PMI-SP.323 questions

PMI-SP

PMI Scheduling Professional

Exam M

QUESTION 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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
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 2
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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
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:
SPI = Earned Value (EV) / 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.

QUESTION 3
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.

Correct Answer: A
**Section: (none)**
Explanation

Explanation/Reference:
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 4
You are the project manager of the BHG Project. You are creating a network diagram as shown in the figure:
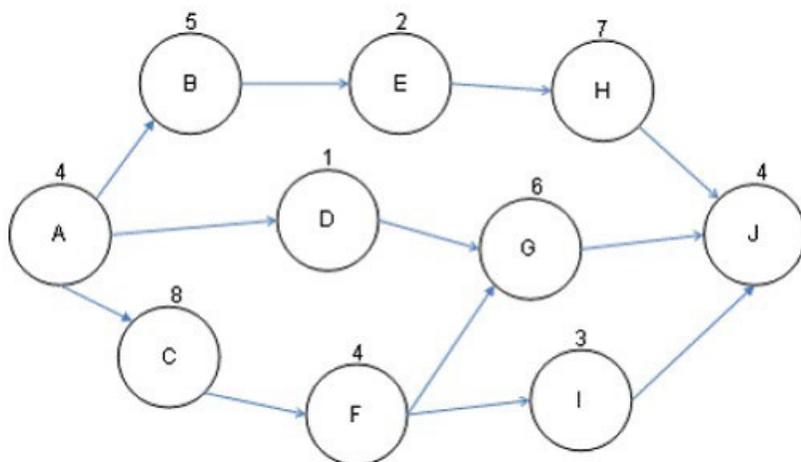
Mary, a project team member, reports that an identified risk is likely to happen in the project that will affect the completion date of Activity D . She reports that the risk event will likely cause the duration of the activity to increase by six days. If this happens what is the earliest the project can complete?

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
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 5
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
D. Stakeholder management strategy

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

According to the PMBOK, the main output of the identify stakeholders process is the stakeholder register. The stakeholder register is a project management document that contains a list of the stakeholders associated with the project. It assesses how they are involved in the project and identifies what role they play in the organization. The information in this document can be very perceptive and is meant for limited exchange only. It also contains relevant information about the stakeholders, such as their requirements, expectations, and influence on the project. Answer option A is incorrect. The communications management plan is an output of communications planning.
Answer option D is incorrect. The stakeholder management strategy is an output of stakeholder identification, but it is not the main output.
Answer option C is incorrect. Requirements are not an output of the stakeholder identification process.

QUESTION 6
You work as a project manager for BlueWell Inc. Management has asked you not to communicate performance unless the CPI is less than 0.96 or the SPI dips below 0.98. What type of report would you create for management, if these instances develop in your project?

A. Cost variance report
B. Exceptions report
C. Performance management report
D. Schedule variance report

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

The best answer is simply an exception report. An exception report refers and documents the major mistakes, mishaps, and goofs. In other words, it itemizes the important and critically significant piece of documentation that is vital to the proper and effective functioning of a project. It does not document what has gone right, but rather documents what has gone wrong. Answer option C is incorrect. A performance management report is not a valid project management report.
Answer option A is incorrect. The question is asked about cost and schedule so this answer would not be appropriate for both the cost and the schedule.
Answer option D is incorrect. The question is asked about cost and schedule so this answer would not be appropriate for both the cost and the schedule.

QUESTION 7
You are the project manager of the HQQ Project. Your project is running late by ten percent of where you should be at this time. Management is concerned. Considering that the project has a BAC of $567,899, you are thirty percent complete, and you have spent $179,450. What is this project's to- complete performance index based on the current BAC?

A. 1.02
B. 0.010
C. 0.75
D. 0.95

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

This project is not performing well on schedule, but moderately well on costs. The project's TCPI based on the current BAC is 1.02. To-complete Performance Index (TCPI) is the measured projection of the anticipated performance required to achieve either the BAC or the EAC. TCPI indicates the future required cost efficiency needed to achieve a target EAC (Estimate At Complete).Once approved, the EAC supersedes the BAC as the cost performance goal. Any significant difference between TCPI and the CPI needed to meet the EAC should be accounted for by management in their forecast of the final cost. The formula for TCPI is as follows:
TCPI = {(BAC-EV)/(BAC-AC)}
Answer option D is incorrect. 0.95 is the project's TCPI value based on the estimate at completion. Answer option C is incorrect. 0.75 is the project's schedule performance index. Answer option B is incorrect. 0.010 is not a valid calculation.

