QUESTION NO: 1

Once the project's WBS has been created what process may happen next?

- A. Estimate activity resources
- B. Define activities
- C. Estimate activity durations
- D. Sequence activities

Answer: B

Explanation:

The define activities process is the process that may begin once the project's WBS has been completed and approved. It is possible, in some projects, to complete the WBS and the activity list at the same time.

Answer option D is incorrect. Sequencing the activities cannot happen until the activity list has been created.

Answer option A is incorrect. Estimating activity resources is dependent on the activity list, so this choice is not valid.

Answer option C is incorrect. Estimate activity durations are dependent on the activity list, so this choice is not valid.

QUESTION NO: 2

Which of the following scheduling techniques identifies the successor activities and the predecessor activities to assist the project manager in sequencing the project work?

- A. Precedence Diagramming Method
- B. Schedule network template
- C. Dependency determination
- D. Activity on the Node

Answer: A

Explanation:

The Precedence Diagramming Method uses both predecessors and successors as nodes in the project network diagram. The PDM approach is the most common network diagram approach used.

Answer option C is incorrect. Dependency determination identifies the order of the project work.

Answer option B is incorrect. The schedule network template is a tool that uses a previous project network diagram as a base for the current project network diagram.

Answer option D is incorrect. Activity on the node places activities on circles within a network diagram. It is an example of the precedence diagramming method.

QUESTION NO: 3

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You are the project manager of the NHGQ project for your company. You must create and distribute performance reports every week to your key project stakeholders. What communication technique do you normally use to distribute reports?

- A. Push technique
- B. Many-to-many
- C. One-to-one
- D. Pull technique

Answer: A

Explanation:

Performance reports are distributed through the push technique. This means that the project manager distributes the reports regularly through a mechanism, such as email. Answer option C is incorrect. One-to-one technique describes a conversation between two people.

Answer option B is incorrect. Many-to-many technique describes a conversation between many people.

Answer option D is incorrect. A pull technique describes the recipients of the report "pulling" the information, such as from a Website.

QUESTION NO: 4

Your project team is executing the project plan and things are going well. Your team has reached its first milestone and is now in the second phase of the project. The project stakeholders have requested that you find a method to reduce the duration of the project. They will reward you and your project team with a 25 percent bonus of the project costs if you can finish the project thirty days earlier than what was already planned. The stakeholders, however, will not approve any additional labor costs as part of the agreement. Which approach could you use to shorten the duration of the project?

- A. Perform resource leveling for the project.
- B. Crash the project schedule.
- C. Fast track the project.
- D. Remove things from the project scope.

Answer: C

Explanation:

Fast tracking is a technique for compressing project schedule. In fast tracking, phases are overlapped that would normally be done in sequence. It is shortening the project schedule without reducing the project scope. It does not add any additional labor but it can introduce project risks.

Answer option D is incorrect. Removing things from the project scope can reduce the project duration, but it will not satisfy the requirements the stakeholders have identified.

Answer option A is incorrect. Resource leveling can actually increase the project duration.

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Answer option B is incorrect. Crashing can reduce the project duration but it increases the labor expense, something the stakeholders won't approve.

QUESTION NO: 5

The Define Activities process is the first process in the project time management knowledge area. The Define Activities process creates just three outputs as a result of decomposition, rolling wave planning, templates, and expert judgment. Which one of the following is not an output of the Define Activities process?

- A. Activity list
- B. Milestone list
- C. Activity attributes
- D. Project document updates

Answer: D

Explanation:

Project document updates are not an output of the Define Activities process. Project document updates are the outputs for estimate activity resources. Project document updates include the following:

Activity list

Activity attributes

Resource calendars

Answer option A is incorrect. The activity list is an output of the define activities process.

