
# PMI-SP PMI Scheduling Professional

# Practice Test

**Version 3.0**

**QUESTION NO: 1**

**QUESTION NO: 2**

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: 3**

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: 4**

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: 5**

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.
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: 6**

The Define Activities process is the first process in the project time management knowledge are a. 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?

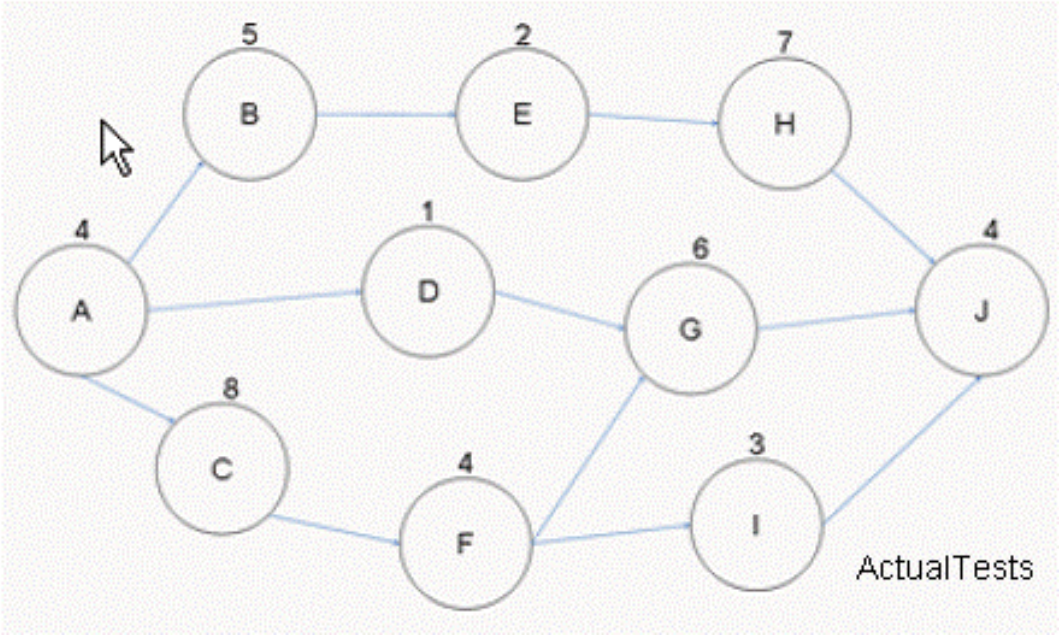
A. Activity list
B. Milestone list
C. Activity attributes
D. Project document updates

**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: 7**

Examine the figure given below:




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: 8**

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

**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: 9**

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: 10**

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 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 = Earned Value (EV) - 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: 11**

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: 12**

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

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: 13**

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:
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 NO: 14 CORRECT TEXT**

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

**QUESTION NO: 15**

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.

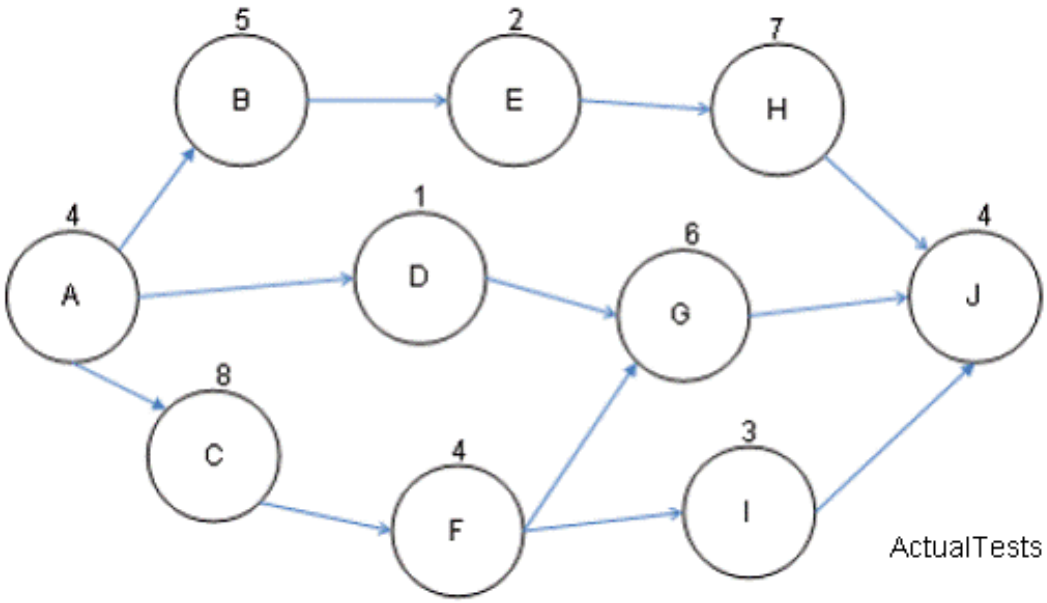
**Answer: A**

**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: 16**

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

**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: 17**

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

**Answer: B**

**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 NO: 18**

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

**Answer: B**

**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 NO: 19**

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

**Answer: A**

**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 NO: 20**

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

**Answer: A**

**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 NO: 21**

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

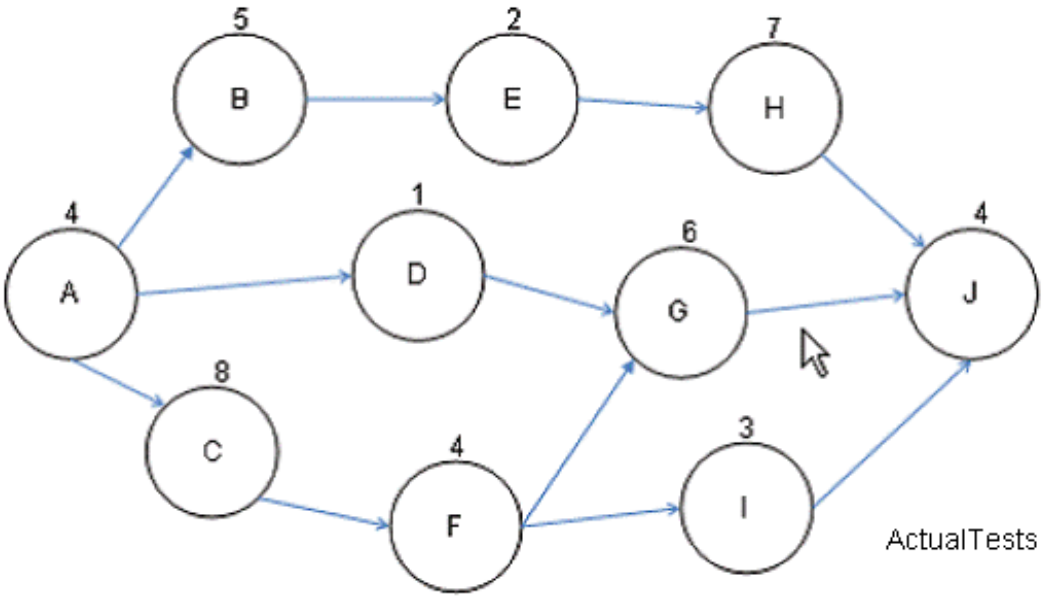
**Answer: A**

**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 NO: 22**

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

**Answer: D**

**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 NO: 23**

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

**Answer: B**

**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 NO: 24**

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

**Answer: C**

**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 NO: 25**

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?

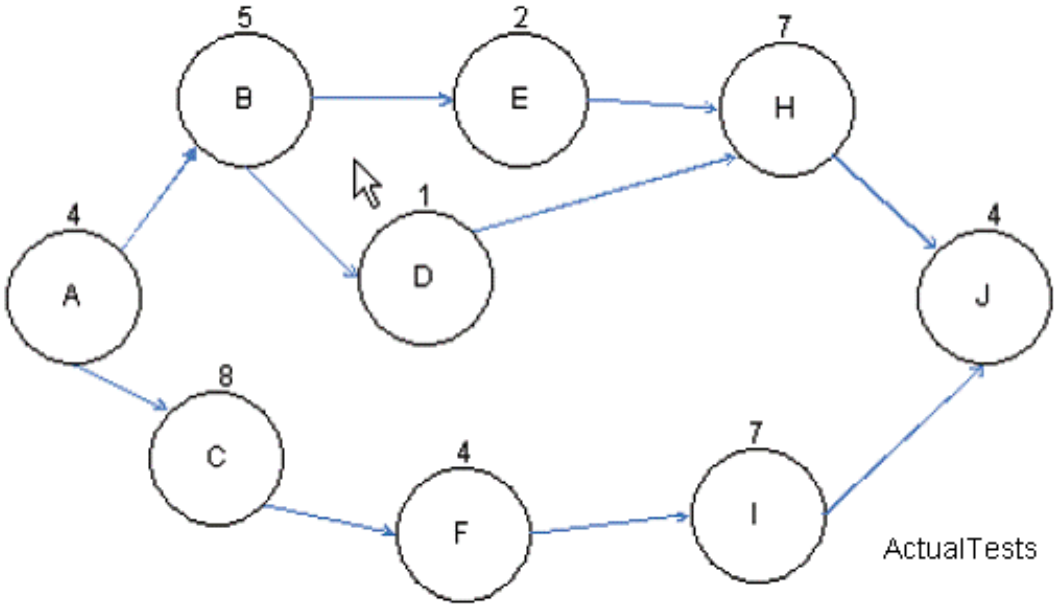
A. Total float is the amount of time an activity can be delayed without delaying any project successors, whereas free float is the amount of time an activity can be delayed without delaying the project completion date.
B. Total float is the amount of time an activity can be delayed without delaying the project completiondate, 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 completiondate, 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.

**Answer: B**

**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 NO: 26**

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

**Answer: A**

**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 NO: 27**

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?

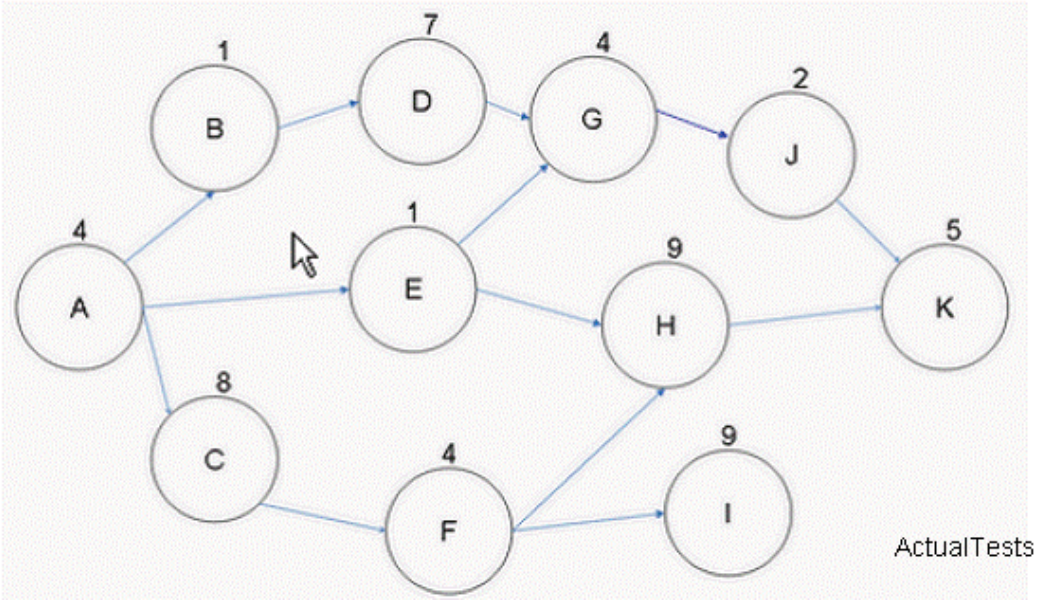
A. 140
B. 10
C. 325
D. 5

**Answer: A**

**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 NO: 28**

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 onActivity I.
D. Your project will now have two critical paths.

**Answer: B**

**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 NO: 29**

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 dayslead time
D. Cabinet procurement December 15 minus 45 dayslead time

**Answer: C**

**Explanation:**
The cabinet procurement and delivery must be completed by December 1. By scheduling the activity to finish on December 1 with minus 45 days lead time for procurement, the cabinets will arrive by the needed date.
Answer option A is incorrect. Lead time is always negative time, lag time is positive time. This choice would cause the cabinets to not arrive until 45 days after December 1.
Answer option D is incorrect. This choice would cause the cabinets to arrive on December 15 when the floors are to be installed.
Answer option B is incorrect. This choice is not the best answer because it does not necessarily account for holidays, weekends, or other factors in the project calendar. By scheduling the cabinet for December 1 and working backwards through lead time, the project's PMIS will account for these breaks in the project work.

**QUESTION NO: 30**

Your project has a BAC of $750,000 and is 75 percent complete. According to your plan, however, your project should actually be 80 percent complete. You have spent $575,000 of your project budget to reach this point and you are worried about the project not being able to complete based on your current project budget. What is the to-complete performance index for this project?

A. 0.98
B. -$16,677
C. 1.07
D. 0.94

**Answer: C**

**Explanation:**
The to-complete performance index can be found by using the formula (BAC-EV) /( BAC-AC) for a value of 1.07. The higher the value is from 1, the less likely the project will meet the BAC.
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 A is incorrect. 0.98 is the project's cost performance index.
Answer option D is incorrect. This is the project's schedule performance index.
Answer option B is incorrect. -$16,667 is the project's variance at completion.

**QUESTION NO: 31**

You are the project manager of the NHT Project. This project has 12,345 office doors to install throughout a campus. Each of the doors costs the project $456 and requires special hardware to electronically lock and open the doors. You've gathered the project team before they begin the installation for a hands-on training. As a group you and the project team install 50 doors following a checklist of instructions so that every door will be installed exactly the same throughout the campus and with minimal waste. This is an example of what project execution technique?

A. Preventive action
B. Defect repair validation
C. Implemented corrective action
D. Quality control

**Answer: A**

**Explanation:**
This is an example of a preventive action as you're working with the team before they install the doors to train them on the installation. The checklist is a quality control tool but the question was asking for a project execution activity. Preventive and corrective actions are part of project execution.
Answer option D is incorrect. Quality control is a controlling and monitoring process, not an executing process.
Answer option B is incorrect. The defect repair validation comes after the project team has corrected an error - something that has not occurred in this instance.
Answer option C is incorrect. Corrective action is a response to something that needs to be corrected in the project.

**QUESTION NO: 32**

Your project is forty percent complete though it was scheduled to be fifty percent complete as of today. Management has asked that you report on the schedule variance for your project. If your project has a BAC of $650,000 and you've spent $385,000 to date, what is the schedule variance value?

A. -$75,500
B. -$390,000
C. -$487,500
D. -$65,000

**Answer: D**

**Explanation:**
The schedule variance is found by subtracting the planned value from the earned value. The earned value is the percentage of the project completeness multiplied by the BAC. Planned value is the percentage of where the project should be at this time multiplied by the BAC. In this example, EV = 40% of BAC = 260,000, and PV = 50% of BAC = 325,000 SV = 260,000 - 325,000 = -65,000
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 = Earned Value (EV) - 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.
Answer options B, C, and A are incorrect. These are not valid calculations of the schedule variance.

**QUESTION NO: 33**

Jim is the project manager for his project. He and his project team are creating their duration estimates for the work packages in the WBS. For each activity, Jim is adding a few hours to the duration estimate in case something goes wrong during the completion of the work activity. Sarah, the project sponsor, does not approve of this and warns Jim of Parkinson's Law. What is Parkinson's Law?

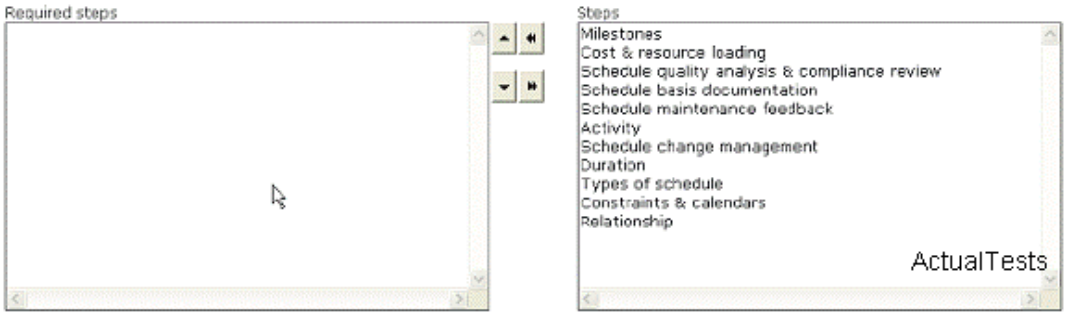
A. People will behave based on what their behavior brings them.
B. As employees do repetitive tasks, duration should decrease.
C. Work expands to fill the amount of time allotted to it.
D. An exponential increase labor does not correlate to an exponential decrease in duration.

**Answer: C**

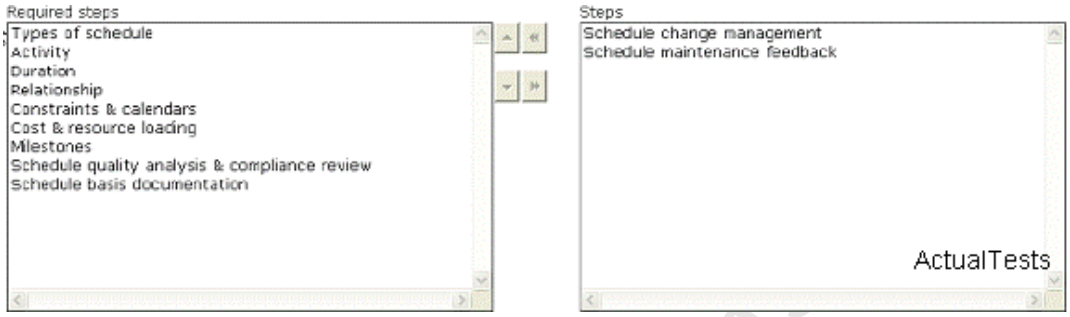
**Explanation:**
Parkinson's Law states that work expands to fill the amount of time allotted to complete the work. If Jim allows 25 hours for a project team member to complete a 20-hour task, it will likely take the team member 25 hours to do the work.
Answer option A is incorrect. This is a description of the Expectancy Theory.
Answer option B is incorrect. This is a description of the learning curve.
Answer option D is incorrect. This is a description of a portion of the Law of Diminishing Returns.

**QUESTION NO: 34**

Michelle works as a scheduler in Array Inc. She has to create a schedule for a project assigned to her. Choose and reorder the steps that she should follow while creating the schedule for the project. Select an item from the right pane. Click button to move the selected item to the left pane. Click button to move the item back to the right pane. Click and buttons to sort the list, if required.




**Explanation:**




Schedule development is the process of analyzing activity sequences, durations, resource requirements, and schedule constraints to create the project schedule. Inserting the activities, durations, and resources into the scheduling tool generates a schedule with planned dates for completing the project activities. The goal of the schedule development is to form the processes such that the stakeholders can use it in the creation of the project. Schedule development consists of two main sections:

1. Input and Data: The starting point for any schedule is the input of information developed during the planning process.

Define schedule scope

Breakdown structure relationships

Schedule specification

Feedback from stakeholders

Cost estimate model

2. Creating Schedule: This process provides basic knowledge in an outline structure for a study of the means, methods, and tools necessary for the project schedule development process.

Types of schedules

Activities

Durations Relationships Constraints and calendars Cost and resource loading Schedule quality analysis and compliance review Schedule basis documentation

**QUESTION NO: 35**

You work as a project manager for ABC Inc. You are currently overseeing a project on a high-rise building site. Your prime concern is to ensure that cranes are used effectively for moving materials. You also have to ensure that delivery trucks do not have to wait in a queue and that workers on the upper floors are able to get their deliveries on time. Which type of scheduling would be required in such a scenario?

A. Critical path scheduling
B. Time-oriented scheduling
C. Resource-oriented scheduling
D. Network scheduling

**Answer: C**

**Explanation:**
Resource-oriented scheduling focuses on using and scheduling particular resources in an effective manner. This type of scheduling should be used whenever there are limited resources available for a project and the struggle for these resources between the project activities is intense. As a result, delays are likely to arise in such cases, as actions must wait until general resources become available. Resource-oriented scheduling is also suitable in cases where unique resources are to be used, such as when there is only one excavator available in an excavation operation.
Answer option B is incorrect. Time-oriented scheduling is a time-scheduling method that focuses on determining the finishing time of a project. It also specifies the crucial precedence relationships among the activities involved in the project. In time-oriented scheduling, the appropriate time is allocated for the whole project through the successive stages of the project life cycle.
Answer option A is incorrect. Critical path scheduling is a technique that calculates the minimum completion time for a project along with the possible start and finish times for the project activities.
Answer option D is incorrect. Network scheduling provides a basis for obtaining facts for decision making.



**QUESTION NO: 36**

John works as a project manager for BlueWell Inc. He is working on a high-profile project with 80 stakeholders and he needs to express to his project team and to the management the importance of communication in the project. He would like to show the number of stakeholder communication channels in the project. Based on this information how many communication channels exist within this project?

A. 3000
B. 79
C. 80

D. 3160

**Answer: D**

**Explanation:**
Communication channels are paths of communication with stakeholders in a project. The number of communication channels shows the complexity of a project's communication and can be derived through the formula shown below: Total Number of Communication Channels = n (n-1)/2 where, n is the number of stakeholders. Hence, a project having five stakeholders will have ten communication channels. Putting the number of stakeholders in the formula we can get the required communication channel for the project. It is (80 x 79)/2 for 3,160 communication channels.

**QUESTION NO: 37**

You work as a project manager for BlueWell Inc. There have been changes to the project scope in your project. These changes will cause the project schedule to change as well, so you will need to update the schedule and the schedule baseline. The schedule baseline is a component of what?