QUESTION 8
Andy works as the project manager for Bluewell Inc. He is developing the schedule for the project. There are eight tools and techniques that a project manager can use to develop the project schedule. Which of the following is a tool and technique for the Schedule Development process?

A. Schedule compression
B. Reserve analysis
C. Variance analysis
D. Expert judgment

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Schedule compression is a tool used as part of the Schedule Development process. The tools and techniques for schedule development are as follows:
Schedule network analysis
Critical path method
Critical chain method
Resource leveling
What-if scenario analysis
Applying leads and lags
Schedule compression
Scheduling tool
Answer options D, B, and C are incorrect. These are not tools and techniques for schedule development.

QUESTION 9
You are the project manager for your organization. You have recorded the following duration estimates for an activity in your project: optimistic 20, most likely 45, pessimistic 90. What time will you record for this activity?

A. 48
B. 20o, 45m, 90p
C. 90
D. 45

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

This is an example of a three-point estimate. A three-point estimate records the optimistic, most likely, and the pessimistic duration, and then records an average for the predicted duration Three-point estimate is a way to enhance the accuracy of activity duration estimates. This concept is originated with the Program Evaluation and Review Technique (PERT). PERT charts the following three estimates:
Most likely (TM): The duration of activity based on realistic factors such as resources assigned, interruptions, etc.
Optimistic (TO): The activity duration based on the best-case scenario Pessimistic (TP): The activity duration based on the worst-case scenario The expected (TE) activity duration is a weighted average of these three estimates:
TE = (TO + 4TM + TP) / 6
Duration estimates based on the above equations (sometimes simple average of the three estimates is also used) provide more accuracy. It can be calculated as follows:
TE = (20 + 45*4 + 90) / 6
= 290/6
=48
Answer options B, C, and D are incorrect. These are not the valid answers for this question.

QUESTION 10
You are the project manager of the NHQ Project. You have created the project network diagram as shown in the figure:
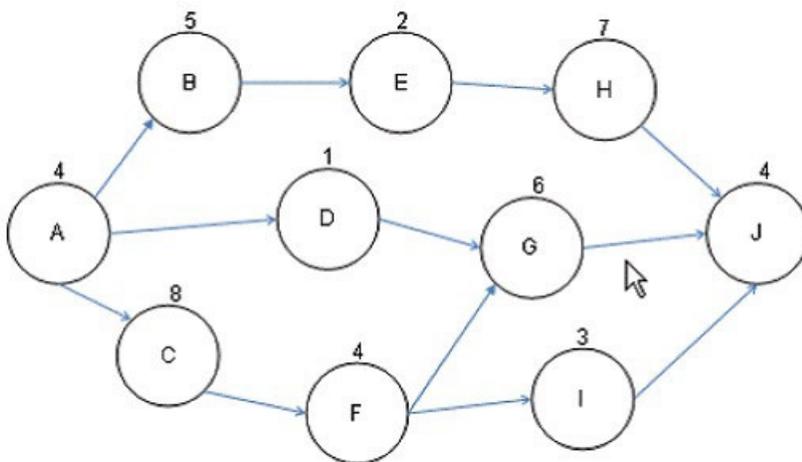
You are concerned about a risk on Activity G that if it happens will delay the project by four days. You would like to utilize float for Activity G. How much float is available for Activity G to help offset the risk event?

A. Five days

B. Four days

C. Eleven days

D. Zero

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

There is no float available for Activity G because it is on the critical path. 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 B, A, and C are incorrect. There is no float available for Activity G because it is on the critical path.

QUESTION 11
Beth is the project manager for her organization. Her current project has many deliverables that have been defined at a high level, but the details of the deliverables are still unknown. In her project, Beth is planning in detail only the activities that are most imminent in the project work. This approach to project management planning is known as what?