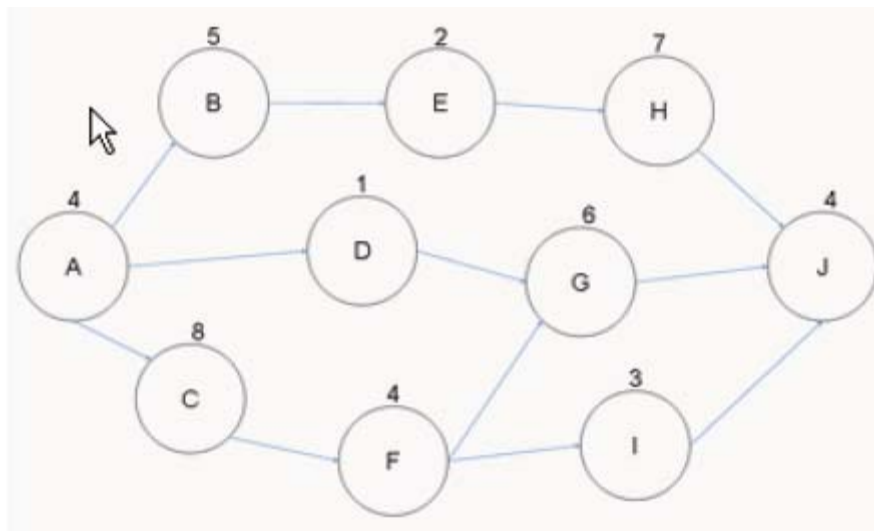
Answer option C is incorrect. The activity attributes is an output of the define activities process.

Answer option B is incorrect. The milestone list is an output of the define activities process.

QUESTION NO: 6

Examine the figure given below:

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If Activity B takes eight days to complete instead of five days as schedule, how long can you now delay Activity H?

- A. Three days
- B. One day
- C. Four days
- D. Zero days

Answer: B

Explanation:

Activity B is not on the critical path and it has a total of four days of float. If Activity B takes a total of eight days, it will consume three days of float. However, the total duration of the path ABEHJ may not exceed 26 days, as this is the total duration for the project. Although Activity H has a total of four days of float available, the consumption of three days of float on this path will reduce the total float for Activity H to just one day. If Activity H is delayed by more than one day, then the project will be late. Answer option D is incorrect. There is one day of float still available for Activity H. Answer options A and C are incorrect. These are not the valid answers, as there is just one day of float available for Activity H.

QUESTION NO: 7

You are the project manager of the GHT Project. Ben, one of your project team members, does not understand the idea of a milestone. Which of the following best describes what a milestone is?

- A. A significant point in the project
- B. A goal of reaching a significant delivery of project benefits by an identified date
- C. An imposed date for the project to reach a given point
- D. The completion of a project activity that is crucial to project completion

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Answer: A

Explanation:

A milestone is simply a significant point or event in the project. It does not have to be assigned to a specific date, but is usually assigned to the completion of project phases. A milestone is the end of a stage that marks the completion of a work package or phase, typically marked by a high level event such as completion, endorsement or signing of a deliverable, document or a high level review meeting. In addition to signaling the completion of a key deliverable, a milestone may also signify an important decision or the derivation of a critical piece of information, which outlines or affects the future of a project. In this sense, a milestone not only signifies distance traveled (key stages in a project) but also indicates direction of travel since key decisions made at milestones may alter the route through the project plan. To create a milestone, enter 0 (zero) in the Duration field. The task will automatically be classified as a milestone.

Answer option C is incorrect. This is a project constraint.

Answer option B is incorrect. A project goal is an objective for time, cost, scope, and other metrics.

Answer option D is incorrect. All activities must be completed in order to complete the project work. Activities that are not completed are quality issues that prevent the project from completing the project scope.

QUESTION NO: 8

You are the project manager of the GHY Project. Management wants you to create a process improvement plan for your project. Your project will be studied by management and will become a standard for all future organizational projects based on your project's performance, approach, and implementation of project processes. All of the following should be included in your project's process improvement plan except for which one?

- A. Process boundaries
- B. Process configuration
- C. Targets for improved performance
- D. Identification of project risks

Answer: D

Explanation:

Identification of the project risks is not part of the process improvement plan. Identify risks is a risk management process, and risks are recorded in the risk register.

Answer options A, B, and C are incorrect. Process boundaries, Process configuration and Targets for improved performance are parts of the process improvement plan.