A. Project calendar
B. Project constraints
C. Project objectives
D. Project management plan

**Answer: D**

**Explanation:**
The schedule baseline is a required component of the project management plan. Project management plan is a formal, agreed document that defines how the project is executed, monitored and controlled. It may be summary or detailed and may be composed of one or more subsidiary management plans and other planning documents. The objective of a project management plan is to define the approach to be used by the project team to deliver the intended project management scope of the project. The project manager creates the project management plan with the inputs from the project team and key stakeholders. The plan should be agreed and approved by at least the project team and its key stakeholders.
Answer option C is incorrect. The schedule baseline is not a project objective.
Answer option A is incorrect. The project calendar defines when the project will take place.
Answer option B is incorrect. Project constraints are restrictions imposed on the project, such as time, cost, and scope.

**QUESTION NO: 38**

Holly is the project manager of her project. She has chosen to crash the project due to time constraints that have been imposed on her project. When Holly crashes the project what project document must be updated to reflect this change to the approach?

A. Develop schedule process
B. Risk register
C. Project risk management plan
D. Activity attributes

**Answer: D**

**Explanation:**
When Holly adds resources to the project, as in this instance, she will need to update the activity attributes to reflect the new labor. Activity attributes are an output of the Define Activity process. These attributes refer to the multiple components that frame up an activity. The components for each activity during the early stages of the project are the Activity ID, WBS ID, and Activity name. At the later stages, the activity attributes include Activity codes, Predecessor activity, activity description, logical relationship, successor activity, leads and lags, imposed dates, and constraints and assumptions. Activity attributes are used for schedule development and for ordering, selecting, and sorting the planned schedule activities in a number of ways within reports. In project document updates, activity attributes are updated to include any revised resource requirements and other revision generated by the develop schedule process.

**QUESTION NO: 39**

Examine the figure given below: Which path is considered the critical path?

A. ACDFJ
B. ACGIJ
C. ABEFJ
D. ABDFJ

**Answer: B**

**Explanation:**
The critical path is the path in the project network diagram with the longest duration. In project management, a critical path is the sequence of project network activities which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). In this instance path ACGIJ is the longest as it takes 23 days.
Answer options C and D are incorrect. These paths take 13 days.
Answer option A is incorrect. This path only takes 19 days.

**QUESTION NO: 40**

Winnie is the project manager for her company. She has been recording the actual durations of the project work to determine the actual progress of her project. Winnie needs to generate an updated project schedule based on project performance. She is using the supporting schedule data, manual scheduling methods, and her project management software to perform schedule network analysis. What other tool Winnie can use to help and generate an updated project schedule?

A. Critical path method
B. Schedule management plan
C. Scheduling tool
D. Critical chain method

**Answer: C**

**Explanation:**
Answer option A is incorrect. The critical path method can be analyzed, but it is a part of the project management information system. In addition, the critical path is not better or worse than the critical chain method so by having both answers among the choices both answers are cancelled.
Answer option D is incorrect. The critical chain method can be analyzed, but it is the part of the project management information system. In addition, the critical path is not better or worse than the critical path method so by having both answers among the choices both answers are cancelled.
Answer option B is incorrect. The schedule management plan may need to be referenced to create a new project schedule, but it is not a tool that Winnie can use.



**QUESTION NO: 41**

You are the project manager of the NHQ project. Your project has a budget of $1,258,456 and is scheduled to last for three years. Your project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, you have spent $525,000. Management needs a performance report regarding the NHQ project. Management is concerned that this project will be over budget upon completion. What is the estimate at completion for this project that you will need to report to management?

A. -$62,922.80
B. $1,312,504
C. $1,525,000

D. $787,504

**Answer: B**

**Explanation:**
The estimate at completion can be calculated by dividing the budget at completion by the cost performance index. Here, CPI =EV/AC=(0.40*1,258,456)/525000 = 0.95882 EAC = BAC/CPI = 1,258456/0.95882 = 1,312,504 What is Estimate at Completion (EAC)? Estimate at Completion (EAC) is a field that displays the final cost of the project including the actual costs and the forecast of remaining costs based on the cost performance index (CPI) so far. The formula used to calculate this estimate is as follows: ACWP+(BAC-BCWP)/CPI
Answer option D is incorrect. $787,504 is the estimate to complete.
Answer option A is incorrect. -$62,922.80 is the schedule variance.
Answer option C is incorrect. This is not a valid calculation for this question.

**QUESTION NO: 42**

John works as the project manager for Honeywell Inc. He is involved in the periodic collection and analysis of baseline versus actual data to understand and communicate the project progress. Which of the following techniques is used in generating performance reports?

A. Work performance information
B. Change requests
C. Work performance measurements
D. Forecasting method

**Answer: D**

**Explanation:**
Forecasting method is a technique used in generating performance reports. Forecasting is the process of estimating or predicting in unknown situations. Forecasting is about predicting the future as accurately as possible with the help of all the information available, including historical data and knowledge of any future events that might impact forecasts. The forecasting methods are categorized as follows: Time series method: It uses historical data as the basis for estimating future outcomes. Causal/econometric method: This forecasting method is based on the assumption that it is possible to identify some factors that might influence the variable that is being forecasted. If the causes are understood, projections of the influencing variables can be made and used in the forecast. Judgmental method: Judgmental forecasting methods incorporate intuitive judgments, opinions, and subjective probability estimates. Other methods: Other methods may include probabilistic forecasting, simulation, and ensemble forecasting. It is one of the tools and techniques of the report performance process.
Answer option A is incorrect. Work performance information is the data gathered on the status of the project schedule activities that are performed to accomplish the project work. This data is

collected as part of the Direct and Manage Project Execution processes. WPI includes the following: Deliverables status Schedule Progress Costs incurred It is used as an input in generating the report performance process.
Answer option C is incorrect. Work performance measurements are created from the work performance information. WPMs are an output of Control schedule, Control cost, and Control scope processes, which are monitoring and controlling processes. WPMs consist of planned versus actual performance indicators with respect to scope, schedule, and cost. They are documented and communicated to the stakeholders and are used to make project activity metrics, such as the following: Planned vs. Actual Technical performance and Scope performance Planned vs. Actual Schedule performance Planned vs. Actual Cost performance They are used as an input in generating the report performance process.
Answer option B is incorrect. Change requests are requests to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets or revise schedules. These requests for a change can be direct or indirect, externally or internally initiated, and legally or contractually imposed or optional. A Project Manager needs to ensure that only formally documented requested changes are processed and only approved change requests are implemented. It is an output of the report performance process.

**QUESTION NO: 43**

Which of the following are the inputs to the Develop Project Charter process? Each correct answer represents a complete solution. Choose all that apply.

A. Procurement document
B. Contract
C. Business case
D. Project statement of work

**Answer: B,C,D**

**Explanation:**
The Develop Project Charter process documents the formal authorization of a project or a phase. It also documents initial requirements that satisfy the stakeholder's needs and expectations. It is used to validate the decisions made during the previous iteration of the Develop Project Charter process. The various inputs of this process are as follows: Project statement of work
Business case
Contract
Enterprise environmental factors
Organizational process assets
The output of the Develop project Charter process is as follows:
Project charter
Answer option A is incorrect. Procurement document is the input of the Identify Stakeholders

process.

**QUESTION NO: 44**

Beth is the project manager for the NHQ project. This project deals with fiber optic cabling in her organizational campus. Tim is the electrical engineer for her company and is the only internal resource that can complete several of the project activities that deal with the fiber optic cables. Because Tim is a highly-skilled resource, he is already scheduled on several projects within the organization and is not available when Beth needs him to complete some of the project activities. This is an example of which term?

A. Resource calendar conflict
B. Matrix network
C. Organizational process assets
D. Activity resource requirements

**Answer: D**

**Explanation:**
Because the activities in Beth's project require Tim and his skills. This is an example of an activity resource requirement. A resource constraint would also have been an acceptable answer.
Answer option B is incorrect. This may be a matrix organization, but matrix network is not a valid project management term.
Answer option C is incorrect. Organizational process assets are things that have been created to help assist the management of the project.
Answer option A is incorrect. A resource calendar conflict is not a valid project management term.

**QUESTION NO: 45 CORRECT TEXT**

Fill in the blank with an appropriate phrase. The_____ allows the project team to look at the performance of the project to date, and use that data to make more accurate projections about the future.

Answer: Schedule model

**QUESTION NO: 46**

John works as a Project Manager for Blue Well Inc. He is measuring cost efficiency of his project. The key values are provided in the table below:

| Measurements | Values |
|---|---|
| BCWP (or EV) | 425 |
| BCWS (or PV) | 400 |
| ACWP (or AC) | 510 |



What is the cost performance index (CPI) of the project at the current point of time?

A. 0.96
B. 1.082
C. 0.833
D. 1.0625

**Answer: C**

**Explanation:**
According to the question, you are required to calculate the cost performance index (CPI) of the project. Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. Here, CPI is as follows: CPI = EV / AV = 425/510 = 0.833 As the CPI (0.833) is less than 1, it shows that the schedule performance is below expectation. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. What is BCWS (or PV)? Budgeted Cost of Work Scheduled (BCWS) or Planned Value (PV) is the authorized budget assigned to the scheduled work to be accomplished for a schedule activity or Work Breakdown Structure (WBS) component. What is ACWP (or AC)? Actual cost of work performed (ACWP) or Actual Cost (AC) is the total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity. It is the cost of the work to date, including direct and indirect costs. AC is money that has actually been expended to date.

**QUESTION NO: 47**

Ben is the project manager of the NHF Project for his organization. Some delays early in the project have caused the project schedule to slip by nearly 15 percent. Management would like Ben to find a method to recoup the schedule slippage and to get the project back on track. Management is risk-adverse with this project. Which of the following methods should Ben avoid to recoup the project time?

A. Crashing
B. Fast tracking
C. Critical chain methodology
D. Adding lead time

**Answer: B**

**Explanation:**
Of all the choices, Ben should avoid fast tracking, as it allows complete phases of the project to overlap, and this increases project risks. Management wants to avoid risks, so fast tracking would not be helpful. 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.
Answer option A is incorrect. Crashing adds people and costs but is relatively safe in regard to risks.
Answer option C is incorrect. Critical chain is not a schedule compression technique and would not necessarily help the project get back on schedule.
Answer option D is incorrect. Lead time, similar to fast tracking, can increase project risks; however, fast tracking is more risky than lead time. Lead time allows individual activities to overlap, while fast tracking allows entire project phases to overlap.

**QUESTION NO: 48**

Laura is the project manager for her organization and management has requested her to create a report on her project's performance. Laura needs to analyze her current project performance and then compare it against what, in order to create a performance report?

A. Cost variances and Cost Performance Index
B. Scope baseline
C. Performance measurement baseline
D. Schedule variances, planned value, and the Schedule Performance Index

**Answer: C**

**Explanation:**
The performance measurement baseline, which can be comprised of cost, scope, and schedule, is the foundation for creating a performance report.
Answer option B is incorrect. The scope baseline will only reflect the performance of the scope, whereas performance reports typically need scope, time, and cost as its foundation.
Answer option A is incorrect. Cost variances and the cost performance index are cost values that must be considered along with the scope performance and schedule performance.
Answer option D is incorrect. Only reporting performance on the schedule is not enough for a performance report. Laura should also report on scope and cost at a minimum.

**QUESTION NO: 49**

Which of the following documents captures and defines the work activities, deliverables, and a timeline that a vendor will execute against in performance of work for a customer?

A. Project charter
B. Scope of statement
C. SOW
D. WBS

**Answer: C**

**Explanation:**
A statement of work (SOW) is a document that captures and defines the work activities, deliverables and timeline that a vendor will execute against in performance of work for a customer. Detailed requirements and pricing are usually specified in it, along with many other terms and conditions. SOW is a narrative description of products or services to be supplied by the project. For internal projects, the project initiator or sponsor provides the statement of work based on business needs, product, or service requirements. For external projects, the statement of work can be received from the customer as part of a bid document.
Answer option B is incorrect. Scope of statement gives the narrative description of the project scope.
Answer option A is incorrect. Project charter is a document that formally authorizes a project manager to work on a project.
Answer option D is incorrect. WBS is a tool that defines a project and groups the project discrete work in a way that helps organize and define the total work scope.

**QUESTION NO: 50**

A construction company is about to start a new project. It requires hiring a project manager for this project. Which of the following are the most important skills that a person must have to be selected as a project manager?

A. Problem solving
B. Team building and human resources
C. Leading
D. Communication
E. Negotiation and influential

**Answer: D**

**Explanation:**

A good project manager must have all of the above mentioned skills. Out of these, the communication skills are the most important skills for a project manager. Communications skills are part of general management skills and are used to exchange information. Communication has many dimensions: Written and oral, listening, and speaking Internal (within the project) and external (customer, the media, the public) Formal (reports, briefings) and informal (memos, ad hoc conversations) Vertical (up and down the organization) and horizontal (with peers) Communication is the most important skill that a project manager must posses. It is the single most important characteristics of a top-class project manager. Project managers must communicate well in order to integrate and maximize the performance of team members. Oral and written communications are the backbone of every successful project. During different phases of a project, a project manager requires to communicate through different manners (for example, documentation, meeting updates, etc.) and he must ensure that the information communicated is explicit, clear, and complete.

Answer options E, C, A, and B are incorrect. All these mentioned skills make a person a good project manager. Communication skills top the list. What are organizational skills? Organizational skills are part of management skills to organize various aspects of a project in order to complete it successfully. A good project manager uses these skills to successfully organize his meetings, as well as to keep documentations, quotes, contracts, etc., which can be fetched at any given moment. Organizational skills also include planning and time management skills. What are budgeting skills? Budgeting skills include the knowledge of finance and accounting principles. A project manager must possess these skills in order to perform cost estimates for project budgeting. Reading and understanding quotes, preparing purchase orders, and reconciling purchase invoices are all part of budgeting skills. In order to make the budget of a project, the project manager must have excellent budgeting skills. What are problem solving skills? Problem solving skills include the ability to define and analyze problems, and to take decisions in order to solve the problems by implementing those decisions. Every project manager must possess strong problem solving skills. Problem solving is a two-fold process: Defining the problem Taking a decision and then implementing it A project manager is responsible for determining the best course of action to take in order to resolve the problem. What are negotiating and influencing skills? Negotiating skills includes demanding and convincing others for the rightful thing or act. A project manager needs this skill to negotiate on projects in almost every area such as scope definitions, budgets, contracts, resource assignments, schedules, etc. Influencing skills include the convincing power of a person. It is an ability to change minds and the course of events. A good project manager requires these skills to utilize them in all areas of project management.

**QUESTION NO: 51**

Which of the following individuals has a management role in a core business area, such as research and development, design, manufacturing, provisioning, testing, or maintenance?

A. Functional manager
B. Operations manager
C. Project manager
D. Seller

**Answer: B**

**Explanation:**
The role of operations manager is to perform various management roles in a core business area, such as research and development, design, manufacturing, provisioning, testing, or maintenance. The operations manager directly deals with constructing and maintaining the saleable products or services of the enterprise.
Answer option C is incorrect. A project manager is an expert in the field of project management. He is responsible for the entire project from inception to completion. The project manager leads the team and helps negotiate the multiple relationships within any project whether with clients, team members, firm principals or any variety of partners and functions as the hub of a project.
Answer option A is incorrect. The role of a functional manager is to perform various management roles within an administrative or functional area of the business, such as human resources, finance, accounting, or procurement. He is assigned his own permanent staff to carry out the ongoing work. He should have a clear directive to manage all tasks within his functional area of responsibility.
Answer option D is incorrect. Seller is also known as a vendor, supplier or contractor. They are external company's elements that enter into a contractual agreement to provide components or services necessary for the project.

**QUESTION NO: 52**

John is the project manager for his organization. He has created a status dashboard for his stakeholders. What is a status dashboard?

A. It is a report that details the current status of risks and issues.
B. It is a software application that allows stakeholders to view the project manager's performance.
C. It is a web-based tool to inspect the project deliverables for performance.
D. It is a report that reflects the overall performance of scope, schedule, quality, cost, or other project performance metrics.

**Answer: D**

**Explanation:**
Of all the choices, the best explanation is that a dashboard is a report for quick review of the project's performance metrics. While there are some software solutions, they still focus on the key performance criteria of the project.
Answer option C is incorrect. This answer defines the definition of quality control, not the

dashboard's review of project performance.
Answer option B is incorrect. Dashboards focus on the performance of the project's key performance factors, not the project manager.
Answer option A is incorrect. A status report could include the details of the project's risks and issues, but usually not the dashboard.

**QUESTION NO: 53**

You have been hired as a project manager for Tech Perfect Inc. You are studying the documentation of planning of a project. The documentation states that there are twenty-five stakeholders with the project. What will be the number of communication channels for the project?

A. 300
B. 50
C. 600
D. 25

**Answer: A**

**Explanation:**
According to the question, the project has twenty-five stakeholders. Communication channels are paths of communication with stakeholders in a project. The number of communication channels shows the complexity of a project's communication and can be derived through the formula shown below: Total Number of Communication Channels = n (n-1)/2 where, n is the number of stakeholders. Hence, a project having five stakeholders will have ten communication channels. Putting the value of the number of stake holder in the formula will provide the number of communication channels: Number of communication channel = (n (n-1)) / 2 = (25 (25-1)) / 2 = (25 x 24) / 2 = 600 / 2 = 300 Who are project stakeholders? Project stakeholders are those entities within or without an organization, which: Sponsor a project or, Have an interest or a gain upon a successful completion of a project. Examples of project stakeholders include the customer, the user group, the project manager, the development team, the testers, etc. Stakeholders are anyone who has an interest in the project. Project stakeholders are individuals and organizations that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project's objectives and outcomes. The project management team must identify the stakeholders, determine their requirements and expectations, and, to the extent possible, manage their influence in relation to the requirements to ensure a successful project.

**QUESTION NO: 54**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are

supposed to be at your second milestone which accounts for half of the project completion. There have been some errors in the project, which has caused you to spend $2,073,654. What is this project's schedule variance?

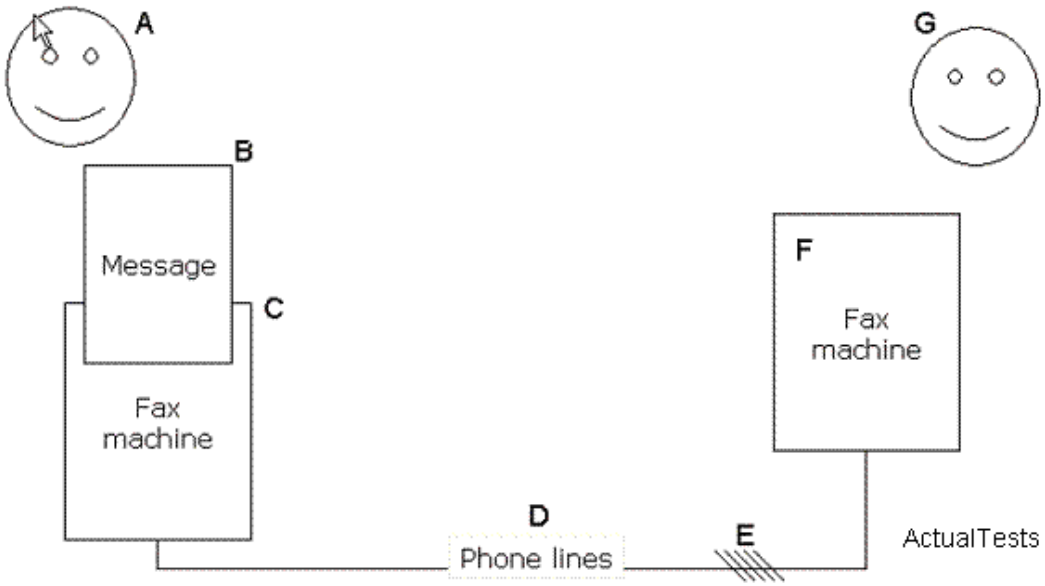
A. -$48,654
B. 13 percent
C. -$225,000
D. 0.98

**Answer: C**

**Explanation:**
he schedule variance can be found by subtracting the planned value form the earned value. In this instance, it is $2,025,000 minus $2,250,000. SV = 2,025,000 - 2,250,000 = -225,000 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 = Earned Value (EV) - 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.
Answer option A is incorrect. This is the cost variance for the project.
Answer option B is incorrect. 13 percent is not a valid answer.
Answer option D is incorrect. This is not a valid variance for this question; variances are typically negative numbers.

**QUESTION NO: 55**

The figure given below demonstrates the communication model for a project. What role does the component E play in the communications model?



A. Static
B. Deterrent
C. Noise
D. Barrier

**Answer: C**

**Explanation:**
Noise is anything that disrupts the communication method such as static on the telephone line, distracting conversations, or misunderstandings.
Answer option A is incorrect. Static is an example of noise, but it is not part of the communication model.
Answer option D is incorrect. A barrier to communication is when communication cannot happen under the present conditions.
Answer option B is incorrect. A deterrent is not a valid part of the communication model.

**QUESTION NO: 56**

Which of the following documents is a narrative description of products or services to be supplied by the project and has detailed requirements and pricing specified on it?

A. Scope of statement
B. Project charter
C. Statement of work (SOW)
D. WBS

**Answer: C**

**Explanation:**
A statement of work (SOW) is a document that captures and defines the work activities, deliverables and timeline that a vendor will execute against in performance of work for a customer. Detailed requirements and pricing are usually specified in it, along with many other terms and conditions. SOW is a narrative description of products or services to be supplied by the project. For internal projects, the project initiator or sponsor provides the statement of work based on business needs, product, or service requirements. For external projects, the statement of work can be received from the customer as part of a bid document.
Answer option A is incorrect. Scope of statement gives the narrative description of the project scope.
Answer option B is incorrect. Project charter is a document that formally authorizes a project manager to work on a project.
Answer option D is incorrect. WBS is a tool that defines a project and groups the project discrete work in a way that helps organize and define the total work scope.

**QUESTION NO: 57**

Fred is the project manager of the NHA project. This project has a BAC of $2,456,900 and is sixty percent complete. Fred has crashed the project, which has driven the project costs to date to $1,525,140, but his project is five percent more complete than what was planned. What is the cost variance for this project that Fred needs to report to management?

A. $122,845
B. -$51,000
C. -$85,000
D. Zero

**Answer: B**

**Explanation:**
The cost variance for the project is -$51,000. You can find the cost variance by using the formula earned value minus planned value. In this instance, it is: CV = EV - AC = (0.60* 2,456,900) - 1,525,140 = -51,000
Answer option C is incorrect. -$85,000 is the project's variance at completion.
Answer option A is incorrect. $122,845 is the project's schedule variance.
Answer option D is incorrect. There is a cost variance on this project of -$51,000.