A. Imminent activity management

B. Rolling wave planning

C. Predecessor-only diagramming

D. Decomposition

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Rolling wave planning is a technique to plan and do the most imminent project work before moving onto the details that are far off in the project schedule and project plan. Rolling wave planning is a technique for performing progressive elaboration planning where the work to be accomplished in the near future is planned in detail at a low level of the work breakdown structure. The work to be performed within another one or two reporting periods in the near future is planned in detail as work is being completed during the current period. Answer option D is incorrect. Decomposition is the process of breaking down work packages into the activity list.
Answer options A and C are incorrect. These are not valid project management terms.

QUESTION 12
Gina is the project manager for her organization and she is working with her project team to define the project activities. In this project, the stakeholders are sensitive to the project completion date, so Gina is stressing to her project team members that while they need to provide and account for all of the project activities, they should focus on one work package in the WBS at a time. In order to start the decomposition of the project work packages into activities, Gina will need all of the following except for which one?

A. Scope baseline

B. Organizational process assets

C. WBS

D. Enterprise environmental factors

Correct Answer: C

Section: (none)
Explanation

Explanation/Reference:
Explanation:

According to the PMBOK, Gina will not need the WBS directly, but will rely on the scope baseline. A Work Breakdown Structure (WBS) in project management is a tool that defines a project and groups the project's discrete work elements in a way that helps organize and define the total work scope of the project. A WBS element may be a product, data, a service, or any combination. WBS also provides the necessary framework for detailed cost estimating and control along with providing guidance for schedule development and control. Answer option A is incorrect. The scope baseline is an input to define the project activities. Answer option D is incorrect. Enterprise environmental factors are an input to define the project activities.
Answer option B is incorrect. Organizational process assets are an input to define the project activities.

QUESTION 13
You have created the project network diagram for the ABC project. You are exploring total float and free float for that project. Martin, a project team member, wants to know the difference between total float and free float. What is the difference between total float and free float?

A. Total float is the amount of time an activity can be delayed without delaying any project successors, whereas free float is the amount of time an activity can be delayed without delaying the project completion date.
B. Total float is the amount of time an activity can be delayed without delaying the project completion date, whereas free float is the amount of time an activity can be delayed without delaying any project successors.
C. Total float is the amount of time an activity can be delayed without delaying the project completion date, whereas free float is the amount of time an activity can be delayed without delaying any project predecessors.
D. Total float is the amount of time a non-critical activity can be delayed without delaying any project successors, whereas free float is the amount of time an activity can be delayed without delaying the project completion date.
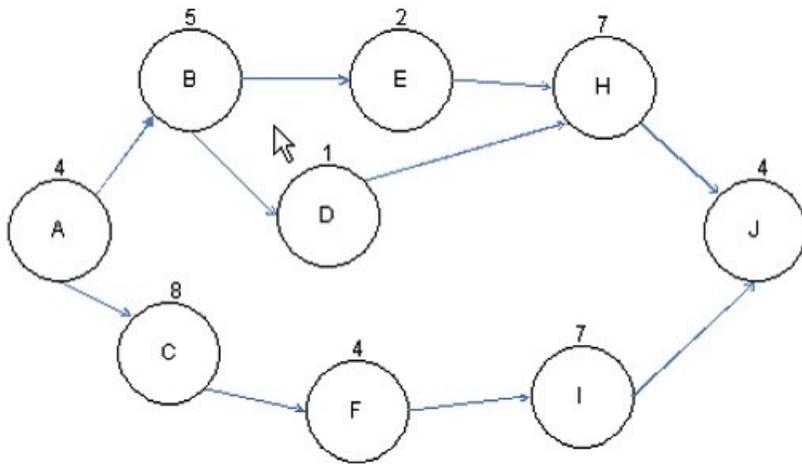
Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Total float is the time you can delay an activity without delaying the project end date, whereas free float is on each activity and does not affect the early start date of successor activities. Float, also called slack, is the amount of time an activity can be delayed without affecting any subsequent activities. There are two types of floats available: Free Float: It is the amount of time a schedule activity can be delayed without delaying the early start date of any immediately following schedule activities. Total Float: It 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 schedule constraint. Float is calculated by using the critical path method technique.
Answer options C, A, and D are incorrect. These are not accurate definitions of free float and total float.