QUESTION NO: 9

George is the project manager of the NHQ Project and has a budget of \$778,000. The project is scheduled to last for one year with an equal amount of work completed each quarter. The second quarter of the project has ended and George has spent \$325,000 but

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has only finished forty percent of the project. Management needs a variance report for the project schedule. What value should George report in this instance?

- A. .96
- B. -\$77,800
- C. \$-34,500
- D. -\$13,800

Answer: B

Explanation:

Schedule variance (SV) is a measure of schedule performance on a project. The variance notifies that the schedule is ahead or behind what was planned for this period in time. The schedule variance is calculated based on the following formula: $SV = \text{Earned Value (EV)} - \text{Planned Value (PV)}$ If the resulting schedule is negative, it indicates that the project is behind schedule. A value greater than 0 shows that the project is ahead of the planned schedule. A value of 0 indicates that the project is right on target. The earned value in this instance is forty percent of the project budget, \$778,000, and the planned value is \$398,000 because George is to be fifty percent done at the end of the second quarter, as the work is spread evenly across all quarters. The schedule variance is -\$77,800 for the project.

Answer option A is incorrect. .96 represents the cost performance index.

Answer option C is incorrect. -\$34,500 represents the project's variance at completion if the project continues as is.

Answer option D is incorrect. -\$13,800 is the cost variance for the project.

QUESTION NO: 10

You are the project manager of the NHQ Project. Management has set a conformance to the project schedule for your project at 0.95. What does this term mean?

- A. It means the largest schedule variance you can have is five percent.
- B. It is the earned value divided by the planned value for your project.
- C. It is the expectation of management to be 95 on schedule at 95 percent of the project.
- D. It means you will need to earn at least 95 cents per dollar invested in the project.

Answer: A

Explanation:

Conformance to schedule is a required adherence for the project's schedule. In this instance, the project manager must not allow the schedule to slip more than five percent.

Answer option B is incorrect. This is the description of the schedule performance index.

Answer option D is incorrect. This is the description of the cost performance index.

Answer option C is incorrect. This is not a valid statement about the project performance.

QUESTION NO: 11

Which one of the following estimate types is a form of expert judgment?

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- A. Parametric estimate
- B. Analogous estimate
- C. Bottom-up estimate
- D. Definitive estimate

Answer: B

Explanation:

An analogous estimate is a form of expert judgment because it relies on historical information. The historical information, assuming that it is accurate, serves as the conduit to the expert that created the historical information.

Answer option C is incorrect. A bottom-up estimate creates an activity duration estimate for each work package in the WBS.

Answer option A is incorrect. Parametric estimating uses a parameter, such as 10 hours per fixture installation, as a base to predict the duration of the project.

Answer option D is incorrect. A definitive estimate, also known as a bottom-up estimate, accounts for the cost of each work package.

QUESTION NO: 12

You are the project manager of the NHA Project. This project is expected to last one year with quarterly milestones throughout the year. Your project is supposed to be at the third milestone today but you're likely only 60 percent complete. Your project has a BAC of \$745,000 and you've spent \$440,000 of the budget-to-date. What is your schedule performance index for this project?

- A. 80
- B. 1.02
- C. 102
- D. 0.80

Answer: D

Explanation:

The schedule performance index can be found by dividing the earned value by the planned value. In this project, it's \$447,000 divided by the \$558,750 for a value of 0.80. Schedule performance index (SPI) is the measure of schedule efficiency on a project. It is used in trend analysis to predict future performance.

SPI is the ratio of earned value to planned value. The SPI is calculated based on the following formula:

$$\text{SPI} = \text{Earned Value (EV)} / \text{Planned Value (PV)}$$

If the SPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The SPI value of 1 indicates that the project is right on target.

Answer option A is incorrect. "80" is not the same value as ".80".

Answer option B is incorrect. 1.02 is the cost performance index.

Answer option C is incorrect. 102 is not a valid calculation for this question.

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QUESTION NO: 13

Fill in the blank with an appropriate phrase.

The _____ includes a description of any collateral services required, such as performance reporting or post-project operational support for the procured item.