**QUESTION NO: 58**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are supposed to be at your second milestone which accounts for half of the project completion. There have been some errors in the project which has caused you to spend $2,073,654. What is this project's schedule performance index?

A. 1.02
B. 0.98
C. 0.90
D. -$108,120

**Answer: C**

**Explanation:**
The schedule performance index shows how well the project is performing on its schedule goals. The SPI can be found by dividing the earned value by the planned value. In this instance, it is $2,025,000 divided by $2,250,000 for .90. The closer to 1, the better the performance. 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 B is incorrect. 0.98 is the cost performance index.
Answer option A is incorrect. 1.02 is the to-complete performance index.
Answer option D is incorrect. -$108,120 is the variance at completion based on current performance.

**QUESTION NO: 59**

Holly is the project manager for her organization. She is creating the activity list and would like to tag those activities that are comprised of discrete effort. What is discrete effort?

A. It is a term used to describe activities whose effort cannot be directly measured to the project objectives.
B. It is a term used to describe activities whose effort can be directly measured and linked to the project objectives.
C. It is a term used to describe activities that are supportive of the project work, but not linked to the project deliverables.
D. It is a term used to describe activities that are core project management processes, but not core project activities.

**Answer: B**

**Explanation:**
Discrete effort is a term used to describe the work that can be measured and traced to the components in the work packages. It is the actual work to create the project deliverables. Discrete effort refers to the particular work effort that can be identified and traced as having a direct tie to the final completion of the project- related work breakdown structure components and the deliverables. It is necessary that all the efforts have a specific measurable end product or end result.
Answer options A, D, and C are incorrect. These are not valid definitions of discrete effort.

**QUESTION NO: 60**

Lily works as a project manager for BlueWell Inc. She has recorded the following duration estimates for an activity in her project: optimistic 35, most likely 50, and pessimistic 95. What time will she record for this activity?

A. 48
B. 55
C. 54
D. 40

**Answer: B**

**Explanation:**
This is an example of 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. Here, it is, TE = ( 35 + 50*4 + 95) / 6 = 330/6 = 55

**QUESTION NO: 61**

Nancy is the project manager of the JJJ Project. This project has recently been approved by the project customer as complete so Nancy must now finalize the administrative closure. Nancy needs to create the final project report to report the successes and failures in the project. Who should Nancy deliver this final project report to if she is participating in a projectized structure?

A. Functional Management
B. Project sponsor
C. Whomever the communications management plan directs her to
D. Project customer

**Answer: C**

**Explanation:**
The communications management plan will define who will receive what information.
Answer option B is incorrect. The project sponsor may be a recipient but the project communications management plan is the best selection.
Answer option A is incorrect. Functional management is not the best choice in a projectized structure.
Answer option D is incorrect. The project customer may receive a copy of the report, but the project communications management plan should direct the communications.

**QUESTION NO: 62**

You are the project manager of the AHQ project. This project is scheduled to last for six months and will require $345,000 to complete. If the project completes earlier than scheduled, your organization will receive a bonus of $5,000 per day of early completion. Management has asked you to develop an aggressive schedule to realize as much of the bonus as possible, but management does not want you to increase the costs of the project beyond $1,000 per day of the bonus realization. Which of the following approaches will likely add costs to the project?

A. Adding leads to the project work
B. Fast tracking
C. Crashing
D. Using the critical chain method

**Answer: C**

**Explanation:**
Crashing adds labor to the project. This approach adds costs to the project because you will have to pay for the added labor.
Answer option B is incorrect. Fast tracking allows entire phases to overlap in the project. This approach adds risks to the project.
Answer option D is incorrect. The critical chain method considers the availability of project resources.
Answer option A is incorrect. Adding lead time to activities allows activities to overlap and does not add project costs.

**QUESTION NO: 63**

Harry works as a project manager for the NHQ project. His project has a budget of $2,208,456 and is scheduled to last for three years. His project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, he has spent $725,000. Management needs a performance report regarding the NHQ project. Management is concerned that this project will be over budget upon completion. What is the estimate at completion for this project that Harry will need to report to management?

A. $1,312,504
B. $787,504
C. $1,812,498
D. $725,000

**Answer: C**

**Explanation:**

The estimate at completion can be calculated by dividing the budget at completion by the cost performance index. Here,
CPI =EV/AC
= (0.40*2,208,456)/725000
= 1.21846

EAC = BAC/CPI
= 2,208,456/1.21846
= 1,812,498

What is Estimate at Completion (EAC)? Estimate at Completion (EAC) is a field that displays the final cost of the project including the actual costs and the forecast of remaining costs based on the cost performance index (CPI) so far. The formula used to calculate this estimate is as follows: ACWP+(BAC-BCWP)/CPI

**QUESTION NO: 64**

You work as a Project Manager for Dreams Unlimited Inc. You are looking for performance efficiencies of a project. The related key values are provided in the table below:

MeasurementsValues
BCWP (or EV)325
BCWS (or PV) 300
ACWP (or AC)410

What will be the cost performance index (CPI) of the project at the current point of time?

A. 0.923
B. 1.083
C. 1.261
D. 0.792

**Answer: D**

**Explanation:**
According to the question, you are required to calculate the cost performance index (CPI) of the project. Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. Now, putting the provided values in the formula: CPI = EV / AC = 325 / 410 = 0.792 As the

CPI 0.792 is lesser than 1, it shows that the schedule performance is below expectation. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. What is BCWS (or PV)? Budgeted Cost of Work Scheduled (BCWS) or Planned Value (PV) is the authorized budget assigned to the scheduled work to be accomplished for a schedule activity or Work Breakdown Structure (WBS) component. What is ACWP (or AC)? Actual cost of work performed (ACWP) or Actual Cost (AC) is the total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity. It is the cost of the work to date, including direct and indirect costs. AC is money that has actually been expended to date.

**QUESTION NO: 65**

Tom is the project manager of the HQQ Project. His project has a schedule variance of -$34,500 due to some errors early in the project. Management would like to know how Tom will respond to these variances. What action can help Tom to manage the errors in the project and to ensure that the errors would not occur again?

A. Lesson learned documentation
B. Risk analysis
C. Preventive action
D. Corrective action

**Answer: D**

**Explanation:**
A corrective action is a change implemented to address a weakness identified in a management system. Normally corrective actions are implemented in response to a customer complaint, abnormal levels of internal nonconformity, nonconformities identified during an internal audit or adverse or unstable trends in product and process monitoring such as would be identified by SP C. It is method of identifying and eliminating the causes of a problem, thus preventing their reappearance. Examples of a corrective action are : Improvements to maintenance schedules Improvements to material handling or storage
Answer option A is incorrect. Lessons learned is a documentation of the errors and how they were resolved, not a method to prevent the errors from occurring again.
Answer option C is incorrect. Preventive action addresses any action or act in which the project management team and the team leader provide documented direction to carry out an activity that is meant to decrease the possibility of negative consequences related to project risk.
Answer option B is incorrect. Risk analysis examines the risk events, its probability, and its impact on the project.

**QUESTION NO: 66**

You have been assigned to a project that centers on a discipline you are only topically aware of. While you do have years of experience as a project manager, but you have never worked with the technology, as is in this project. During the define activities process, you rely on your project team and two consultants to coach you and identify the type of activities the project will include. Which tool and technique are you using in the define activities process in this scenario?

A. Templates
B. Rolling wave planning
C. Decomposition
D. Expert judgment

**Answer: D**

**Explanation:**
When the project manager relies on consultants or the project team (or both), it is an example of expert judgment. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess. Expert judgment involves people most familiar with the work of creating estimates. Preferably, the project team member who will be doing the task should complete the estimates. Expert judgment is applied when performing administrative closure activities, and experts should ensure the project or phase closure is performed to the appropriate standards.
Answer option C is incorrect. This is not an example of decomposition.
Answer option B is incorrect. This is not an example of rolling wave planning.
Answer option A is incorrect. This is not an example of using a project template.



**QUESTION NO: 67**

You work as a project manager for BlueWell Inc. Your project requires the project team to paint 1,500 hotel rooms. Your project team reports that it will take them approximately 4 hours to paint each hotel room. You reason, then, that it will take 6,000 hours to paint all of the hotel rooms. What type of an estimate are you creating in this scenario?

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

**Answer: A**

**Explanation:**
This is an example of a parametric estimate. This estimate type uses a parameter, such as four hours of painting per hotel room, and multiplies this value across the total number of units, such as 1,500 rooms. A parametric estimate is an estimate that uses a parameter to predict the costs of the project, such as cost per network drop or cost per software license. Parametric estimating technique utilizes the statistical relationship that exists between a series of historical data and a particular delineated list of other variables.
Answer option C is incorrect. An analogous estimate type uses a similar project's duration as a basis for the current project's estimate duration.
Answer option B is incorrect. A definitive estimate type accounts for the duration or costs of each work package in the WBS.
Answer option D is incorrect. A bottom-up estimate, also known as a definitive estimate, accounts for the duration or costs of each work package in the WBS.

**QUESTION NO: 68**

Which organizational theory explains the factors that promote performance of people in any organization?

A. Herzberg's theory
B. Maslow's Hierarchy theory
C. McGregor's theory
D. Expectancy theory

**Answer: A**

**Explanation:**
Herzberg's Motivation-Hygiene Theory, also known as Two Factor Theory, was developed by Frederick Herzberg, a psychologist who found that job satisfaction and job dissatisfaction acted independently of each other. Two Factor Theory states that there are certain factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. Two Factor Theory distinguishes between the following: Motivators (e.g. challenging work, recognition, responsibility) which give positive satisfaction, arising from intrinsic conditions of the job itself, such as recognition, achievement, or personal growth. Hygiene factors (e.g. status, job security, salary and fringe benefits) which do not give positive satisfaction, although dissatisfaction results from their absence. These are extrinsic to the work itself, and include aspects, such as company policies, supervisory practices, or wages/salary. Essentially, hygiene factors are needed to ensure an employee is not dissatisfied. Motivation factors are needed in order to motivate an employee to higher performance, Herzberg also further classified our actions and how and why we do them, for example, if you perform a work-related action because you have to, then that is classed as movement, but if you perform a work-related action because you want to, then that is classed as motivation.

Answer option C is incorrect. McGregor's X and Y theory describes the team members and their behavior on the project and how management responds.
Answer option B is incorrect. It describes the five layer of needs we all have.
Answer option D is incorrect. It explains the processes that an individual undergoes to make choices.

**QUESTION NO: 69**

You are the project manager for your company. You are working with the management regarding the exact end date of your project. Management needs to know what day of the week your project will complete. Assuming that your project will not require any work to be completed over the upcoming weekends and that the remaining project work will commence on a Tuesday, what day of the week will the project end if there are 67 days of project work left to complete?

A. Wednesday
B. Thursday
C. Monday
D. Tuesday

**Answer: A**

**Explanation:**
The project will end on a Wednesday. If the project work commences on a Tuesday, there will be four days to complete in that week. That will bring the project work down to 63 days of remaining work. Each work week counts as five days of work. 63 divided by 5 is 12 work weeks with three days remaining. The 63rd remaining day will complete on a Wednesday.
Answer options C, D, and B are incorrect. These are not the valid answers.

**QUESTION NO: 70**

Harry works as the project manager for his organization. He is creating the activity list and would like to tag those activities that are comprised of apportioned effort. Which of the following is the best example of apportioned effort?

A. Adding features to the project's product that is not included in the project scope.
B. Managing the day-to-day events of a project.
C. Creating software as defined in the project scope.
D. Completing project activities as start-to-start events.

**Answer: B**

**Explanation:**

Apportioned effort is effort applied that you cannot subdivide into work packages, but it is related to, usually in a supportive role, to the completion of the project work packages. The project management overhead, such managing the project work, is an example of apportioned effort.
Apportioned effort (AE) is the effort that is applied to the project-related work that cannot be easily and readily divided into discrete efforts for those tasks, but which is associated in a direct proportion to the discrete work efforts that are capable of being measured. The presence of apportioned effort relies particularly on the performance of further efforts.
Answer option C is incorrect. This is an example of discrete effort.
Answer option A is incorrect. This is an example of a scope change that has not been approved.
Answer option D is incorrect. This is an example of a scheduling technique.

**QUESTION NO: 71**

You work as a project manager for BlueWell Inc. Some of the activities in your project are not being completed on time. You review these activities with your project team discovered that the time estimates for the project are much more aggressive than what they are actually experiencing in the completion of the activities. You decide on to create a new schedule for the project. What project management process are you working with when you create a new target schedule?

A. Estimate activity durations
B. Estimate activity resources
C. Control schedule
D. Develop schedule

**Answer: C**

**Explanation:**
In severe cases, new schedule duration estimates with new forecasted start and finish dates are needed. In these instances, it is an example of using the control schedule process. Control schedule process is a method of monitoring the status of the project to update project progress and deal with the changes to the schedule baseline. It is concerned with: Determining the current status of the project Influencing the factors that create schedule changes Determining that the project schedule has changed Managing the actual changes as they occur Control schedule is a component of the Perform Integration Change Control process.
Answer option B is incorrect. The activity resources would only address the addition or replacement of resources needed to complete the project work.
Answer option A is incorrect. This is a tempting choice, but according to the PMBOK, new schedules are part of the control schedule process.
Answer option D is incorrect. Develop schedule is not the best choice for this question. It is a process of analyzing activity sequences, durations, resource requirements, and schedule constraints to create the project schedule.

**QUESTION NO: 72**

You are the project manager of the OOI Project and you're forty percent complete with this project. The project has a BAC of $2,345,650 and you have spent $950,000 to date. Based on your aggressive scheduling you should at the 45 percent milestone today, but due to some early delays you're running late. What is the schedule variance of your project?

A. -$29,350
B. -$117,282
C. -$938,260
D. -$11,740

**Answer: B**

**Explanation:**
The schedule variance is the earned value minus the planned value. In this instance, it is $938,260-$1,055,543 = -$117,282. 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 = Earned Value (EV) - 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.
Answer option D is incorrect. This is the cost variance for the project.
Answer option A is incorrect. This is the variance at completion.
Answer option C is incorrect. This is the inverse of the earned value.

**QUESTION NO: 73**

Which of the following individuals performs various management roles within an administrative or functional area of the business, such as human resources, finance, accounting, or procurement?

A. Seller
B. Operations manager
C. Functional manager
D. Project manager

**Answer: C**

**Explanation:**
The role of a functional manager is to perform various management roles within an administrative or functional area of the business, such as human resources, finance, accounting, or procurement. He is assigned his own permanent staff to carry out the ongoing work. He should have a clear

directive to manage all tasks within his functional area of responsibility.
Answer option D is incorrect. A project manager is an expert in the field of project management. He is responsible for the entire project from inception to completion. The project manager leads the team and helps negotiate the multiple relationships within any project whether with clients, team members, firm principals or any variety of partners and functions as the hub of a project.
Answer option A is incorrect. Seller is also known as a vendor, supplier or contractor. They are external company's elements that enter into a contractual agreement to provide components or services necessary for the project.
Answer option B is incorrect. The role of operations manager is to perform various management roles in a core business area, such as research and development, design, manufacturing, provisioning, testing, or maintenance. The operations manager directly deals with constructing and maintaining the saleable products or services of the enterprise.

**QUESTION NO: 74 CORRECT TEXT**

Fill in the blank with the appropriate word. ____ management sets the boundaries for the project and is the foundation on which the other project elements are built.

Answer: Scope

**QUESTION NO: 75**

You are the project manager for your organization. You and the project team are developing the project schedule for your current project. In addition to the enterprise environment factors and the organizational process assets, you will need seven other inputs to this process. Which one of the following is NOT an input to the Develop Schedule process?

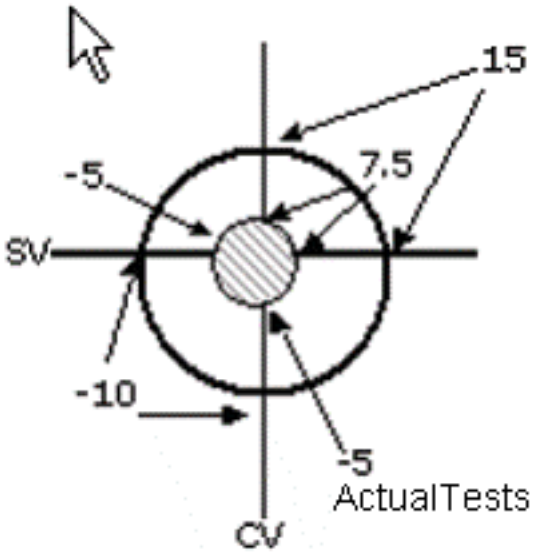
A. Resource calendars
B. Schedule data
C. Activity list
D. Project scope statement

**Answer: B**

**Explanation:**
Schedule data is an output of the Develop Schedule process. The nine inputs to the Develop Schedule process are: activity list, activity attributes, project schedule network diagrams, activity resource requirements, resource calendars, activity duration estimates, project scope statement, enterprise environmental factors, and organizational process assets.
Answer options C, A, and D are incorrect. These are the inputs to the Develop Schedule process.

**QUESTION NO: 76**

What is the term assigned to graphic in the figure given below?




A. Communications bull's eye
B. Performance goals
C. Earned value management goals
D. Project exception report

**Answer: A**

**Explanation:**
The graphic shown in the figure is a communications bull's eye. The project manager must keep the project within the boundaries defined by the bull's eye or he will need to generate a performance report. This is an example of management by exception because the project manager only communicates with management when there is an exception, or variance, within the project.
Answer options C, B, and D are incorrect. These are not valid terms for the communications bull's eye.

**QUESTION NO: 77**

Samuel works as a project manager in Bluewell Inc. He is performing constructability analysis in one of the initial planning phases. Which of these does constructability take into account during analysis? Each correct answer represents a complete solution. Choose three.

A. Quality inspections and compliance
B. Location, logistics, and resource availability analysis
C. Labor productivity studies from previous similar projects in the area
D. The average price of general labor in the area

**Answer: B,C,D**

**Explanation:**
Constructability analysis takes into account the location, logistics, resource availability analysis, the average price of general labor in the area, and labor productivity studies from previous similar projects in the area. Constructability analysis is a process that starts in the initial planning phases and persists all over the entire planning cycle and into the implementation phase of the project. Constructability analysis during the planning process examines the methods and cost of installed equipment and materials, technology, site conditions, resources, and related infrastructure. The benefit of constructability analysis is to reduce both the time and cost of a project. Constructability analysis is repeatedly performed throughout the life-cycle of a project in order to optimize cost, plan, and schedule while mitigating risk. It is a very important process that needs to be performed early in planning to allow alternatives to be considered and integrated into the design.
Answer option A is incorrect. This comes under the quality assurance phase.

**QUESTION NO: 78**

You are the project manager of the NHQ project. This project deals with a new technology that your company has never used before. You have petitioned the management to hire a consultant to help you and the project team to create the WBS, the activity list, and complete the duration estimates. The management is concerned about the costs of the consultant, but agrees to your request because of the nature of this new work. The consultant can best be described as what type of resource for this project?

A. Direct expense
B. External requirement
C. Temporary resource
D. Expert judgment

**Answer: D**

**Explanation:**
The consultant is an example of expert judgment, as he is helping you and the project team to create the project elements. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess. Expert judgment involves people most familiar with the work of creating estimates. Preferably, the project team member who will be doing the task should complete the estimates. Expert judgment is applied when performing administrative closure activities, and experts should ensure the project or phase closure is performed to the appropriate standards.
Answer option A is incorrect. The consultant may be considered a direct expense because the fees can only be assigned to your project work, but this is not the best choice for the question.
Answer option B is incorrect. An external requirement is not a valid choice for this question.

Answer option C is incorrect. A temporary resource is not a valid project management term.

**QUESTION NO: 79**

Holly is the project manager for her organization. In her project, she has worked with the project team to define when the project team will be utilized in the project, the duration of the project activities, and the sequence in which the project work must be completed. During several phases of her project, the project team will need to work more than fifty hours per week. The project team members have agreed this is necessary and they're willing to do the work to complete the project. Management, however, has not approved Holly's schedule based on the overtime the scheduling will require. They have set a limit on the project schedule of 45 hours per week. What is this limit technically called? Each correct answer represents a complete solution. Choose all that apply.

A. Constraint
B. Assumption
C. Execution variance analysis
D. Resource leveling heuristic

**Answer: A,D**

**Explanation:**
Resource leveling is a rule of limiting the total number of hours a project team may work during a given time period in the project. If management restricts the project work to 45 per week, as in this example, Holly's schedule will likely increase because the project team can't complete as much work in one given time period.While this may be seen as a constraint, because it limits Holly's options, it's technically called a resource leveling heuristic.
Answer option B is incorrect. It is an assumption that's believed to be true, but it hasn't been proven to be true.
Answer option C is incorrect. Execution variance analysis describes the difference between what was planned and what was executed. A better term for this experience would simply be a scope variance, scope change, or defect.

**QUESTION NO: 80**

You are the project manager of a project that has a budget of $675,000 and you have completed 40 percent of the project work. Your project is supposed to be 60 percent complete but you are actually only 40 percent complete. Due to some errors, however, you have actually spent $335,000 of the budget. Management wants to know what the project's cost performance index (CPI) is. What value do you report?

A. -$135,000

B. .67
C. .81
D. -$65,000

**Answer: C**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instances it is $270,000 divided by $335,000 for a CPI of .81.
Answer option B is incorrect. .67 is actually the schedule performance index.
Answer option D is incorrect. -$65,000 is the cost variance for the project.
Answer option A is incorrect. -$135,000 is the schedule variance of the project.

**QUESTION NO: 81**

Amy is working on a project which is forty percent complete though it was scheduled to be fifty percent complete as of today. Management has asked Amy to report on the schedule variance for her project. If Amy's project has a BAC of $750,000 and she has spent $485,000 to date, what is the schedule variance value?

A. -$75,000
B. -$42,000
C. -$45,000
D. -$65,000

**Answer: A**

**Explanation:**
The schedule variance is found by subtracting the planned value from the earned value. The earned value is the percentage of the project completeness multiplied by the BA
C. Planned value is the percentage of where the project should be at this time multiplied by the BA

C. 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 = Earned Value (EV) - 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. In this example, EV = 40% of BAC = 300,000, and PV = 50% of BAC = 375,000 SV = 300,000 - 375,000 = -75,000

Answer options C, B, and D are incorrect. These are not the correct values for the schedule variance.