QUESTION 14
John works as a project manager of the NHQ Project. He has created the project network diagram as shown in the figure:

Based on the project network diagram, how much float is available for Activity H if Activity B is delayed by four days and Activity E is delayed by two days?

A. Zero
B. One
C. Four
D. Five

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

The path of ABEHJ will take 22 days to complete and cannot exceed 28 days or else the project will be late. If Activity B takes four additional days and Activity E takes two additional days, this adds (4+2= 6) six days to the path, bringing the path's duration to exactly (22+6 = 28) days. There is no available float left for Activity D or H. 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 B, C, and D are incorrect. There is no float available because the path's duration has increased to 28 days.

QUESTION 15
Ben is the project manager for his organization. His project has 26 stakeholders this week and will have five additional stakeholders next week. How many more communication channels will Ben's project have next week?

A. 140
B. 10
C. 325
D. 5

**Correct Answer:** A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Ben's project will have 140 more communication channels because of the five additional stakeholders. To solve the question, you will need to find the current stakeholder communication channels first, which is (26*25)/2= 325, and then find the difference of the number of channels for the five additional stakeholders. You can use the formula of N(N-1), where N is the number of stakeholders. In this example, the formula would read: Total number of communication channels that Ben will have next = ((31*30)/2)-((26*25)/2 =140
Answer option D is incorrect. Five is the number of additional stakeholders. Answer option B is incorrect. 10 is the number of communication channels among just five stakeholders.
Answer option C is incorrect. 325 is the number of current communication channels.

QUESTION 16
You are the project manager for your company. You are working with the activities defined in the figure below.
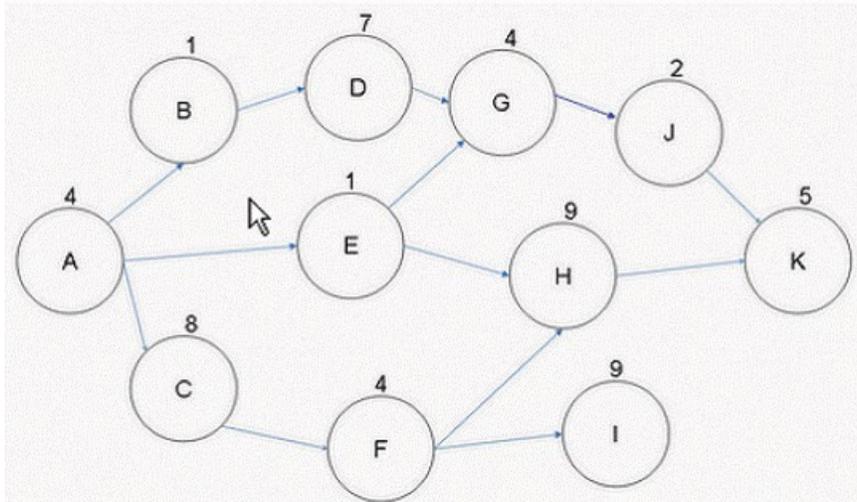
What will happen to your project if Activity F takes five additional days to complete than what was expected?

A. Your project's critical path will shift to ACFI.
B. Your project will be late by five days.
C. Your project can still complete on time as float is available on Activity I.
D. Your project will now have two critical paths.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Activity F is on the critical path of ACFHK of 30 days. By adding five additional days to Activity F, the project will now take 35 days to complete.
Answer options C, A, and D are incorrect. These are not the valid answers.

QUESTION 17
You are the project manager for your organization. You need the oak cabinets for your project delivered by December 1 in order to install the floors around the oak cabinets by December 15. Your company's procurement office generally takes 45 days to complete procurement orders. Based on this information, how should you schedule the lead time for the cabinet delivery?

A. Cabinet procurement December 1, plus 45 days lead time
B. Cabinet procurement November 15
C. Cabinet procurement December 1, minus 45 days lead time