Answer: procurement SOW

Explanation:

The procurement SOW consists of a description of some collateral services required, such as performance reporting or post-project operational support for the procured item. The procurement SOW is revised and refined as required when it moves through the procurement process until incorporated into a signed contract award.

QUESTION NO: 14

Mark is the project manager of the GHQ Project. He is happily reporting that his project has a schedule performance index of 2.12. Management, however, does not think this is good news. What is the most likely reason why management does not like an SPI of 2.12?

- A. It is not good news because a larger number means the schedule duration estimates were likely to be wrong to begin with.
- B. They likely do not understand the SPI formula.
- C. It is not good news, as the number should be closer to 100 than 0.
- D. It is good news, but Mark may have large cost variances to achieve this value.

Answer: A

Explanation:

Cost and schedule performance indexes should be as close to 1 as possible. A larger value, such as 2.12, means that the schedule duration estimates were likely bloated or incorrect to begin with.

Answer option B is incorrect. This is not the best choice for this question.

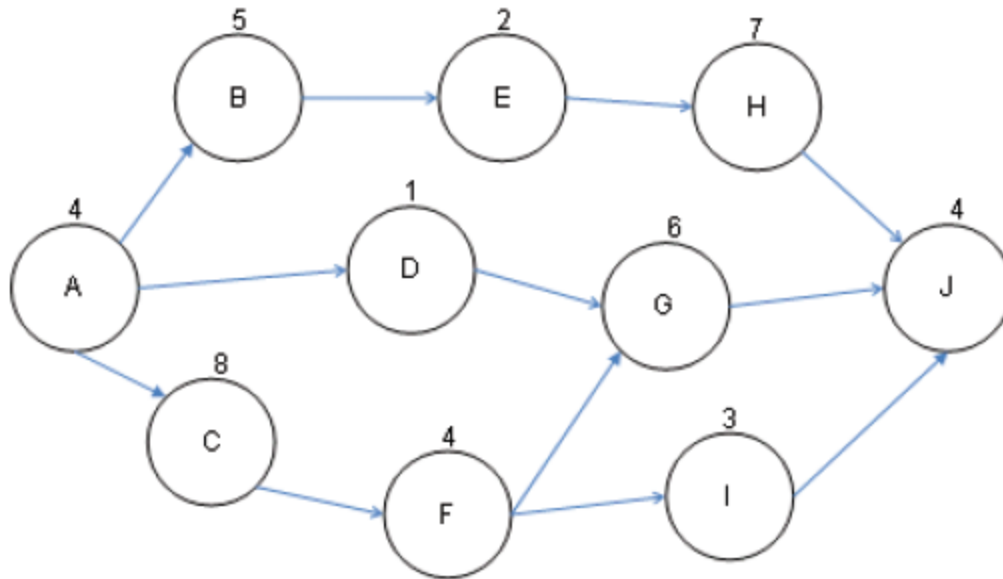
Answer option C is incorrect. The number should not be close to 100; it should be close to 1.

Answer option D is incorrect. While Mark may have crashed the schedule and driven up costs to achieve the SPI value, a more likely reason is that the time estimates were bloated.

QUESTION NO: 15

You are the project manager of the BHG Project. You are creating a network diagram as shown in the figure:

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Mary, a project team member, reports that an identified risk is likely to happen in the project that will affect the completion date of Activity D . She reports that the risk event will likely cause the duration of the activity to increase by six days. If this happens what is the earliest the project can complete?

- A. 32 days
- B. 29 days
- C. 27 days
- D. 26 days

Answer: D

Explanation:

If Activity D increases by six days, the duration of the project will not change. There is 11 days of float available for Activity D so it may delay by six days without affecting the project end date. What is float?

Float or total float (TF) is the total amount of time that a schedule activity may be delayed from its early start date without delaying the project finish date, or violating a schedule constraint. It is calculated by using the critical path method technique and determining the difference between the early finish dates and late finish dates.

Answer options A, B, and C are incorrect. These are not valid answers for the question.

QUESTION NO: 16

Sam is the project manager of the NQQ project. He and the project team have completed the stakeholder identification process for his project. What is the main output of the identify stakeholders process?

- A. Communications management plan
- B. Stakeholder register
- C. Requirements