**QUESTION NO: 82**

You are the project manager of the GHE Project. You have identified the following risks with the characteristics as shown in the following figure:

| Risk | Probability | Impact |
|---|---|---|
| A | .60 | -10,000 |
| B | .10 | -85,000 |
| C | .25 | -75,000 |
| D | .40 | 45,000 |
| E | .50 | -17,000 |



A. Communications bull's eye
B. Performance goals
C. Earned value management goals
D. Project exception report

**Answer: A**

**Explanation:**
The graphic shown in the figure is a communications bull's eye. The project manager must keep the project within the boundaries defined by the bull's eye or he will need to generate a performance report. This is an example of management by exception because the project manager only communicates with management when there is an exception, or variance, within the project.
Answer options C, B, and D are incorrect. These are not valid terms for the communications bull's eye.

**QUESTION NO: 83**

Samuel works as a project manager in Bluewell Inc. He is performing constructability analysis in one of the initial planning phases. Which of these does constructability take into account during analysis? Each correct answer represents a complete solution. Choose three.

A. Quality inspections and compliance
B. Location, logistics, and resource availability analysis
C. Labor productivity studies from previous similar projects in the area
D. The average price of general labor in the area

**Answer: B,C,D**

**Explanation:**
Constructability analysis takes into account the location, logistics, resource availability analysis, the average price of general labor in the area, and labor productivity studies from previous similar projects in the area. Constructability analysis is a process that starts in the initial planning phases and persists all over the entire planning cycle and into the implementation phase of the project. Constructability analysis during the planning process examines the methods and cost of installed equipment and materials, technology, site conditions, resources, and related infrastructure. The benefit of constructability analysis is to reduce both the time and cost of a project. Constructability analysis is repeatedly performed throughout the life-cycle of a project in order to optimize cost, plan, and schedule while mitigating risk. It is a very important process that needs to be performed early in planning to allow alternatives to be considered and integrated into the design.
Answer option A is incorrect. This comes under the quality assurance phase.

**QUESTION NO: 84**

You are the project manager of the NHQ project. This project deals with a new technology that your company has never used before. You have petitioned the management to hire a consultant to help you and the project team to create the WBS, the activity list, and complete the duration estimates. The management is concerned about the costs of the consultant, but agrees to your request because of the nature of this new work. The consultant can best be described as what type of resource for this project?

A. Direct expense
B. External requirement
C. Temporary resource
D. Expert judgment

**Answer: D**

**Explanation:**
The consultant is an example of expert judgment, as he is helping you and the project team to create the project elements. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess. Expert judgment involves people most familiar with the work of creating estimates. Preferably, the project team member who will be doing the task should complete the estimates. Expert judgment is

applied when performing administrative closure activities, and experts should ensure the project or phase closure is performed to the appropriate standards.
Answer option A is incorrect. The consultant may be considered a direct expense because the fees can only be assigned to your project work, but this is not the best choice for the question.
Answer option B is incorrect. An external requirement is not a valid choice for this question.
Answer option C is incorrect. A temporary resource is not a valid project management term.

**QUESTION NO: 85**

Holly is the project manager for her organization. In her project, she has worked with the project team to define when the project team will be utilized in the project, the duration of the project activities, and the sequence in which the project work must be completed. During several phases of her project, the project team will need to work more than fifty hours per week. The project team members have agreed this is necessary and they're willing to do the work to complete the project. Management, however, has not approved Holly's schedule based on the overtime the scheduling will require. They have set a limit on the project schedule of 45 hours per week. What is this limit technically called? Each correct answer represents a complete solution. Choose all that apply.

A. Constraint
B. Assumption
C. Execution variance analysis
D. Resource leveling heuristic

**Answer: A,D**

**Explanation:**
Resource leveling is a rule of limiting the total number of hours a project team may work during a given time period in the project. If management restricts the project work to 45 per week, as in this example, Holly's schedule will likely increase because the project team can't complete as much work in one given time period. While this may be seen as a constraint, because it limits Holly's options, it's technically called a resource leveling heuristic.
Answer option B is incorrect. It is an assumption that's believed to be true, but it hasn't been proven to be true.
Answer option C is incorrect. Execution variance analysis describes the difference between what was planned and what was executed. A better term for this experience would simply be a scope variance, scope change, or defect.

**QUESTION NO: 86**

You are the project manager of a project that has a budget of $675,000 and you have completed 40 percent of the project work. Your project is supposed to be 60 percent complete but you are actually only 40 percent complete. Due to some errors, however, you have actually spent

$335,000 of the budget. Management wants to know what the project's cost performance index (CPI) is. What value do you report?

A. -$135,000
B. .67
C. .81
D. -$65,000

**Answer: C**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instances it is $270,000 divided by $335,000 for a CPI of .81.
Answer option B is incorrect. .67 is actually the schedule performance index.
Answer option D is incorrect. -$65,000 is the cost variance for the project.
Answer option A is incorrect. -$135,000 is the schedule variance of the project.

**QUESTION NO: 87**

Amy is working on a project which is forty percent complete though it was scheduled to be fifty percent complete as of today. Management has asked Amy to report on the schedule variance for her project. If Amy's project has a BAC of $750,000 and she has spent $485,000 to date, what is the schedule variance value?

A. -$75,000
B. -$42,000
C. -$45,000
D. -$65,000

**Answer: A**

**Explanation:**
The schedule variance is found by subtracting the planned value from the earned value. The earned value is the percentage of the project completeness multiplied by the BAC. Planned value is the percetage of where the project should be at this time multiplied by the BAC. 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 = Earned Value (EV) - 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. In this example,
EV = 40% of BAC
= 300,000, and
PV = 50% of BAC
= 375,000
SV = 300,000 - 375,000
= -75,000
Answer options C, B, and D are incorrect. These are not the correct values for the schedule variance.

**QUESTION NO: 88**

You are the project manager of the GHE Project. You have identified the following risks with the characteristics as shown in the following figure: How much capital should the project set aside for the risk contingency reserve?

A. $142,000
B. $232,000
C. $41,750
D. $23,750

**Answer: D**

**Explanation:**
Contingency reserves are estimated costs to be used at the discretion of the project manager to deal with anticipated, but not certain, events. These events are "known unknowns" and are part of the project scope and cost baselines. The contingency reserve is calculated by multiplying the probability and the impact for the risk event value for each risk event. The sum of the risk events equals the contingency reserve for the project. Note that Risk D is a positive risk amount.
Answer option C is incorrect. This value is the sum of the risk events if you did not include Risk D as a positive risk value.
Answer option A is incorrect. This is a sum of the risk event.
Answer option B is incorrect. This is a sum of the risk events without including Risk D as a positive risk event.

**QUESTION NO: 89**

Mary is the project manager for her company. She's working with the project team to compress the project schedule as the project must be completed by December 30. For some of the project activities, she and the project team have agreed to crash the project work. What must be true of

these project activities for crashing to be acceptable?

A. The activities must be of fixed duration.
B. The activities must be effort-drive.
C. The activities must not be susceptible to the Law of Diminishing Returns.
D. The activities must be risk-free.

**Answer: B**

**Explanation:**
Crashing is the addition of project resources to complete effort-driven activities in faster time. By adding more labor the activity can be completed faster. Crashing is a schedule compression technique to obtain the greatest amount of compression for the least incremental cost. Crashing works for activities where additional resources will shorten the duration. Approving overtime, bringing in additional resources, paying to expedite delivery to activities on the critical path are examples of crashing.
Answer option A is incorrect. An activity of fixed duration, such as printing 100,000 brochures in a printing press, won't be completed faster by adding more effort.
Answer option D is incorrect. Activities need not be risk-free to use project crashing.
Answer option C is incorrect. All effort-driven activities are susceptible to the Law of Diminishing Returns. By adding more labor the value of the yield of the work decreases because of the cost of the labor added to the project work.

**QUESTION NO: 90**

Gary is the project manager for his organization. At each weekly status meeting with his project team, Gary collects information on the work that has been completed and reviews the work that is remaining in the project. Alice, one of Gary's project team members, consistently reports that she's late on her project work. After the meeting, Gary and Alice discuss why the work is late as it is causing other delays in the project. What is the review of the late work commonly called?

A. Variance analysis
B. Leadership
C. Quality control
D. Discipline

**Answer: A**

**Explanation:**
Variance analysis is the study to determine why a variance in the project exists. Alice 's late work may be for a number of reasons so Gary needs to determine why in order to address the problem. Variance analysis is a process that examines the dissimilarities between the planned and the actual budget or schedule in order to discover unacceptable risks to the budget, schedule, quality,

or scope of the project. It is a method for resolving the total variance in the set of scope, schedule, and cost variables into particular component variances that are associated with defined factors affecting the cost, scope and schedule variables.
Answer option D is incorrect. Discipline is not the best answer as Gary , at this point, is simply reviewing the situation to determine why the variance exists.
Answer option C is incorrect. Quality control is the inspection of the work results to prove the existence of quality and to prevent mistakes from reaching the customer.
Answer option B is incorrect. This may be a type of leadership, but it is not the best answer for the question.

**QUESTION NO: 91**

You have a project to install 45,900 emergency exit signs throughout a university campus. You have a crew of 45 project team members to install the signs and they are making good progress on the installation but it looks like they'll miss the promised end date. Your project requires all of the signs to be installed one week before classes are scheduled to begin. You elect to crash the project in an effort to shorten the installation duration activity. What does it mean to crash the project?

A. Increase the working hours.
B. Level the project schedule.
C. Add more workers.
D. Reduce the project scope.

**Answer: C**

**Explanation:**
Crashing adds more workers to the project team. Crashing allows the project to complete faster because there are more people helping with the project work.
Answer option D is incorrect. Reducing the project scope is called descoping or project scope changes.
Answer option A is incorrect. Crashing does not consider the working hours.
Answer option B is incorrect. Resource leveling actually increases the project duration.

**QUESTION NO: 92**

Fred is the project manager of the NHA project. This project has a BAC of $2,456,900 and is sixty percent complete. Fred has crashed the project, which has driven the project costs to date to $1,525,140, but his project is five percent more complete than what was planned. What is the schedule variance for this project that Fred needs to report to the management?

A. $176,675
B. $122,845
C. -$85,000
D. -$51,000

**Answer: B**

**Explanation:**
There is positive variance of $122,845 on Fred's project. Variances can be either positive or negative. 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 = Earned Value (EV) - 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.
Answer option C is incorrect. This is the project's variance at completion.
Answer option D is incorrect. This is the cost variance for the project.
Answer option A is incorrect. This is not a valid answer for the project.

**QUESTION NO: 93**

Tom works as the project manager for BlueWell Inc. He is working with his project to ensure timely and appropriate generation, retrieval, distribution, collection, storage, and ultimate disposition of project information. What is the process in which Tom is working?

A. Work performance measurement
B. Stakeholder expectation management
C. Project communication management
D. Stakeholder analysis

**Answer: C**

**Explanation:**
Tom is working with the project communication management process, as it is required to ensure the timely disposition of project information. Project Communications Management is one of the nine Knowledge Areas. It employs the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. The following processes are part of Project Communications Management:
Identify Stakeholders
Plan Communications
Distribute information
Manage Stakeholder Expectations
Report Performance

The Project Communications Management processes provide the critical links among people and information that are necessary for successful communications. These processes interact with each other and with the processes in the other Knowledge Areas as well.
Answer option B is incorrect. Managing stakeholder expectation is the process of working and communicating with the stakeholders to meet their requirements.
Answer option A is incorrect. Work performance measurement uses the information to create project activity metrics to evaluate actual progress compared to planned progress.
Answer option D is incorrect. Stakeholder analysis is the process of gathering and analyzing quantitative and qualitative information to determine the interest of the stakeholders. You are the project manager for your organization. Management has asked you to document the holidays, weekends, and other corporate working hours, which will supersede the project timings for your schedule. Which calendar will communicate to the project stakeholders, when the project work will take place within the organization?

**QUESTION NO: 94**

You are the project manager for your organization. Management has asked you to document the holidays, weekends, and other corporate working hours, which will supersede the project timings for your schedule. Which calendar will communicate to the project stakeholders, when the project work will take place within the organization?

A. Project calendar
B. Resource calendar
C. Organizational calendar
D. Company calendar

**Answer: A**

**Explanation:**
The project calendar defines the working hours for the project, including any days that project work will not happen due to the organizational calendar.
Answer option D is incorrect. The company calendar is not the correct choice for this question.
Answer option C is incorrect. The organizational calendar is not the correct choice for this question.
Answer option B is incorrect. The resource calendar defines whether resources the project needs will be available. The resources include people, facilities, equipment, and other things that project needs to be completed.

**QUESTION NO: 95**

Management is concerned about your project. They want to know how the project is performing specifically the schedule performance index. What formula do you use to find the schedule

performance index?

A. PV/EV
B. EV-AC
C. EV-PV
D. EV/PV

**Answer: D**

**Explanation:**
The schedule performance index is earned value divided by planned value. The close the result is to 1, the better the project is performing.
Answer option B is incorrect. This is the cost variance formula.
Answer option C is incorrect. This is the formula to find schedule variance.
Answer option A is incorrect. This is not a valid formula.

**QUESTION NO: 96**

You work as a project manager for BlueWell Inc. You want to increase the overall duration of the project. If the management elects to use resource leveling, then what will happen to the project duration?

A. The duration will increase, but the labor will stay the same.
B. The duration will decrease as new team members are brought onto the project.
C. Nothing, new resources will be incorporated into the project team.
D. The duration will increase, but the labor will decrease.

**Answer: A**

**Explanation:**
Resource leveling usually increases the overall duration of the project because management restricts the amount of labor which can be utilized in a given time period. Resource leveling heuristics is a prioritization method that allocates inadequate resources to critical path activities first. It is a schedule network analysis technique useful to a schedule that has already been analyzed by the critical path method. It is used when shared or critical essential resources are only available at certain times, in limited quantities, or to keep resource usage at a constant level. It is a technique that resolves resource conflicts by delaying tasks within their slack allowances.
Resource leveling is the process in which project teams come across problems when developing their project schedules. If a company has multiple projects running simultaneously that require the same resources, then problems can arise. It can often cause the critical path method to change.
Answer option C is incorrect. New resources are not added as part of resource leveling.
Answer option D is incorrect. Labor remains the same in resource leveling, but their availability decreases.

Answer option B is incorrect. New resources are not added as part of resource leveling.

**QUESTION NO: 97**

You work as a project manager for BlueWell Inc. Your project is falling behind though the project team reports that the actual durations of their work is what they estimated. You investigate the cause and determine that the project team is not starting their assignments early enough to finish their work on time. While the duration of the assignments may be in synchronization with the duration estimates, the completion time is causing the project schedule to slip from the baseline. What can you do to rectify this problem?

A. Increase the duration estimates for each activity.
B. Discipline the project team.
C. Add management reserve.
D. Corrective actions.

**Answer: D**

**Explanation:**
Corrective actions should be taken to move the results of the project work back into alignment with the project scope. The project team must start their activities on time and finish on time. A corrective action is a change implemented to address a weakness identified in a management system. Normally corrective actions are implemented in response to a customer complaint, abnormal levels of internal nonconformity, nonconformities identified during an internal audit or adverse or unstable trends in product and process monitoring such as would be identified by SP C. It is method of identifying and eliminating the causes of a problem, thus preventing their reappearance. Examples of a corrective action are :Improvements to maintenance schedulesImprovements to material handling or storage
Answer option C is incorrect. Management reserve is time and funds allotted for unforeseen issues and risks within the project.
Answer option A is incorrect. Padding each estimate may cause the project to succumb to Parkinson's Law: work expands to fill the amount of time allotted to it. In addition, the project team may still delay the start time of their project assignments.
Answer option B is incorrect. Disciplining the project team may be a good option if the problem continues. The best option is to first apply corrective actions.

**QUESTION NO: 98**

Tom is the project manager of the GHQ Project for his organization. He is working on recovering the project schedule. As Tom examines his schedule he is especially aware of project activities with soft logic. What is soft logic?

A. Soft logic describes activities that do not have particular resources assigned to them.
B. Soft logic describes activities that can be completed in any order.
C. Soft logic describes activities that can have lead time added to them.
D. Soft logic describes activities that can be crashed because they are effort-driven.

**Answer: B**

**Explanation:**
Soft logic can be completed in any order without affecting the outcome of the deliverables. Soft logic is also known as preferential logic, preferred logic, and discretionary dependency. It is defined on the basis of knowledge of best practices and standard procedures for the particular application area. Soft logic is defined by the project management team based on well- known practices in a specific desired sequence.
Answer options A, D, and C are incorrect. These are not valid definitions of soft logic.

**QUESTION NO: 99**

Which of the following components of the change control system includes the documentation, tracking systems, and defined approval levels necessary for authorizing and controlling changes?

A. Scope Verification
B. Configuration Management System
C. Project Management Information System
D. Integrated Change Control

**Answer: B**

**Explanation:**
The change management system comprises several components that guide the change request through the process. When a change request is made, it will affect the project scope. The Configuration Management System evaluates the change request, and documents the features and functions of the change on the project scope. What is Configuration Management System? Configuration Management System is a subsystem of the overall project management system. It is a collection of formal documented procedures used to identify and document the functional and physical characteristics of a product, result, service, or component of the project. It also controls any changes to such characteristics, and records and reports each change and its implementation status. It includes the documentation, tracking systems, and defined approval levels necessary for authorizing and controlling changes. Audits are performed as part of configuration management to determine if the requirements have been met.
Answer option D is incorrect. Integrated Change Control, part of the change control system, does not document changes to the features and functions of the project scope. It evaluates the change's impact on eight knowledge areas: scope, time, cost, quality, human resources, communication, risk, and procurement. What is Perform Integrated Change Control? Perform

Integrated Change Control is the process of reviewing all change requests, approving changes, and controlling changes to the deliverables and organizational process assets in a project. Perform Integrated Change Control has to do with influencing the things that cause change, determining that the change is required or has happened, and managing the change.
Answer option A is incorrect. Verify scope is a process of formalizing acceptance of the completed project deliverables. It is an inspection- driven process the stakeholders will complete to inspect the project scope deliverables. It is typically performed at the end of the phase and at the end of the project.
Answer option C is incorrect. The Project Management Information System (PMIS) is an information system consisting of the tools and techniques used to gather, integrate, and disseminate the outputs of project management processes. It is used to support all aspects of the project from initiating through closing, and can include both manual and automated systems. It is the parent of the change control process. It is a system that includes all of the change control processes for scope, time, cost, and procurement. Configuration management is part of the PMIS.

**QUESTION NO: 100**

You are the project manager for your organization. You are meeting with your customers to discuss the project performance. In this meeting, you will have eight project customers, the project sponsor, and ten members of your project team. What type of communication method are you using in this instance?

A. Interactive communication
B. Active communication
C. Pull technique
D. Push technique

**Answer: A**

**Explanation:**
Any meetings, phone calls with multiple participants, or conferences are examples of the interactive communications.
Answer option B is incorrect. Active communication is not a PMBOK term for project management.

Answer option D is incorrect. A push technique describes a distribution from the project manager out to the message recipients, such as email.
Answer option C is incorrect. A pull technique describes a distribution method where the recipients of the message pull the message from a source, such as a Web server.

**QUESTION NO: 101**

Holly is the project manager of the NDS project and she is 85 percent complete with her project though she should be 95 percent complete. Her project has a BAC of $9,850,400 and she has spent $8,011,221 to date. What is Holly's schedule performance index for this project?

A. 1.07
B. 0.98
C. 0.89
D. Ten percent

**Answer: C**

**Explanation:**
The schedule performance index is found by dividing the earned value by the planned value. For Holly's project, it would be as follows:
SPI = EV/PV
= (0.85*9,850,400)/(0.95*9,850,400)
=8,372,840/9,357,880
=0.89
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 D is incorrect. Ten percent is not a valid calculation for this question.
Answer option B is incorrect. 0.98 is the cost performance index.
Answer option A is incorrect. 1.07 is the to-complete performance index based on the BAC.



**QUESTION NO: 102**

You are the project manager of the JKM Project for your organization. Your project is supposed to be 60 percent complete but you are only 45 percent complete. The project has an assigned budget of $765,000 but you have already spent $365,000 to reach this point in the project due to some errors and rework. Management is pressing you on when you'll complete the project and how much the project will likely cost based on the current performance. You need to tell management what the project's current cost performance index (CPI) is. What value should you report to management based on your project's performance?

A. $306,000
B. .94
C. $344,250

D. .75

**Answer: B**

**Explanation:**
Management wants to know the cost performance index (CPI). You can find the CPI by first finding the earned value (EV) and then dividing it by the actual costs (AC) spent to date on the project. You find EV by multiplying percent complete by the project's budget; in this instance that's $344,250. The actual costs are reported as $365,000. The formula for the CPI on this project is $344,250 / $365,000 for a value of .94. What is CPI? Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. Answer options C, A, and D are incorrect. These do not reflect an accurate value for the project's cost performance index. The project is performing moderately well on cost as the closer the CPI is to 1 the better the project's performance.

**QUESTION NO: 103**

You are the project manager for the NHQ Project. Management has asked you to create a time estimate for this project although you have only just received the project charter. They would like some idea of how long the project will take based on the information in the project charter. While you are uncomfortable giving any type of estimate at this point, you work with your assigned project to create a quick time estimate. What type of estimate have you created for management?

A. Analogous estimate
B. Broad estimate
C. Rough order of magnitude
D. Expert judgment

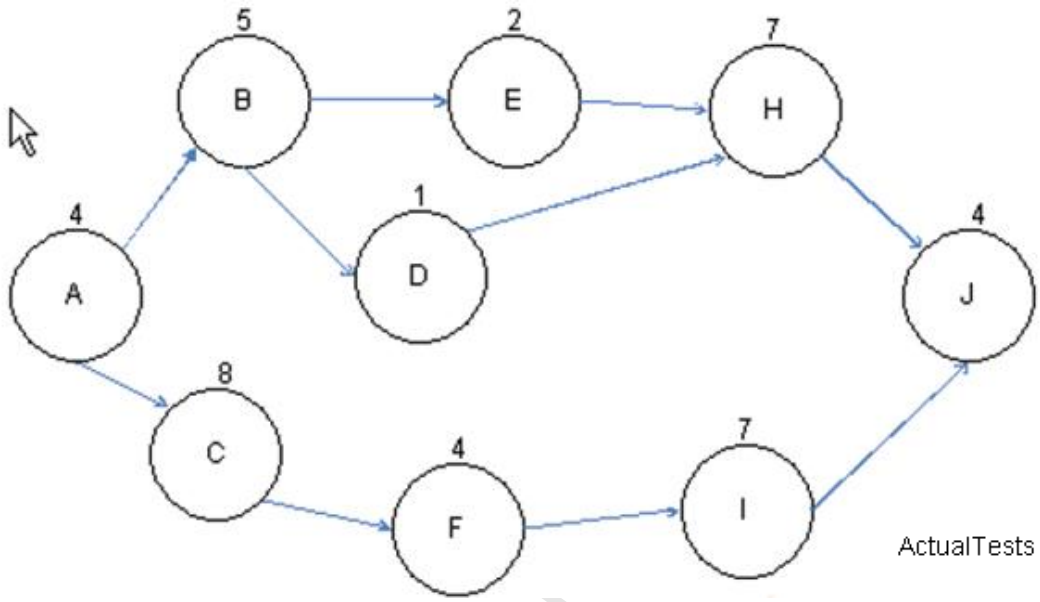
**Answer: C**

**Explanation:**
The rough order of magnitude (ROM) estimate is used early in the project when there is not much information available to create a time estimate. Rough order of magnitude estimates can have a range of variance as large as -25% to +75 percent. While ROM is mostly used with cost estimates, it can be used with time estimates too. Rough order of magnitude (ROM), also known as ball park estimate, is a rough approximation, made with a degree of knowledge and confidence that the estimated figure falls within a reasonable range of values. ROM range can vary from half to twice

(-50 to +100) the actual cost.
Answer option B is incorrect. Broad estimate is not a valid time estimating type.
Answer option D is incorrect. Expert judgment is what the project manager used in this scenario to create the time estimate, but it is not a time estimating type.
Answer option A is incorrect. An analogous estimate is based on historical information from a similar project. For example, Project A took 8 months to complete and Project B, while similar but larger, will take 10 months to complete.

**QUESTION NO: 104**

You are the project manager of the NHQ Project. You have 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 D is delayed by two days?

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

**Answer: D**

**Explanation:**
The path of ABDHJ will take 21 days to complete and cannot exceed 27 days or else the project will be late. If Activity B takes four additional days and Activity D takes two additional days, this adds (4+2= 6) six days to the path, bringing the path's duration to exactly (21+6 = 27) twenty seven days. There is no available float left for Activity E 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 A, C, and B are incorrect. There is no float available because the path's duration has increased to 27 days.

**QUESTION NO: 105**

You are the project manager for your organization. You are working with your project team to create activity duration estimates using the PERT method. What is the formula for PERT?

A. (O+ML+P)
B. (O+(6M)+P)6
C. (O+ML+P)/3
D. (O+(4M)+P)/6

**Answer: D**

**Explanation:**
PERT, which means the Program Evaluation and Review Technique, is a duration estimating technique that uses the formula (O+(4M)+P)/6 for the optimistic, most likely, and pessimistic values for each work package. A PERT chart is a project management tool used to schedule, organize, and coordinate tasks within a project. PERT stands for Program Evaluation Review Technique, a methodology developed by the U.S. Navy in the 1950s to manage the Polaris submarine missile program. A PERT chart presents a graphic illustration of a project as a network diagram consisting of numbered nodes (either circles or rectangles) representing events, or milestones in the project linked by labeled vectors (directional lines) representing tasks in the project. The direction of the arrows on the lines indicates the sequence of tasks.
Answer option C is incorrect. This is the formula for the three-point estimate.
Answer options A and B are incorrect. These are not the valid formulas.

**QUESTION NO: 106**

Gary is the project manager of the NHF project, which is a part of a program in his organization. According to the PMBOK, how will Gary provide feedback to programs and portfolios?

A. Status meetings
B. Push communications
C. Regular communications
D. Status reports and change requests

**Answer: D**

**Explanation:**
According to the PMBOK, the project manager provides the feedback to programs and portfolios by means of status reports and change requests that may impact other projects, programs, or portfolios. The needs of the projects, including the resource needs, are rolled up and communicated back to the portfolio level, which in turn sets the direction for organizational planning. What is a status report? A status report is a narrative description about a subject that is relevant to an organization. Typically, a user submits a status report that was created for him by a manager. He can also create and submit his own unrequested status report at any time. It is a collaborative feature specific to PW

A. Status report in PWA is a convenient way to exchange textual information with the team members about the status of a project or items in addition to task progress, which a user updates on the Tasks page. What are change requests? Change requests are requests to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets or revise schedules. These requests for a change can be direct or indirect, externally or internally initiated, and legally or contractually imposed or optional. A Project Manager needs to ensure that only formally documented requested changes are processed and only approved change requests are implemented.
Answer option C is incorrect. While regular communication is needed, this is not the best answer for the question.
Answer option A is incorrect. Status meetings are a part of project communications, but do not answer the question as completely as status reports and change requests.
Answer option B is incorrect. Push communications is one type of communicating mode where the project manager pushes the information to recipients. This is not the best choice for the question because there are other modes communicating as well.

**QUESTION NO: 107**

You are a project manager in a matrix environment and management is concerned about the utilization of the resources on your project team and when you'll release them. What project management plan will guide how and when project resources will be released from the project team?

A. Project Human Resources Management Plan
B. Project Staffing Management Plan
C. Project Communications Management Plan
D. Project Schedule Management Plan

**Answer: B**

**Explanation:**

The Project Staffing Management Plan will define how resources are brought onto the project team, how they are managed while on the project team, and how they may be released from the project team. The staffing management plan is part of human resources plan. It is a subsidiary plan of the overall project management plan and defines when project team members will be brought onto and released from the project. It describes when and how human resource requirements will be met. Depending upon the needs of the project, it can be formal or informal, highly detailed or broadly framed. The staffing management plan may include the following items: Staff acquisition, resource calendars, staff release plan, training needs, recognition and rewards, compliance, and safety.
Answer option C is incorrect. The communications management plan defines project communication requirements and expectations.
Answer option A is incorrect. This is not a valid project management plan.
Answer option D is incorrect. The project schedule management will define when resources are needed and scheduled, but not how resources are allowed to be released from the project.

**QUESTION NO: 108**

You are working as a project manager for BlueWell Inc. Which of the following tools and techniques of the Define Activity process will help you in identifying the typical schedule milestones?

A. Expert Judgment
B. Decomposition
C. Rolling Wave Planning
D. Templates

**Answer: D**

**Explanation:**
Templates are used to identify the typical schedule milestones in the Define Activity process. The tools and techniques used in defining the activity process are as follows: Decomposition: It is used to further divide the project work package into a more smaller and convenient form called activities. Rolling Wave Planning: It is a form of progressive elaboration planning where the work to be accomplished in the near term is planned in detail and future work is planned at a higher level of WBS. Templates: It is an activity list or a part of the activity list taken from the previous project and used in a new project. Expert Judgement: The skilled members in a project team or other experts who develop project scope statements can help provide knowledge in defining activities.

**QUESTION NO: 109**

Which of the following statements best describes an activity in a project?

A. It is a defined set of functions a resource must complete for the project scope to be considered complete.
B. It is the effort needed to complete a work package.
C. It is the unit of resource utilization needed to complete a project deliverable.
D. It is a listing of all project work that must be accomplished for the project scope to be considered complete.

**Answer: B**

**Explanation:**
An activity is the effort needed to complete a work package. The activities are linked to the work packages in the WBS. An activity is the element of work performed throughout the various stages of a project. It is a group of people, communications, processes, and work items that correspond to a joint effort to achieve a goal. An activity is a way to manage the work collectively with others in any organization. The create WBS process identifies the deliverables at the lowest level in the WBS, called the work package. Project work packages are divided into smaller elements known as activities, which correspond to the work required to complete the work package.
Answer option D is incorrect. This is a definition of all the work that the project team and manager must complete in order to complete the total activity list.
Answer options A and C are incorrect. These are not valid definitions of an activity.

**QUESTION NO: 110**

Fredrick works as a Project Manager for BlueWell Inc. A number of projects are running under his guidance. You, a team leader of a project, inform Fredrick about the performance indexes of your project. The schedule performance index (SPI) of your project is 1.325. What does this figure indicate?

A. The schedule performance is better than expected.
B. The schedule performance is right on target.
C. The cost performance is better than expected.
D. The schedule performance is below expectation.

**Answer: A**

**Explanation:**
According to the question, the SPI of your project is 1.325. This figure is greater than 1. Hence, it shows that the schedule performance is better than expected. What is SPI? 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 C is incorrect. SPI has nothing to do with cost performance.
Answer options B and D are incorrect. An SPI value less than 1 or 0 indicates that the schedule performance is either below expectation or is right on target.

**QUESTION NO: 111**

Which of the group creativity techniques enhances brainstorming with a voting process used to rank the most useful ideas for further brainstorming or prioritization?

A. Idea/mind mapping
B. Delphi technique
C. Nominal group technique
D. Affinity diagram

**Answer: C**

**Explanation:**
The various group creativity techniques are as follows: Brainstorming: It is a technique used to generate and collect multiple ideas related to the project and product requirements. Nominal group technique: It is a technique used to enhance brainstorming with a voting process used to rank the most useful ideas for further brainstorming or prioritization. Delphi technique: It is a techniques used to identify potential risk. In this technique, the responses are gathered via a questionnaire from different experts and their inputs are organized according to their contents. Idea/mind mapping: It is a technique used to map the ideas generated by brainstorming to reflect the commonality and differences in understanding and generating new ideas. Affinity diagram: It is a technique used to allow a large number of ideas to be sorted into groups for review and analysis.



**QUESTION NO: 112**

Jack works as a project manager for the NHQ project. His project has a budget of $2,208,456 and is scheduled to last for three years. His project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, he has spent $725,000. Management needs a performance report regarding the NHQ project. Management is concerned that this project will be over budget upon completion. Management would like to create a report telling them how much more the project will need to complete. What value should Jack tell the management?

A. $1,087,497.74

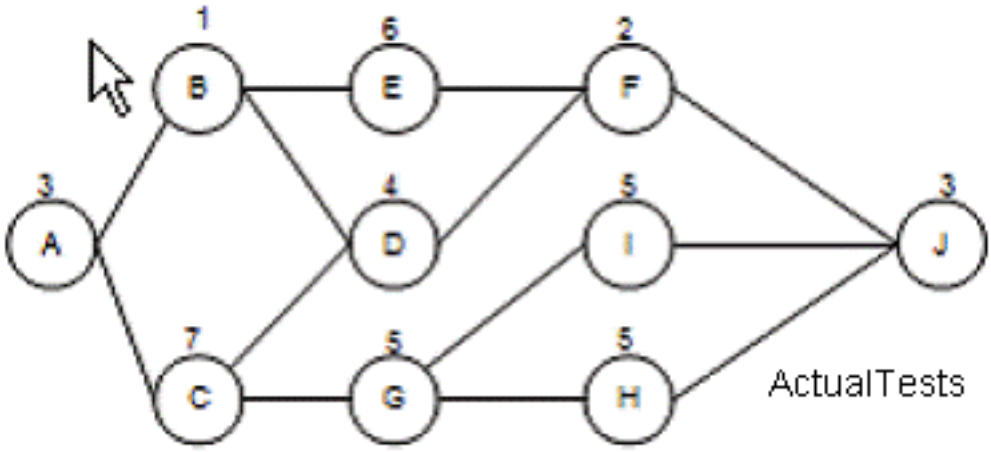
B. $755,000.56
C. $1,112,978.45
D. $790,988.76

**Answer: A**

**Explanation:**
The project will need $1,087,497.74 more to complete. This formula, the estimate to complete, is estimate at completion minus the actual costs. Here,
CPI = EV/AC
= (0.40*2,208,456)/725,000
= 1.21846, and
ETC = EAC - AC
= (BAC/CPI) - AC
= (2,208,456/1.21846) - 725,000
= 1,812,497.74 - 725,000
= 1,087,497.74
The estimate to complete (ETC) is the expected cost needed to complete all the remaining work for a scheduled activity, a group of activities, or the project. ETC helps project managers predict what the final cost of the project will be upon completion. The formula for the ETC is EAC- A C. The EAC is BAC/CPI.

**QUESTION NO: 113**

You are the project manager of the NHG. The following figure represents your project network diagram.




Management has asked that you add some features to the project scope. Through the change control system these changes are approved and they'll affect Activity I. The duration of Activity I, which is on the critical path, will decrease by three days. What affect does this have on the critical path?

A. The critical path will now take 26 days.
B. The critical path will now take 17 days.
C. The critical path will now take 23 days.
D. The critical path will now take 20 days.

**Answer: C**

**Explanation:**
The critical path is the path in the project network diagram with the longest duration. In project management, a critical path is the sequence of project network activities which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). This project actually has two critical paths. Path ACGIJ takes 23 days. Path ACGHJ also takes 23 days. When Activity I decreases by three days the critical will still take 23 days to complete as Path ACGHJ remains a critical path.
Answer option A is incorrect. The duration of the critical path did not increase.
Answer option D is incorrect. The duration of the path ACGIJ will decrease to 20 days but the critical path will remain at 23 days.
Answer option B is incorrect. The critical path did not reduce to 17 days.

**QUESTION NO: 114**

Marty is the project manager of the recently completed NHK Project. The project was deemed successful by the project customer and they have signed the formal acceptance documentation. Marty has written the final project report, released the project team, and completed the lessons learned documentation. What else should Marty do in the closure of the NHK Project?

A. Archive the project records.
B. Summarize the project risks costs.
C. Summarize the project variance.
D. Close the project office.

**Answer: A**

**Explanation:**
The last duty of a project manager is to archive the project records as part of the organizational process assets.
Answer option B is incorrect. The cost summary is included in the final project report.
Answer option C is incorrect. The project variance is included in the final project report as it shows cost performance.
Answer option D is incorrect. A project office is an organization within the company that oversees and supports project. Marty would not close the project office.

**QUESTION NO: 115**

Diane is the project manager of the HGF Project. A risk that has been identified and analyzed in the project planning processes is now coming into fruition. What individual should respond to the risk with the preplanned risk response?

A. Diane
B. Project sponsor
C. Risk owner
D. Subject matter expert

**Answer: C**

**Explanation:**
The risk owner is the individual on the project team that is closest to the risk event. The risk owner can be an individual or an organization responsible for implementing risk responses or contingency plan. The risk owner should be empowered with the ability to respond to the risk as it was planned.
Answer option A is incorrect. Diane is the project manager and likely won't be the risk owner as well.
Answer option B is incorrect. The project sponsor authorizes the project but does not participate in the execution of the project.
Answer option D is incorrect. While a subject matter expert may be the risk owner on some occasions, he won't be the risk owner on every occasion.

**QUESTION NO: 116**

You are the project manager for your organization. You are working on creating the activity list so that you can create the project schedule. This current project is similar to a project you have completed for your company. You and the project team decide to use the previous project as a template for your current project. A template can help you and the project team do all of the following except for which one?

A. Identify typical schedule milestones.
B. Create parametric estimates for repetitive activities.
C. Save time creating activity duration estimates.
D. Import activity attributes.

**Answer: B**

**Explanation:**

Parametric estimates are created for repetitive tasks, such as four hours per unit installed; 1,000 units to install would equate to 4,000 hours. A template does not address this type of time estimating directly. A template for time estimating is an analogous estimate type. A template for any project is an activity list or a part of the activity list from a previous project. The template contains the activity attributes information and other vivid information that are helpful to define activities. It is also used to classify schedule milestones.
Answer option D is incorrect. Templates can include activity attribute information.
Answer option A is incorrect. Templates do indicate milestones.
Answer option C is incorrect. Templates can save time for the project manager and the project team.

**QUESTION NO: 117**

You work as a project manager for BlueWell Inc. You are in the process of identifying all the people and organization impacted by the project. Mark, a project team member, has some doubts about the inputs of the Identify Stakeholder process. What is referred to as an input to the identify stakeholder process in project communication management?

A. Expert judgment
B. Project charter
C. Stakeholder analysis
D. Stakeholder register

**Answer: B**

**Explanation:**
The project charter is an input to the identify stakeholder process. It provides information about the internal and external parties concerned and is affected by the project. The project charter is the document that formally authorizes a project. The project charter provides the project manager with the authority to apply organizational resources to project activities. According to PMBOK Guide, the project charter should address the following information:
Requirements that satisfy customer, sponsor, and other stakeholder needs, wants and expectations Business needs, high-level project description, or product requirements that the project is undertaken to address
Project purpose or justification
Assigned Project Manager and authority level
Summary milestone schedule
Stakeholder influences
Functional organizations and their participation
Organizational, environmental and external assumptions
Organizational, environmental and external constraints
Business case justifying the project, including return on investment

Summary budget

If required, it also authorizes the next project phase, and updates the charter. The project manager should always be assigned prior to the start of planning, and preferably while the project charter is being developed.

Answer option A is incorrect. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess. Expert judgment involves people most familiar with the work of creating estimates. Preferably, the project team member who will be doing the task should complete the estimates. Expert judgment is applied when performing administrative closure activities, and experts should ensure the project or phase closure is performed to the appropriate standards.

Answer option C is incorrect. Stakeholder analysis is the identification of stakeholder needs, wants and expectations. It involves the documentation, prioritization, and quantification of the needs to help define the project scope. Stakeholders' interests may be positively or negatively affected by execution or completion of the project and they may also exert influence over the project and its deliverables.

Answer option D is incorrect. 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.



**QUESTION NO: 118**

Thomas works as a contract-based project manager for BlueWell Inc. Management has hired Thomas to manage a high-risk project because Thomas has years of experience with this technology and similar project. Thomas would like to use his own templates for the project schedule, quality, and risk management approach. Management is fine with this, except after reviewing the template they had preferred Thomas to use 24-hour time periods for his project calendar rather than the 8-hour time periods as indicated. Thomas agrees, but now he has to update what document in his project management plan?

A. Project calendar
B. Activity attributes
C. Resource calendar
D. Schedule management plan

**Answer: A**

**Explanation:**

The project calendar needs to be updated to reflect the 24-hour time period rather than the 8-hour time period. The project calendar is used to define the working and nonworking days and times for tasks. This calendar is usually used to represent an organization's traditional working hours. Project uses this calendar to schedule tasks that do not have resources assigned or that have a task type of fixed duration. By default, the Standard base calendar is used as the project calendar. A user can also reflect alternative schedules by using other base calendars. The working days and hours in the project calendar reflect the working days and hours for the whole project. A user can also specify special days off, such as company holidays. A user can also indicate other nonworking times to reflect periods when the whole team will be working on nonproject activities, such as company meetings or department retreats.
Answer option D is incorrect. The schedule management plan will reference to the project calendar and the resource calendar. It does not need to be updated directly as a result of the time period change.
Answer option C is incorrect. The resource calendar does not need to be updated as this document defines when resources are available.
Answer option B is incorrect. The activities of the project are not changing, only the time periods of the project calendar.

**QUESTION NO: 119**

You are the project manager of the SWC project. You have created the stakeholder register. In the stakeholder register of your project, you will have all of the following information except for which one?

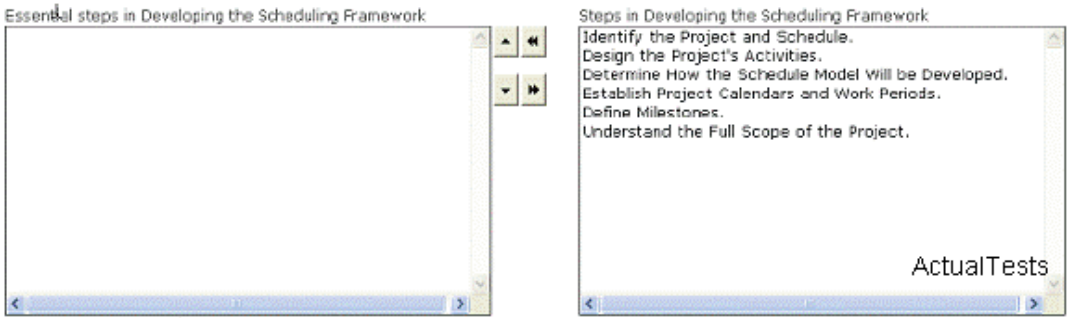
A. Stakeholder classification
B. Project management team's classification
C. Assessment information
D. Identification information

**Answer: B**

**Explanation:**
The stakeholder register does not contain the project management team's classification information. 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 options D, C, and A are incorrect. These are the parts of the stakeholder register.

**QUESTION NO: 120**

Choose and reorder the essential steps required in developing the scheduling framework. Select an item from the right pane. Click button to move the selected item to the left pane. Click button to move the item back to the right pane. Click and buttons to sort the list, if required.




**Explanation:**


The essential steps required in developing the scheduling framework are as follows: 1.Determine how the schedule model will be developed.
2.Understand the full scope of the project.
3.Identify the project and schedule.
4.Establish project calendars and work periods.
5.Establish the optimum project update cycle.
6.Design an effective activity coding structure.
7.Determine resource planning requirements.

**QUESTION NO: 121**

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 and they'd like to know what is your schedule performance index. Considering that the project has a BAC of $567,899, you are thirty percent complete, and you have spent $179,450, what is the SPI for this project?

A. $227,140
B. 0.75
C. 0.95
D. -$56,789

**Answer: B**

**Explanation:**
The schedule performance index is found by dividing the earned value by the planned value. In this instance, the planned value is ten percent more than where the project is forty percent of the budget at completion. 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 C is incorrect. 0.95 is the project's cost performance index.
Answer options A and D are incorrect. An index is a decimal value.

**QUESTION NO: 122**

Lara has been assigned to a construction project. The project includes constructing a residential building with fifty flats. On which of the following events will the project be considered successful?

A. The project meets or exceeds the expectations of the stakeholders.
B. The building is complete and handed over to the authority concerned.
C. The keys of the first flat are handed over to the owner of the flat.
D. Successful possession of all flats is made.

**Answer: A**

**Explanation:**
A project is considered successfully completed when the stakeholder needs and expectations are met or exceeded. What is a project? In project management a project consists of a temporary endeavor undertaken to create a unique product, service or result. An other definition is a management environment that is created for the purpose of delivering one or more business products according to a specified business case. Project have the following characteristics: They are unique. They are temporary in nature and have a definite beginning and ending date. They are completed when the project goals are achieved. Their success is measured by evaluating whether they meet or exceed expectations of the stakeholders. Project objectives define target status at the end of the project, reaching of which is considered necessary for the achievement of planned benefits. A project should be specific, measurable achievement, achievable, realistic, time bounded, ethical and recorded. The evaluation (measurement) occurs at the project closure. However a continuous guard on the project progress should be kept by monitoring and evaluating. Who are project stakeholders? Project stakeholders are those entities within or without an organization, which: Sponsor a project or, Have an interest or a gain upon a successful completion of a project. Examples of project stakeholders include the customer, the user group, the project manager, the development team, the testers, etc. Stakeholders are anyone who has an interest in

the project. Project stakeholders are individuals and organizations that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project's objectives and outcomes. The project management team must identify the stakeholders, determine their requirements and expectations, and, to the extent possible, manage their influence in relation to the requirements to ensure a successful project.
Answer options D, C, and B are incorrect. These events are not the measurement of the project's success.

**QUESTION NO: 123**

You are the project manager of a research project. Because much of the project work will be based on what is discovered in each stage of the project work, you are directing the project time to focus on creating time estimates for the most imminent research work and broad estimates for the project work that is coming later in the project. What type of planning are you using in this project?

A. Milestone planning
B. Rolling wave planning
C. Phase gates
D. Decomposition

**Answer: B**

**Explanation:**
This is an example of rolling wave planning. Rolling wave planning focuses on the most imminent work in detail and creates estimates for the whole project and later work in broad estimates. Rolling wave planning is a form of progressive elaboration. 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 describes the breakdown of the project scope into work packages, and then the work packages are broken down into project activities.
Answer option C is incorrect. Phase gates describe the review process associated with the end of project phases.
Answer option A is incorrect. Milestone planning defines the project milestones, not the activities required to reach the milestones.

**QUESTION NO: 124**

Holly is a new project manager in your organization. She is working with you on the JHG project and she is confused as to why the project needs a schedule management plan and a schedule

baseline. What is the difference between the schedule management plan and the schedule baseline?

A. The schedule management plan describes how the schedule will be managed and controlled. The schedule baseline is used to compare with actual results to determine if a change, corrective action, or preventive action is needed.
B. The schedule management plan describes how the schedule will be managed and controlled. The schedule baseline is used to determine how accurate the schedule management plan has been throughout the project execution.
C. The schedule baseline describes how the schedule will be managed and controlled. The schedule management plan is used to compare with actual results to determine if a change, corrective action, or preventive action is needed.
D. The schedule management plan describes how the schedule will be created. The schedule baseline is used to compare with actual results with what the project manager intended.

**Answer: A**

**Explanation:**
The schedule management plan is the intent of the project manager. It defines how the schedule will be managed and controlled. The schedule baseline is a benchmarking tool to compare actual results against the planned results.
Answer options C, D, and B are incorrect. These are not valid definitions of the schedule management plan and the schedule baseline.

**QUESTION NO: 125**

You are the project manager for your company. You are currently working with your project team to begin sequencing the activity list. You will need organizational process assets and four other documents as inputs to this process. Which of the following is NOT one of the four documents you will need for activity sequencing?

A. Project scope statement
B. Milestone list
C. Project schedule network diagrams
D. Activity list

**Answer: C**

**Explanation:**
The project schedule network diagram is an output of the sequence activity process, not an input. This process uses five inputs: the activity list, the activity attributes, milestone list, the project scope statement, and the organizational process assets. The project schedule network diagram is an output of the sequence activity process. It represents a schematic display of the project's

schedule activities and the logical relationship among them. This diagram can be produced manually or by using the project management software. It consists of complete project details, or one or more summary activities.
Answer options D, B and A are incorrect. These are inputs to the process.

**QUESTION NO: 126**

Allen works as a project manager of the NHY project. This project is scheduled to last for two years and has a BAC of $5,400,000. He is currently 45 percent complete with this project, though he is supposed to be at his second milestone, which accounts for half of the project completion. There have been some errors in the project, which have caused Allen to spend $2,093,754. What is this project's schedule variance?

A. - $210,000
B. - $720,000
C. - $250,000
D. - $270,000

**Answer: D**

**Explanation:**
The schedule variance can be found by subtracting the planned value from the earned value. In this instance, it is
EV = (0.45 * 5,400,000)
= 2,430,000
PV = (0.50 * 5,400,000)
= 2,700,000
SV = EV - PV
= 2,430,000 - 2,700,000
= - $270,000
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 = Earned Value (EV) - 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.

**QUESTION NO: 127**

Which of the following is an output of the Identify Stakeholders process?

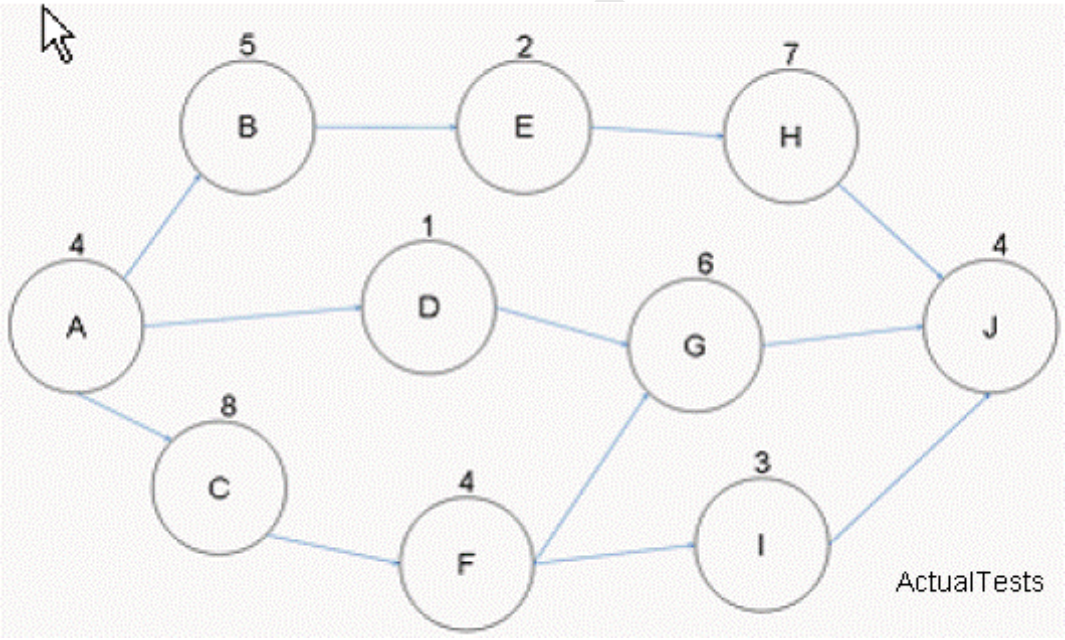
A. Scope baseline
B. Project scope statement
C. Project charter
D. Stakeholder register

**Answer: D**

**Explanation:**
The Identify Stakeholders process identifies all people or organizations that are impacted by the project. It also documents relevant information regarding their interests, involvement, and impact on project success. Stakeholder register and stakeholder management strategy are outputs of this process.
Answer option C is incorrect. Project charter is one of the inputs of the Identify Stakeholders process.
Answer option A is incorrect. Scope baseline is one of the outputs of the Create Work Breakdown Structure (WBS) process.
Answer option B is incorrect. Project scope statement is one of the outputs of the Define Scope process.

**QUESTION NO: 128**

Examine the figure given below:




You are the project manager of this project. Tom, a project team member, reports that Activity D will be delayed by 12 days due to the unavailability of the resources from the vendor. What will this delay do to your project completion, if you allow the delay to enter into the project?

A. The project will be one day late.

B. The float for activity D will be consumed.
C. The project can still finish on time.
D. The project will be seven days late.

**Answer: A**

**Explanation:**
The project will be just one day late due to this delay. The path ADGJ takes a total of 15 days. If Activity D takes a total of 13 days (i.e. 12 + 1), then the path will now take 27 days to complete. This causes the critical path to shift to ADGJ and the project will end on day 27 rather than day 26.

Answer options D, B, and C are incorrect. These are not the valid answers, as the project will now take 27 days to complete, rather than 26.

**QUESTION NO: 129**

You work as a project manager for BlueWell Inc. You would like to crash your project to help the project schedule to get back on track. What is the primary danger of crashing?

A. Crashing increases project costs.
B. Crashing is a top-down approach to project completion.
C. Crashing restricts resource utilization.
D. Crashing always increases project risks.

**Answer: A**

**Explanation:**
Crashing adds project resources and usually increases costs - though it may also increase some project risks. Crashing is a schedule compression technique to obtain the greatest amount of compression for the least incremental cost. Crashing works for activities where additional resources will shorten the duration. Approving overtime, bringing in additional resources, paying to expedite delivery to activities on the critical path are examples of crashing.
Answer option D is incorrect. Crashing does not always increase project risks.
Answer option C is incorrect. Crashing does not restrict resource utilization - that is resource leveling.
Answer option B is incorrect. This is not a valid definition or description to crashing the project.

**QUESTION NO: 130**

You are working with your project team to identify the project activities within your project. Which of the following is NOT a tool and technique that will be useful in defining the project activities?

A. Decomposition
B. Rolling wave plan
C. Precedence diagramming method
D. Templates

**Answer: C**

**Explanation:**
The precedence diagramming method is not a tool and technique that will be used during the activity definition process. Precedence diagramming method (PDM) is used in critical path methodology for building a project schedule network diagram that uses boxes or rectangles, referred to as nodes, to represent activities, and join each other with arrows that show the logical relationship that exists between them. The tools and techniques used in defining the activity process are as follows: Decomposition: It is used to further divide the project work package into a more smaller and convenient form called activities. Rolling Wave Planning: It is a form of progressive elaboration planning where the work to be accomplished in the near term is planned in detail and future work is planned at a higher level of WBS. Templates: It is an activity list or a part of the activity list taken from the previous project and used in a new project. Expert Judgement: The skilled members in a project team or other experts who develop project scope statements can help provide knowledge in defining activities.

**QUESTION NO: 131**

You are the project manager for your organization. You are managing a project to create new software for your clients. During the project execution, there have been some unforeseen delays that will require your attention. You will need four inputs to the control schedule process. Which of the following documents would not be an input for the control schedule process?

A. Project schedule
B. Work performance information
C. Project management plan
D. Earned value management results

**Answer: D**

**Explanation:**
The results of earned value management are not an input to the control schedule process. The fourth input is organizational process assets. The inputs of schedule control process are as follows:
Project Management Plan
Project Schedule
Work Performance Integration
Organizational Process Assets

Answer option C is incorrect. The project management plan is an input to the control schedule process.
Answer option A is incorrect. The project schedule is an input to the control schedule process.
Answer option B is incorrect. The work performance information is an input to the control schedule process.

**QUESTION NO: 132**

You work as a Project Manager for Dreams Unlimited Inc. You are looking for performance efficiencies of a project. The related key values are provided in the table below:
MeasurementsValues
BCWP (or EV)325
BCWS (or PV) 300
ACWP (or AC)410
What is the schedule variance (SV) of the project at the current point of time?

A. +110
B. -25
C. -110
D. +25

**Answer: D**

**Explanation:**
According to the question, you are required to find out the schedule variance (SV) of the project. 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 = Earned Value (EV) - 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. Now, putting the provided values on the formula:
SV = EV - PV
= 325 - 300
= 25
As the value of SV (which is 25) is a positive number, it means that the project is ahead of the planned schedule. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. What is BCWS (or PV)? Budgeted Cost of Work Scheduled (BCWS) or Planned Value (PV) is the authorized budget assigned to the scheduled work to be accomplished for a schedule activity or Work Breakdown Structure (WBS) component. What is ACWP (or AC)? Actual cost of work performed (ACWP) or Actual Cost (AC) is

the total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity. It is the cost of the work to date, including direct and indirect costs. AC is money that has actually been expended to date.

**QUESTION NO: 133**

You are the project manager of the NHQ project. You are working with your project team to create the project schedule and the project network diagram. In order to start the sequencing of the project activities, you will need a document to identify the result of project phases, key project deliverables, and significant, timeless events in the project. Which of the following documents will you need to help sequence the project work?

A. Activity attributes
B. Activity list
C. Project scope statement
D. Milestone list

**Answer: D**

**Explanation:**
The milestone list is needed as an input to the sequence activities process. Milestones are timeless events in the project schedule that are generally created as a result of phase completion. What is a milestone list? A milestone list provides a sequence of indicators about project progress to date and achievements or goals, which are to be achieved. The milestone list is used in project management as an indication of progress through the achievement of a major project accomplishment. It is a project document that is not part of the project management plan. The list contains all the project milestones along with information indicating whether they are mandatory to achieve or not.
Answer option B is incorrect. While the activity list is an input to activity sequencing, it is not a document that shows timeless events or the results of activity phases.
Answer option A is incorrect. Activity attributes describe the work, nature of the activity, and required resources for the activity.
Answer option C is incorrect. The project scope statement is an input to the activity sequence, but it does not define the end result of activity phases.

**QUESTION NO: 134**

You work as a project manager for BlueWell Inc. Management has asked you to communicate with them whenever your project is about to reach a milestone so that they can review your project performance to date. Where can you find a list of the project milestones to anticipate management's request?

A. Scope baseline
B. Milestone list
C. Project charter
D. Project Schedule Management Plan

**Answer: B**

**Explanation:**
The milestone list is the best answer. A milestone list provides a sequence of indicators about project progress to date and achievements or goals, which are to be achieved. The milestone list is used in project management as an indication of progress through the achievement of a major project accomplishment. It is a project document that is not part of the project management plan. The list contains all the project milestones along with information indicating whether they are mandatory to achieve or not.
Answer option A is incorrect. The scope baseline is a collection of the project scope, the WBS, and the WBS dictionary.
Answer option D is incorrect. The project schedule management plan is not the best answer, as the milestone list is the most direct result.
Answer option C is incorrect. The project charter is not the best answer for identifying the milestones.

**QUESTION NO: 135**

Beth works as a project manager for BlueWell Inc. Which of the following tools and techniques of Administer Procurements process will Beth use to manage contracts, and procurement documentation and records?

A. Records Management System
B. Performance reporting
C. Inspection and Audit
D. Payment System

**Answer: A**

**Explanation:**
A records management system is used to manage contract, and procurement documentation and records by the project managers. It includes specific set of processes, related control functions, and automation tools that are merged as part of the project management information system.
Answer option D is incorrect. Payment system determines the payments to the seller, which is processed by the account payable system of the buyer after certification of satisfactory work by the authorized person on the project team.
Answer option C is incorrect. Inspection and audits are required by the buyer and supported by the seller as mentioned in the procurement contract during execution of the project to verify the

compliance in the seller's work processes or deliverables.
Answer option B is incorrect. Performance reporting offers the management with the information about how effectively the seller is achieving the contractual objectives.

**QUESTION NO: 136**

Billy is the project manager of the PQW Project and she has an assigned project budget of $655,000. Currently she is 80 percent complete with the project though she was scheduled to be 90 percent done by this date. She has spent $490,000 to date. What should Billy report as her cost performance index (CPI)for this project?

A. .07
B. 1.07
C. $34,000
D. .89

**Answer: B**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instance the earned value is $524,000 and the actual costs are $490,000. In this project Billy has spent less than what the work is worth - a good thing. This could be because of a cost savings, such as travel or shipping, or because a risk event didn't come into play. This causes the positive CPI - something which does not happen very often.
Answer option A is incorrect. .07 is an incorrect calculation for the cost performance index for the project.
Answer option D is incorrect. .89 represents the schedule performance index.
Answer option C is incorrect. $34,000 is the cost variance of the project.

**QUESTION NO: 137**

Wendy is the project manager for the NHQ project. She is working with her project to begin creating the project duration estimate. Her organization is in weak matrix and several of the project team members are scheduled to complete work on other projects. What input will most likely be of the biggest assistance as Wendy and the project team begin creating the duration estimate for this project?

A. Project charter
B. Project scope statement
C. Project communications management plan
D. Resource calendar

**Answer: D**

**Explanation:**
The resource calendar is needed because it will help Wendy and the project team to determine when the project team resources will be available. The availability of the project resources can affect the overall duration of the project. A resource calendar is used to make sure that work resources (people and equipment) are scheduled only when they are available for work. They affect a specific resource or category of resources. By default, the working time settings in the resource calendar are the same as in the project calendar. However, a user can customize the resource calendar to show individual schedule information, such as vacations, leaves of absence, or equipment maintenance time.
Answer option B is incorrect. The project scope statement is an input to the estimate activity duration estimate, but it is not the best choice for this question.
Answer option C is incorrect. The project communications management plan is not an input to the estimate activity duration process.
Answer option A is incorrect. The project charter is not an input to the estimate activity duration process.

**QUESTION NO: 138**

You work as a project manager for BlueWell Inc. Which of the following plans will you use to define how resources are brought onto the project team, how they are managed while on the project team, and how they may be released from the project team?

A. Project Schedule Management Plan
B. Project Staffing Management Plan
C. Project Human Resources Management Plan
D. Project Communications Management Plan

**Answer: B**

**Explanation:**
The project staffing management plan will define how resources are brought onto the project team, how they are managed while on the project team, and how they may be released from the project team. The staffing management plan is part of human resources plan. It is a subsidiary plan of the overall project management plan and defines when project team members will be brought onto and released from the project. It describes when and how human resource requirements will be met. Depending upon the needs of the project, it can be formal or informal, highly detailed or

broadly framed. The staffing management plan may include the following items: Staff acquisition, resource calendars, staff release plan, training needs, recognition and rewards, compliance, and safety.
Answer option D is incorrect. The communications management plan defines project communication requirements and expectations.
Answer option C is incorrect. This is not a valid project management plan.
Answer option A is incorrect. The project schedule management will define when resources are needed and scheduled. But it will not define how resources are allowed to be released from the project.

**QUESTION NO: 139**

Bonnie is the project manager for her organization. She is developing a strategy to manage the project stakeholders. She wants to identify the key stakeholders, their influence over the project, their interest in project, and an assessment of methods. What can Bonnie create to gain support from the stakeholders in her project?

A. Stakeholder identification tools
B. Expert judgment
C. Stakeholder Analysis Matrix
D. Communications management plan

**Answer: C**

**Explanation:**
A stakeholder analysis matrix is a simple table that identifies stakeholders, their attitude towards the project, their perceived threats and concerns, and strategies the project manager can use to gain stakeholder support and remove obstacles.
Answer option A is incorrect. Stakeholder identification tools are not a precise answer for this question.
Answer option D is incorrect. The communications management plan is a broad plan and may reference the stakeholder analysis matrix, but it is not the best answer for this question.
Answer option B is incorrect. In some cases the project manager could rely on expert judgment, but in all projects the project manager can use a stakeholder analysis matrix.

**QUESTION NO: 140**

You are the project manager for your organization. Your project will need four electrical engineers for the project though there are no electrical engineers within your department. This scenario is best described as which one of the following terms?

A. Assumption
B. Risk
C. Resource requirement
D. Resource constraint

**Answer: C**

**Explanation:**
This is an example of a resource requirement. The project needs four electrical engineers even though the resources are not within your department. Your organization could be a matrix structure, or it could hire resources from outside the organization.
Answer option D is incorrect. A resource constraint is evident when the project requires the electrical engineer and she is not available. A requirement, as in this scenario, is simply the identification of the needed resource even if the resource is not available in your department.
Answer option B is incorrect. This is not an example of a risk, unless the resource is constrained by other projects, schedules, or work and may not be available at all when needed.
Answer option A is incorrect. An assumption would be believing the resource is available for the project without confirming the availability of the resource.

**QUESTION NO: 141**

Vicky is the project sponsor of Robert's project. She has requested several changes for the project scope and these changes have, of course, been approved. Robert needs to incorporate the project scope changes into the activity list. Where else should Robert reflect these project changes?

A. Project final report
B. Scope baseline
C. Quality control mechanism
D. Cost baseline

**Answer: B**

**Explanation:**
All scope changes should also be updated in the project scope baseline. The scope baseline is the project scope statement, work breakdown structure (WBS), and the WBS dictionary.
Answer option D is incorrect. If the changes affect cost then the cost baseline would also be updated. The question did not indicate that therbe would a change in the project cost.
Answer option C is incorrect. Quality control does not change. It always reflects the demands of the project scope.
Answer option A is incorrect. The project final report evaluates the success and failures of the project scope.

**QUESTION NO: 142**

You work as a project manager for BlueWell Inc. You are calculating the performance indexes of your project. The cost variance (CV) of your project is 30. What does this figure depict?

A. Project is behind the schedule.
B. Costs are higher than planned.
C. Costs are right on target.
D. Costs are lower than planned.

**Answer: D**

**Explanation:**
According to the question, the cost variance of the project is 30, which is a positive figure. A positive value means that cost is less than planned. What is CV? Cost variance (CV) is a measure of cost performance on a project. The variance notifies if costs are higher than budgeted or lower than budgeted. The cost variance is calculated based on the following formula: CV = Earned Value (EV) - Actual Cost (AC) A positive value means that spending is less than budgeted, whereas a negative value indicates that costs are higher than originally planned for the project.
Answer option C is incorrect. If the CV is zero, it shows that cost is right on target.
Answer option A is incorrect. This result is depicted by viewing the schedule variance (SV), not the CV.
Answer option B is incorrect. If the CV is a negative value, it depicts that the costs are higher than planned.

**QUESTION NO: 143**

You are the project manager for your organization. You are working with your project team to define the project network diagram. Several of the activities in the project schedule appear to have external constraints. Who among the following determines which dependencies are external to the project?

A. Project team
B. Project sponsor
C. Project manager
D. Project management team

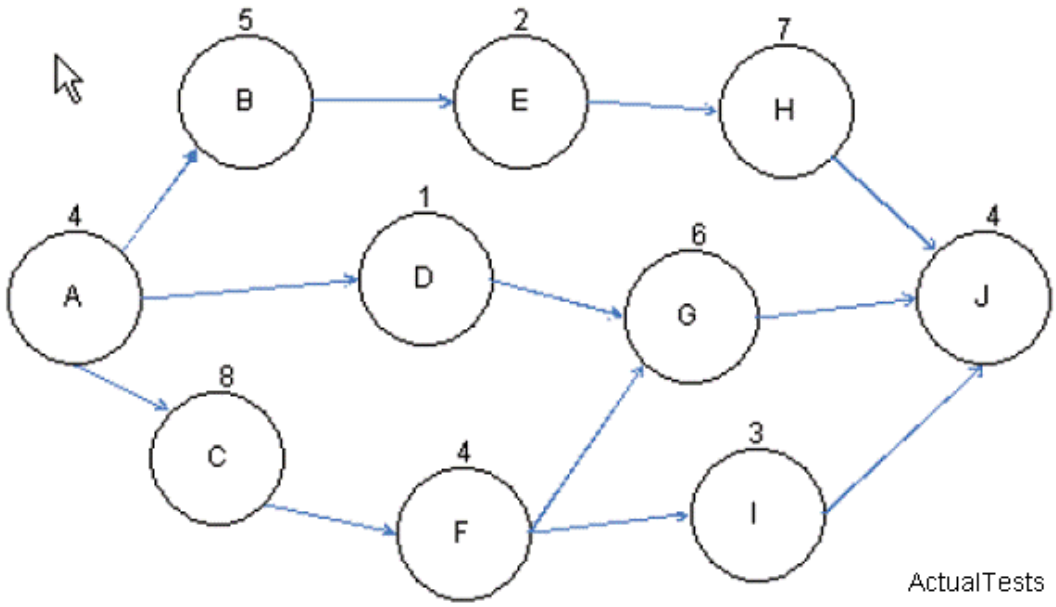
**Answer: D**

**Explanation:**
The project management team defines which activities are external to the project. An external dependency is any nonproject activity that is external to the project but has a direct impact on the

project activities. An external dependency may be an inspector or any agency that may have to give prior approval before the project can move forward. These dependencies are external to the organization and are determined by the project management team to find which dependencies are external all through the process of sequencing the activities.
Answer option C is incorrect. The project manager may be part of the project management team, but this is not the best choice.
Answer option A is incorrect. The project team does not define this relationship.
Answer option B is incorrect. The project sponsor would not define the external dependencies.

**QUESTION NO: 144**

You are the project manager of the GHQ Project. You have to prioritize activities for the effective management of project. For this, you have created a network diagram to schedule a set of project activities as shown in the figure:




Based on this figure, what is the critical path of this project?

A. ABEHJ
B. ACFIJ
C. ADGJ
D. ACFGJ

**Answer: D**

**Explanation:**
The activity nodes of path ACFGJ equals 26 days and is the longest path to completion - it is the critical path.
ACFGJ= A(4)+C(8)+F(4)+G(6)+J(4)=26
What is a critical path?

A critical path is the sequence of project activities, which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path. These results allow managers to prioritize activities for the effective management of project completion, and to shorten the planned critical path of a project by pruning critical path activities, by "fast tracking" (i.e., performing more activities in parallel), and/or by "crashing the critical path" (i.e., shortening the durations of critical path activities by adding resources).
Answer option A is incorrect. ABEHJ takes only 22 days to complete; it is not the critical path.
ABEHJ=A(4)+B(5)+E(2)+H(7)+J(4)=22
Answer option C is incorrect. ADGJ takes only 15 days to complete; it is not the critical path.
ADGJ=A(4)+D(1)+G(6)+J(4)=15
Answer option B is incorrect. ACFIJ takes only 23 days to complete; it is not the critical path.
ACFIJ=A(4)+C(8)+F(4)+I(3)+J(4)=23

**QUESTION NO: 145**

You are the project manager for your organization. Management has offered you a bonus if you can complete the project work two months earlier than what your schedule predicts. You can use a schedule compression technique, but management does not want to increase costs in the project. What approach would you recommend to condense the project duration?

A. Fast tracking
B. Crashing
C. Effort-driven activity analysis
D. Rewards and recognition for the project team

**Answer: A**

**Explanation:**
Of all the choices, only fast tracking is an option that would not increase project costs. Fast tracking allows phases of the project to overlap, but it does increase project risks. 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.
Answer option B is incorrect. Crashing adds labor to the project and increases project costs.
Answer option C is incorrect. Effort-driven activity analysis examines activities whose duration may be reduced by adding labor. This approach, however, increases project costs, as it is a form of project crashing.
Answer option D is incorrect. Rewards and recognitions are good incentives for the project team, but simply offering the reward does not decrease the duration of the project.

**QUESTION NO: 146**

In the project time management knowledge area, there are six processes. According to the PMBOK, which project time knowledge area will have the majority of the effort?

A. Estimate activity resources
B. Define activities
C. Control schedule
D. Develop schedule

**Answer: C**

**Explanation:**
Of all six processes, the control schedule process will take the majority of the time in the project time management knowledge area. Control schedule process is a method of monitoring the status of the project to update project progress and deal with the changes to the schedule baseline. It is concerned with: Determining the current status of the project Influencing the factors that create schedule changes Determining that the project schedule has changed Managing the actual changes as they occur Control schedule is a component of the Perform Integration Change Control process.
Answer options B, A, and D are incorrect. These processes will not take the longest to complete.

**QUESTION NO: 147**

Nancy is the project manager of a project with 78 stakeholders. This is a high-profile project and she needs to express to her project team and to the management the importance of communication in this project. She would like to show the number of stakeholder communication channels in the project. Based on this information how many communication channels exist within this project?

A. 78
B. 156
C. 3,003
D. 6,084

**Answer: C**

**Explanation:**
Communication channels are paths of communication with stakeholders in a project. The number of communication channels shows the complexity of a project's communication and can be derived through the formula shown below: Total Number of Communication Channels = n (n-1)/2 where, n is the number of stakeholders. Hence, a project having five stakeholders will have ten

communication channels. Putting the number of stakeholders in the formula we can get the required communication channel for the project. It is (78 x 77)/2 for 3,003 communication channels.
Answer options A, B, and D are incorrect. These numbers do not reflect the accurate number of communication channels in the project.

**QUESTION NO: 148**

You are the project manager for your organization. You and the project team are developing the project schedule for your current project. This project management process will create four outputs. Which of the following is an output of the Develop Schedule process?

A. Work performance information
B. Schedule baseline
C. Resource calendars
D. Activity duration estimates

**Answer: B**

**Explanation:**
The schedule baseline is the only output of the develop schedule process among these answers. The three other outputs of the Develop Schedule Process are: project schedule, schedule data, and project document updates.
Answer option D is incorrect. Activity duration estimates are an output of the Estimate Activity Duration process.
Answer option A is incorrect. Work performance information is an input of the Control Schedule process.
Answer option C is incorrect. Resource calendars are an input to the Develop Schedule process.



**QUESTION NO: 149**

You are the project manager of the NDF project. You need to determine how often a complete project report can be made, including forecasted project completion information for your project. How often should the report be created?

A. Weekly
B. One per status milestone reached
C. Regularly or on an exception basis
D. Exception-by-exception basis

**Answer: C**

**Explanation:**
Performance reports should be created regularly or on an exception basis. A performance report tracks the performance of the program/project team members. A template can be created that tracks performance, such as work results, schedule, costs, and other factors. The performance report must include both the positive and negative performance for the staff.
Answer option A is incorrect. Weekly may be appropriate for many projects, but it does not include the opportunity to create a report by exception.
Answer option D is incorrect. Regular reporting is also needed or at least, an option for the project manager.
Answer option B is incorrect. This is not a valid answer as milestones will vary per project and does not offer an opportunity for exceptions reporting.

**QUESTION NO: 150**

You are the project manager of the OOI Project and you're forty percent complete with this project. The project has a BAC of $2,345,650 and you have spent $950,000 to date. Based on your aggressive scheduling you should be at the 45 percent milestone today, but due to some early delays you're running late. What is the planned value of your project?

A. $950,000
B. $2,375,000
C. $1,055,543
D. $938,260

**Answer: C**

**Explanation:**
The planned value is forty-five percent of the project's BAC, or $1,055,543. Planned value (PV) is the authorized budget assigned to the schedule work to be accomplished for a schedule activity or work breakdown structure component. It serves as a baseline against which actual performance is measured. The theory of planned value is of vital importance to the project management team and it is important to keep careful track of this. The term planned value can also be in some situations referred to by the project management team and the project management team leader as the budgeted cost of work scheduled (BCWS).
Answer option D is incorrect. $938,260 is the project's earned value.
Answer option A is incorrect. $950,000 is the project's actual costs.
Answer option B is incorrect. $2,375,000 is the project's estimate at completion.

**QUESTION NO: 151**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are

supposed to be at your second milestone, which accounts for half of the project completion. There have been some errors in the project, which has caused you to spend $2,073,654. Based on the budget at completion, what is this project's to-complete performance index?

A. -$108,120
B. 0.98
C. $2,500.000
D. 1.02

**Answer: D**

**Explanation:**
The to-complete performance index shows the likelihood of reaching the project objectives based on the current performance. The formula is (BAC-EV)/(BAC-AC) for a result of 1.02. The higher the value over 1 the less likely the project is to reach its objectives based on the current performance.To-complete Performance Index (TCPI) is the measured projection of the anticipated performance required to achieve either the BAC or the EA
C. 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 B is incorrect. This is the cost performance index for this project.
Answer option A is incorrect. This is the expected variance at completion.
Answer option C is incorrect. This is not a valid answer for this question.

**QUESTION NO: 152**

You are working with your project team to control the project schedule. You will need five inputs to this process throughout your project. Which one of the following is an output of the project schedule control, and NOT an input?

A. Work performance information
B. Project schedule
C. Project management plan
D. Work performance measurements

**Answer: D**

**Explanation:**
Work performance measurements are created from the work performance information. WPMs are an output of Control schedule, Control cost, and Control scope processes, which are monitoring and controlling processes. WPMs consist of planned versus actual performance indicators with

respect to scope, schedule, and cost. They are documented and communicated to the stakeholders and are used to make project activity metrics, such as the following: Planned vs. Actual Technical performance and Scope performance Planned vs. Actual Schedule performance Planned vs. Actual Cost performance

Answer option A is incorrect. Work performance information is an input to the control schedule process and includes information on project progress and activity start and finish information.

Answer option C is incorrect. The project management plan is an input to the control schedule process.

Answer option B is incorrect. The project schedule is an input to the control schedule process.

**QUESTION NO: 153**

You work as the project manager for BlueWell Inc. You are recording the activity status for your project team's performance in the project. Based on the current performance your project is likely to be three months late. What type of communication should be generated based on this performance issue?

A. Issue report
B. Exceptions report
C. Variance analysis
D. Performance report

**Answer: D**

**Explanation:**

A performance report is needed to communicate the variance between planned work and actual work. A performance report is made by the project team detailing activities, milestones, problems, accomplishments, and identified issues. Performance reports are used to report some key information as follows: Current status Scheduled activities Significant accomplishment for the period Forecasts Issues

Answer option A is incorrect. An issue report is not the best answer for this scenario. Issues are recorded in the issue log and an issue owner is assigned.

Answer option B is incorrect. An exceptions report is a tempting answer as this is an exception to the project. PMI does not use this terminology.

Answer option C is incorrect. Variance analysis is the activity of reviewing the variance to determine why it exists.

**QUESTION NO: 154**

You are the project manager of the NHQ project. Your project has a budget of $1,258,456 and is scheduled to last for three years. Your project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, you have spent $525,000.

Management needs a performance report regarding the NHQ project. What is the planned value for this project?

A. $566,305
B. $1,258,456
C. -$54,044
D. $503, 382

**Answer: A**

**Explanation:**
The planned value is the percent complete that the project should have done. In this instance, it is:
Planned value = 45% of $1,258,456 =$566,305
Answer option B is incorrect. This is the project budget.
Answer option D is incorrect. $503,382 is the earned value for this project.
Answer option C is incorrect. -$54,044 is the variance at completion for your project.

**QUESTION NO: 155**

You are the project manager for the GRT Project in your organization. You have created your time duration estimates based on historical information, but the estimates are not holding true in your current project. Unfortunately, many activities are late. You have decided to create a PERT estimate with your project team for each of their activities. What is the formula used for PERT?

A. O+M+P
B. (O+M+P)/3
C. (O+4M+P)/6
D. Average of the estimates

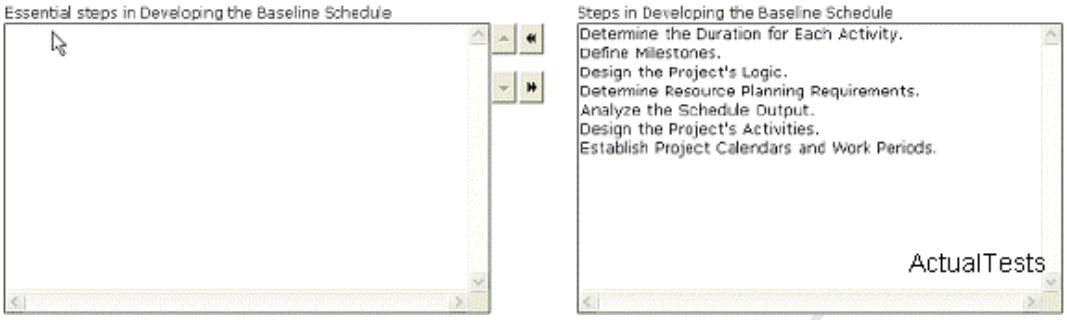
**Answer: C**

**Explanation:**
PERT uses the formula of (O+4M+P)/6 to predict the duration of the project activities and the overall project schedule. 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.
Answer option A is incorrect. This is not a valid formula.
Answer option D is incorrect. This almost describes the three-point estimate, but does not answer

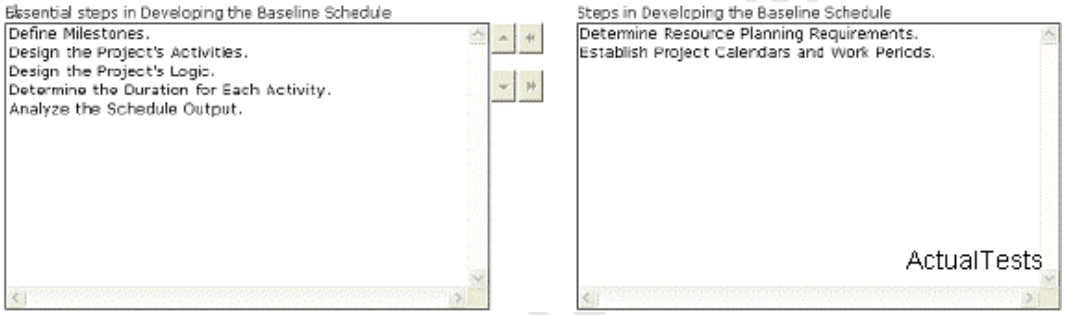
the question about PERT.
Answer option B is incorrect. This is the formula for the three-point estimate. Note the PERT, while similar, uses 4M and divides the result by six factors.

**QUESTION NO: 156**

Choose and reorder the essential steps required in developing the baseline schedule. Select an item from the right pane. Click button to move the selected item to the left pane. Click button to move the item back to the right pane. Click and buttons to sort the list, if required.




**Explanation:**




The essential steps required in developing the baseline schedule are as follows:
1.Define Milestones.
2.Design the Project's Activities.
3.Design the Project's Logic.
4.Determine the Duration for Each Activity.
5.Analyze the Schedule Output.
6.Approve the Schedule.
7.Baseline the Schedule.
8.Maintain the Schedule.

**QUESTION NO: 157**

Terri is the project manager for her organization and she is working with her project team to develop the project schedule. She has identified the float in her project although some of the activities where float exists may be susceptible to risk in the project execution. She is also

concerned that the critical path may change during the project if the risk events come into execution. What scheduling method is Terri using in this example?

A. Critical chain method
B. Risk analysis method
C. Activity on the arrow method
D. Critical path method

**Answer: D**

**Explanation:**
Terri is using the critical path method in this example. The question acknowledges that Terri has identified float and the critical path, but it makes no mention of the availability of project resources - something the critical chain method focuses on. Critical Path Method, abbreviated CPM, or Critical Path Analysis, is a mathematically based algorithm for scheduling a set of project activities. It is an important tool for effective project management. It provides the following benefits: Provides the graphical view of the project. Predicts the time required to complete the project. Shows which activities are critical to maintain the schedule and which are not. CPM models the activities and events of a project as a network. Activities are depicted as nodes on the network, and events that signify the beginning or ending of activities are depicted as arcs or lines between the nodes. Answer option A is incorrect. The question does not indicate that Terri is concerned with the availability of project resources - as she would be if she were using the critical chain method. Answer option B is incorrect. The risk analysis method is not a valid scheduling technique. Answer option C is incorrect. Activity on the arrow method is not being described in this question.

**QUESTION NO: 158**

You work as a Project Manager for Tech Perfect Inc. You are looking for performance efficiencies of a project. The related key values are provided in the table below:

| Measurements | Values |
|---|---|
| BCWP (or EV) | 320 |
| BCWS (or PV) | 310 |
| ACWP (or AC) | 400 |



What will be the cost variance (CV) of the project at the current point of time?

A. +80
B. -80
C. -10
D. +10

**Answer: B**

**Explanation:**
According to the question, you are required to calculate the cost performance index (CPI) of the project. Cost variance (CV) is a measure of cost performance on a project. The variance notifies if costs are higher than budgeted or lower than budgeted. The cost variance is calculated based on the following formula: CV = Earned Value (EV) - Actual Cost (AC) A positive value means that spending is less than budgeted, whereas a negative value indicates that costs are higher than originally planned for the project. Now, putting the provided values in the formula: CV = EV - AC = 320 - 400 = -80 As the value of CV (which is -80) is negative, it shows that the costs are higher than that have been planned for the project. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. What is BCWS (or PV)? Budgeted Cost of Work Scheduled (BCWS) or Planned Value (PV) is the authorized budget assigned to the scheduled work to be accomplished for a schedule activity or Work Breakdown Structure (WBS) component. What is ACWP (or AC)? Actual cost of work performed (ACWP) or Actual Cost (AC) is the total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity. It is the cost of the work to date, including direct and indirect costs. AC is money that has actually been expended to date.

**QUESTION NO: 159**

Amy works as a project manager for BlueWell Inc. She is working on the SDI project, which has a BAC of $2,816,000. She is currently 20 percent complete with this project, though she should be 25 percent complete with the project work. The project has consumed $495,000 of the project budget to date. Management has asked her the project's Estimate To Complete (ETC) based on the current project performance. What is the ETC for this project?

A. $1,312,504
B. $1,979,952
C. $1,541,544
D. $2,474,952

**Answer: B**

**Explanation:**
The estimate to complete is about knowing how much more money the project will need to complete its objectives. The estimate to complete (ETC) is the expected cost needed to complete all the remaining work for a scheduled activity, a group of activities, or the project. ETC helps project managers predict what the final cost of the project will be upon completion. The formula for the ETC is EAC- AC. The EAC is BAC/CPI. Here it is,
CPI = EV/AC

= (0.20*2,816,000)/495,000
= 563200/495,000
= 1.1378
EAC = BAC/ CPI
= 2,816,000/1.1378
= 2,474,952 (Approx)
ETC = EAC - AC
= 2,474,952 - 495,000
= 1,979,952
Answer options C and A are incorrect. These are not the valid answers for this question.
Answer option D is incorrect. This is the estimate at completion based on the current project performance.

**QUESTION NO: 160**

Harry works as a project manager for BlueWell Inc. A risk that has been identified and analyzed in the project planning processes is now coming into fruition. Who among the following is responsible for implementing the risk responses or contingency plan?

A. Risk owner
B. Harry
C. Project sponsor
D. Subject matter expert

**Answer: A**

**Explanation:**
The risk owner is the individual on the project team that is closest to the risk event. The risk owner can be an individual or an organization responsible for implementing risk responses or contingency plan. The risk owner should be empowered with the ability to respond to the risk as it was planned.
Answer option B is incorrect. Harry is the project manager and likely would not be the risk owner as well.
Answer option C is incorrect. The project sponsor authorizes the project but does not participate in execution of the project.
Answer option D is incorrect. While a subject matter expert may be the risk owner on some occasions, he would not be the risk owner on every occasion.

**QUESTION NO: 161**

Donna is the project manager of the QSD Project and she believes Risk Event D in the following figure is likely to happen.

| Risk | Probability | Impact |
|---|---|---|
| A | .60 | -12,000 |
| B | .15 | -45,000 |
| C | .35 | -15,000 |
| D | .40 | -35,000 |
| E | .50 | -17,000 |



If this event does happen, how much will Donna have left in the risk contingency reserve if none of the other risk events have happened?

A. $35,000
B. $41,700
C. $6,700
D. $14,000

**Answer: C**

**Explanation:**
To answer this question, you'll first need to calculate the contingency reserve. Contingency reserves are estimated costs to be used at the discretion of the project manager to deal with anticipated, but not certain, events. These events are "known unknowns" and are part of the project scope and cost baselines. The contingency reserve is calculated by multiplying the probability and the impact for the risk event value for each risk event. The sum of the risk events equals the contingency reserve for the project. The sum of the risk events equals the contingency reserve for the project. In this question, the value is $41,700. If Risk D happens, it'll cost the project $35,000. The difference of $35,000 and $41,700 is $6,700.
Answer option A is incorrect. This is the impact of Risk Event
D.
Answer option D is incorrect. $14,000 is the risk event value of Risk Event
D.
Answer option B is incorrect. $41,700 is the amount of the contingency reserve.

**QUESTION NO: 162**

John is the project manager for his organization. Management has asked John to fast track his project in order to reach a particular date for the project completion. When John fast tracks the project what project management component must be updated to reflect this decision? Choose the best answer.

A. Organizational process assets
B. Cost management plan
C. Resource calendars
D. Risk register

**Answer: D**

**Explanation:**
Fast tracking allows phases of the project to overlap and increases risk for the project. When new risks are introduced into the project they should be recorded in the risk register. Risk register is a document that contains the results of the qualitative risk analysis, quantitative risk analysis, and risk response planning. Description, category, cause, probability of occurring, impact on objectives, proposed responses, owner, and the current status of all identified risks are put in the risk register.
Answer option B is incorrect. The costs do not change because of the new fast tracking requirement.
Answer option C is incorrect. Resource calendars show the availability of project resources.
Answer option A is incorrect. Organizational process assets are updated as a result of updating the risk register when you consider that the risk register will become part of the organizational process assets. However, this is not the best answer for this question.

**QUESTION NO: 163**

You are the project manager of the NHQ Project and are trying to determine which seller you should choose for the project. You have received proposals from six vendors and they are all very good proposal, qualified to complete the project work, and the prices are close to the same. You would like to create method of ranking each vendor based and assign a score value to several different categories. Because the project is a high-profile project, you have assigned 25 points to experience and 10 points for all of the other categories to judge the vendors. This is considered what type of source selection process?

A. Screening system
B. Preferred vendor list
C. Benefits-cost analysis
D. Weighting system

**Answer: D**

**Explanation:**
This is an example of a weighting system as the values you're measuring are weighted towards experience.
Answer option B is incorrect. A preferred vendors list describes the vendors you're allowed to choose from in the organization.

Answer option A is incorrect. A screening system sets qualifiers in place, such as the vendor must have a PMP on staff, in order to qualify for the project.
Answer option C is incorrect. The benefits-cost analysis defines the total number of benefits to the number of costs the project requires.

**QUESTION NO: 164**

Frank is the project manager in BlueWell Inc. He is working with his project to subdivide the project work packages into smaller, more manageable components. He and the project team are planning in detail all of the things the team will need to create, purchase, or do in order to satisfy the project scope. Management is concerned with the activity which Frank is using in this scenario, as they believe that Frank is taking too long to complete this pre-execution activity. Which of the following techniques of the activity process is Frank using in this example?

A. Rolling wave planning
B. Expert judgment
C. Creating a project template
D. Decomposition

**Answer: D**

**Explanation:**
This is an example of decomposition. Frank and the project team are subdividing the work packages into smaller, more manageable units called activities. The tools and techniques used in defining the activity process are as follows: Decomposition: It is used to further divide the project work package into a more smaller and convenient form called activities. Rolling Wave Planning: It is a form of progressive elaboration planning where the work to be accomplished in the near term is planned in detail and future work is planned at a higher level of WBS. Templates: It is an activity list or a part of the activity list taken from the previous project and used in a new project. Expert Judgement: The skilled members in a project team or other experts who develop project scope statements can help provide knowledge in defining activities.

**QUESTION NO: 165**

Kelly is the project manager of her organization. She is reviewing the project network diagram to confirm that the resource she has identified is available to complete the project assignments without conflicting with other activities in the project node. The availability of resources will help Kelly determine the final finish date for the project. What scheduling technique is Kelly using?

A. Critical Chain method
B. Resource utilization

C. Critical Path method
D. Resource leveling heuristics

**Answer: A**

**Explanation:**
The Critical Chain method examines the availability of project resources to determine when the resource may be utilized without conflicting with other activities. The Critical Chain method is a project management technique in which schedule network analysis is used for the purpose of modifying and determining a set of project schedules to account for more inadequate than estimated project financial resources. This method tends to keep the resources levelly loaded, but requires the resources to be flexible in their start times and to quickly switch between tasks and task chains to keep the whole project on schedule. In the Critical Chain method, projects are completed more rapidly and with better scheduling consistency.
Answer option C is incorrect. The Critical Path method examines the duration of the critical path to determine the finish date for the project. It does not consider when project activities are available.
Answer option B is incorrect. Resource utilization simply means that the resource is scheduled for work.
Answer option D is incorrect. A resource leveling heuristic is a guideline, such as a maximum of 35 hours per week, per resource. It is a rule that usually signals the maximum amount of hours a resource may be utilized on the project.

**QUESTION NO: 166**

Mary is the project manager for her organization. She is working with the project team to define the project activities. She is concerned about some of the dependencies of the project work, which may affect the project schedule. Which one of the following is the best example of a project constraint that will likely affect the project's ability to finish by a given deadline?

A. The project must use internal team members to complete the project work.
B. The project must adhere to several regulations.
C. The project must use the BGH company to deliver the software portion of the project.
D. The project must not exceed $1,250,000.

**Answer: C**

**Explanation:**
Of all the constraints listed only this is an external dependency, which can directly affect the project manager's control over the project work. If the BGH company is late delivering the software portion of the project, it will likely have an effect on the project's ability to complete the project on time.
Answer option B is incorrect. While regulations may affect the project timing, this is not the best choice.

Answer option D is incorrect. The $1,250,000 is an example of cost constraint.
Answer option A is incorrect. This is only constraint if the project team members are not available, or do not have the required skills to complete the project work.

**QUESTION NO: 167**

You work as a project manager for BlueWell Inc. According to you, which of the following is an output of the Sequence Activities process?

A. Project scope statement
B. Project schedule network diagram
C. Activity list
D. Organizational process assets

**Answer: B**

**Explanation:**
Sequence Activities is one of the twenty processes of the Planning Process group. It is the process of identifying and documenting relationships among the project activities. Inputs Following are the inputs to this activity:
Activity list
Activity attributes
Milestone list
Project scope statement
Organizational process assets
Outputs Following are the outputs of the sequence activities process:
Project schedule network diagrams
Project document updates



**QUESTION NO: 168**

Holly is the project manager of the NDS project and she is 85 percent complete with her project though she should be 95 percent complete. Her project has a BAC of $9,850,400 and she has spent $8,011,221 to date. What is Holly's schedule variance for this project?

A. $163,626
B. $130,901
C. -$985,040
D. 0.16

**Answer: C**

**Explanation:**
The schedule variance for a project can be found by subtracting the planned value from the earned value. In this instance, it would be as follows:
SV = EV - PV
=(0.85*9,850,400) - (0.95*9,850,400)
= 8,372,840 - 9,357,880
=-985,040
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 = Earned Value (EV) - 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.
Answer option B is incorrect. $130,901 is the cost variance.
Answer option A is incorrect. $163,626 is the variance at completion for this project.
Answer option D is incorrect. 0.16 is the difference between the schedule performance index of .84 and a perfect schedule.

**QUESTION NO: 169**

Gary is the project manager of the GHY project. He has elected to use a previous, but similar, project to guide him and the project team through the estimate activity duration process. The previous project schedule could best described as which one of the following?

A. Organizational process asset
B. Lessons learned documentation
C. Process input
D. Predecessor project

**Answer: A**

**Explanation:**
This is an example of an organizational process asset. The previous project is the historical information that the current project can use. This could also be, with a bit more information, an example of an analogous estimate. Organizational process assets are forms, templates, and other support pieces that the project managers can use to help manage their projects. It is usually something that has been created before the project begins and often, but not always, comes from historical information.
Answer option D is incorrect. This is not a valid term for this question.
Answer option B is incorrect. The lessons learned documentation is a separate document that Gary might reference for his current project, but this is not a valid choice.
Answer option C is incorrect. While organizational process assets are inputs to this process, this

choice is not the best selection for the question.

**QUESTION NO: 170**

Anna is the project manager of the NHQ project. Her project has 1,500 stakeholders, some of which are external to her organization. In this project, Anna wants to create a method to classify the stakeholders based on their level of authority and their level of concern regarding the project outcomes. This model will help Anna determine the communication demands and when information should be distributed. What does Anna want to create in this instance?

A. Power/interest grid
B. Salience model
C. Power/influence grid
D. Communications matrix

**Answer: A**

**Explanation:**
Anna needs to create a power/interest grid. This grid groups the stakeholders based on their level of authority and level of concern regarding the project outcomes. The power/interest grid forms a group of the stakeholders based on their level of authority (power) and their level of interest in the project. Interest accounts to what degree the stakeholders are affected by examining the project or policy change, and to what degree of interest or concern they have about it. Power accounts for the influence the stakeholders have over the project or policy, and to what degree they can help to accomplish, or block, the preferred change. Stakeholders, who have high power and interests associated with the project, are the people or organizations that are fully engaged with the project. When trying to generate strategic change, this community is the target of any operation.
Answer option B is incorrect. A salience model classifies stakeholders based on their power, urgency, and legitimacy.
Answer option C is incorrect. A power/influence grid groups the stakeholders based on their power and influence.
Answer option D is incorrect. A communications matrix simply maps which stakeholder need to communicate with other stakeholders.

**QUESTION NO: 171**

You work as the project manager for BlueWell Inc. You are reviewing and regulating the progress to meet the performance objectives defined in the project management plan. Mark, a trainee, has a doubt related to the inputs of monitor and control project work. Which of the following is the input to monitor and control project work?

A. Project document updates
B. Expert judgment
C. Performance report
D. Project management plan updates

**Answer: C**

**Explanation:**
Performance report is an input of monitor and control project work. Reports are prepared by the project team detailing activities, milestones, and problems. A performance report is made by the project team detailing activities, milestones, problems, accomplishments, and identified issues. Performance reports are used to report some key information as follows: Current status Scheduled activities Significant accomplishment for the period Forecasts Issues
Answer option B is incorrect. It is the tool and technique used for monitoring and controlling project work.
Answer options A and D are incorrect. These are the outputs to monitor and control project work.

**QUESTION NO: 172**

You are the project manager of the NAA Project for your organization. You are exploring the possibility of fast tracking in your project. Which of the following statements is most accurate about fast tracking the project?

A. Fast tracking only works if activities can be overlapped to shorten duration.
B. Fast tracking only works if the activities are effort-driven.
C. Fast tracking only works if the activities are resource-driven.
D. Fast tracking only works if activities can have start-to-start relationships.

**Answer: A**

**Explanation:**
Fast tracking is only valid if the activities or phases can be overlapped. Some activities or phases cannot be overlapped due to mandatory dependencies in the project. In other words, the work must be completed in a particular given order. 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.
Answer option C is incorrect. This is not a valid description of fast tracking.
Answer option B is incorrect. Effort-driven or activities of fixed duration can be fast tracked.
Answer option D is incorrect. The relationships among the activities do not have to be start-to-start to be fast tracked.

**QUESTION NO: 173**

Tom is the project manager for the ABC Construction Company. As part of the project scheduling for the construction of a new office building, he has allotted time for the inspectors of the building structure, as well as electrical, plumbing, and safety into the project's schedule. These inspectors can be considered what type of dependency in the project?

A. Mandatory dependencies
B. Required dependencies
C. Discretionary dependencies
D. External dependencies

**Answer: D**

**Explanation:**
An external dependency is any nonproject activity that is external to the project but has a direct impact on the project activities. An external dependency may be an inspector or any agency that may have to give prior approval before the project can move forward.
Answer option B is incorrect. Required dependency is not a valid term to describe a dependency.
Answer option A is incorrect. Mandatory dependencies describe the required order in which the project work must take place - such as foundation before framing, or the operating system installed before the application may be installed.
Answer option C is incorrect. Discretionary dependencies describe the optional order of the project work, such as painting the walls before installing the carpet.

**QUESTION NO: 174**

Tom works as the project manager for BlueWell Inc. He spends the majority of his time communicating with team members and the project stakeholders. Various communication skills are involved in the communication processes. Which communication skills are involved in this process? Each correct answer represents a part of the solution. Choose all that apply.

A. Internal and External
B. Vertical and Horizontal
C. Confronting and problem solving
D. Formal and Informal

**Answer: A,B,D**

**Explanation:**
These are some communication activities that Tom uses to communicate with the team and the stakeholders. Communications skills are part of general management skills and are used to exchange information. Communication has many dimensions: Written and oral, listening, and speaking Internal (within the project) and external (customer, the media, the public) Formal

(reports, briefings) and informal (memos, ad hoc conversations) Vertical (up and down the organization) and horizontal (with peers) Communication is the most important skill that a project manager must posses. It is the single most important characteristics of a top-class project manager. Project managers must communicate well in order to integrate and maximize the performance of team members. Oral and written communications are the backbone of every successful project. During different phases of a project, a project manager requires to communicate through different manners (for example, documentation, meeting updates, etc.) and he must ensure that the information communicated is explicit, clear, and complete.
Answer option C is incorrect. It is a technique to resolve conflict that arises while communicating with different parties.

**QUESTION NO: 175**

Frank is the project manager of a construction project. In this project, Frank has elected to allow the interior design phase of the project to overlap with the pool construction phase of the project. Normally, Frank would not allow these two phases to overlap, but for this project, he has elected to do so in order to compress the project schedule. What is this schedule compression technique called?

A. Resource leveling heuristic
B. Lead time
C. Fast tracking
D. Crashing

**Answer: C**

**Explanation:**
This is an example of fast tracking. Fast tracking allows phases to overlap in order to compress the project schedule.
Answer option D is incorrect. Crashing adds labor to the project in order to complete effort-driven activities in less time.
Answer option B is incorrect. The lead time allows individual activities to overlap, not entire phases.
Answer option A is incorrect. Resource leveling heuristics are rules that limit the amount of time a labor resource may contribute to the project in a given time period.

**QUESTION NO: 176**

You are the project manager of a project that has a budget of $875,000 and you have completed 40 percent of the project work. Due to some errors, however, you have actually spent $425,000 of the budget. Management wants to know what the project's cost performance index is. What value do you report?

A. -$75,000
B. $350,000
C. .82
D. -$187,500

**Answer: C**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instance it's $350,000 divided by $425,000 for a CPI of .82.
Answer option B is incorrect. $350,000 is the earned value of the project.
Answer option A is incorrect. -$75,000 is the cost variance for the project.
Answer option D is incorrect. -$187,500 is the predicted variance at the completion of the project.

**QUESTION NO: 177**

You work as a project manager for BlueWell Inc. Which of the following techniques will you use to determine whether particular work can best be accomplished by the project team or must be purchased from the outside sources?

A. Contract Types
B. Expert Judgment
C. Procurement Negotiations
D. Make-or-Buy Analysis

**Answer: D**

**Explanation:**
A make-or-buy analysis is used to verify whether a particular work can best be accomplished by the project team or must be purchased from outside sources. The budget constraints can influence the make-or-buy decisions. A make-or-buy analysis must consider all related costs; both direct and indirect support costs.
Answer option B is incorrect. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess.
Answer option A is incorrect. The type of contract to be used and the specific contract terms and conditions fix the degree of risk being assumed by the buyer and seller.
Answer option C is incorrect. Negotiations clarify the structure, requirements and other terms of the purchase so that the mutual agreement can be reached prior to signing the contracts.

**QUESTION NO: 178**

You work as a project manager for BlueWell Inc. You have to identify the specific actions to be performed to produce the project deliverables. For this, you have to explain the three inputs for the define activities process to your project team. Which of the following is NOT a valid input?

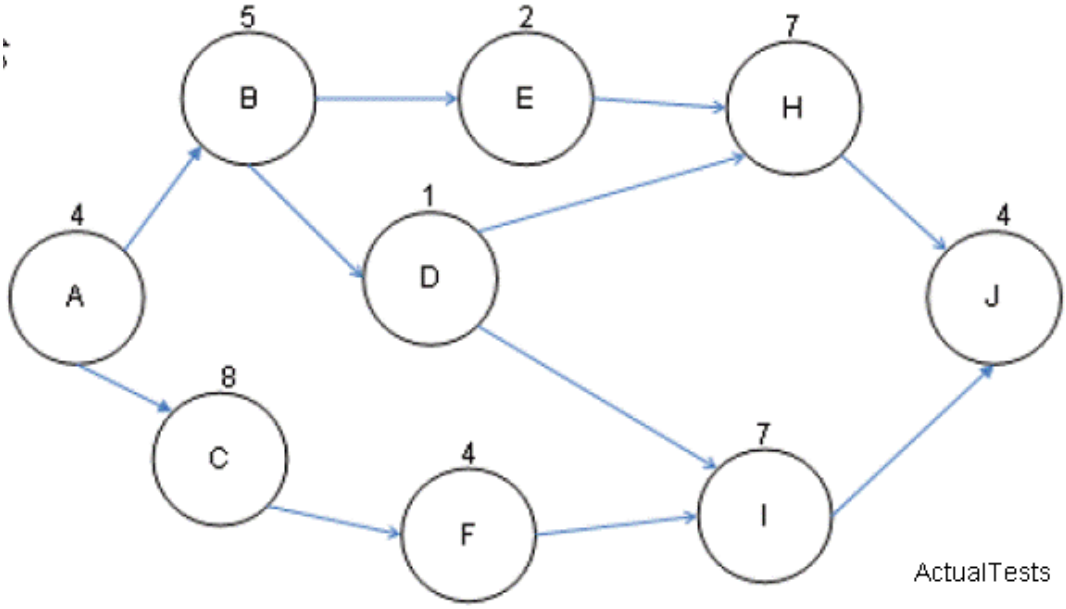
A. Work Breakdown Structure
B. Enterprise Environmental Factors
C. Scope baseline
D. Organizational Process Assets

**Answer: A**

**Explanation:**
Of all the choices, the WBS is the best choice. The entire scope baseline is needed as an input, not just the WBS. The inputs to the Define Activities process are as follows: Scope Baseline: The project constraints, assumptions documented, and deliverables in the project scope baseline are considered while defining activities. Enterprise Environmental Factors: One of the factors that affect the Define Activities process is the project management information system (PMIS). Organizational Process Assets: The assets that can affect the Define Activities process are as follows: 1.The existing proper and unofficial scheduling strategies, procedures, and related policies that are measured in developing the activity definitions 2.The lessons-learned knowledge base containing the past information about activity lists used by similar earlier projects

**QUESTION NO: 179**

Joseph works as the project manager of the NHQ Project. He has created the project network diagram as shown in the figure:




Based on the network diagram, find out which path is the critical path for this project?

A. ABEHJ
B. ABDIJ
C. ABDHJ
D. ACFIJ

**Answer: D**

**Explanation:**
The critical path is the path with the longest duration to complete the project. It has no float and shows the earliest completion date and the latest completion date for the project. In this example, path ACFIJ takes 27 days and is the critical path.
ACFIJ= A(4)+C(8)+F(4)+I(7)+J(4)= 27
A critical path is the sequence of project activities, which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path. These results allow managers to prioritize activities for the effective management of project completion, and to shorten the planned critical path of a project by pruning critical path activities, by "fast tracking" (i.e., performing more activities in parallel), and/or by "crashing the critical path" (i.e., shortening the durations of critical path activities by adding resources).
Answer option A is incorrect. ABEHJ takes only 22 days to complete.
ABEHJ= A(4)+B(5)+E(2)+H(7)+J(4)= 22
Answer option C is incorrect. ABDHJ takes 21 days to complete.
ABDHJ= A(4)+B(5)+D(1)+H(7)+J(4)= 21
Answer option B is incorrect. ABDIJ takes 21 days to complete.
ABDIJ= A(4)+B(5)+D(1)+I(7)+J(4)= 21

**QUESTION NO: 180**

Ned is the project manager of the HYQ Project. In Ned's project, the management has requested that he enforce resource leveling so that the maximum amount of hours in the project per worker will not exceed 25 hours per week. Ned's pay is based on how quickly he can complete the project work. What must Ned do to accommodate the change in the resource allotment if he has to finish the project on time?

A. Crash the project.
B. Add more risk mitigation.
C. Reduce the amount of labor.
D. Reduce the project scope.

**Answer: A**

**Explanation:**
The change in the amount of labor Ned is allowed to use will cause his project schedule to increase thereby affecting the project end date. Crashing the project will allow Ned to add more resources while still keeping each resource to a maximum of 25 hours per week.
Answer option D is incorrect. Ned likely does not have control over descoping decisions.
Answer option C is incorrect. Reducing the project labor is what resource leveling does.
Answer option B is incorrect. Adding risk mitigation won't necessarily help Ned finish the project faster.

**QUESTION NO: 181**

Which of the following processes fall under the Project Integration Management knowledge area? Each correct answer represents a complete solution. Choose all that apply.

A. Quality Assurance
B. Project Plan Development
C. Integrated Change Control
D. Project Plan Execution

**Answer: B,C,D**

**Explanation:**
Project Integration Management is one of the nine Project Management Knowledge areas. It comprises the following processes:
Develop Project Charter
Develop Preliminary Project Scope Statement
Develop Project Management Plan

Direct and Manage Project Execution
Monitor and Control Project Work
Integrated Change Control
Close Project
These processes occur throughout the project and are repeated quite often during the working of the project. They ensure that the various elements of the project are properly coordinated. What are the Project Management Knowledge Areas? The Project Management Knowledge Areas are groupings that bring together processes that have things in common. For example, Resource Planning, Cost Estimating, Cost Budgeting, etc., are part of the Project Cost Management knowledge group. These processes may or may not be part of different or same process groups. Guide to the PMBOK identifies forty- two processes that are arranged in nine knowledge areas. The knowledge areas are as follows:
Project Integration Management
Project Scope Management
Project Time Management
Project Cost Management
Project Quality Management
Project Human Resource Management
Project Communications Management
Project Risk Management
Project Procurement Management
Answer option A is incorrect. Quality Assurance is a part of the Project Quality Management knowledge area.

**QUESTION NO: 182**

Don is the project manager of the NQP project for his organization. This project is scheduled to last for 18 months and will have several elements of the project that have government regulations. Management is concerned with the regulations and would like Don to report on the activities that will be affected by the regulations. Which of the following documents should Don refer to, for the information on the activities and the regulations?

A. Risk management plan
B. Activity list
C. Activity list and attributes
D. Risk register

**Answer: C**

**Explanation:**
The activity list and the attributes will contain the information about the activities that interact with the government regulations.

Answer option A is incorrect. The risk management plan communicates how the risks will be identified, analyzed, responded to, and monitored.
Answer option D is incorrect. The risk register is a list of all the risk events for the project.
Answer option B is incorrect. The activity list is not a detailed enough answer for this question.

**QUESTION NO: 183**

You are the project manager for your organization. You have been recording the actual results of activity duration for your project. Many of the results are late and this is causing your project to be late on reaching its milestones. What tool and technique can you use as a part of controlling the schedule to help you review various scenarios to bring the schedule into alignment with the plan?

A. What-if scenario analysis
B. Root cause analysis
C. Schedule analysis
D. Resource leveling

**Answer: A**

**Explanation:**
Of all the choices, the what-if scenario analysis allows you to determine the best approach to bring the schedule back into alignment with the project plan. What-if scenario analysis explains the analysis of the question "What if the situation represented by scenario 'X' happens?". This What-If Scenario Analysis shortly named as WIS

A. A schedule network analysis is performed using the schedule to compute the different scenarios, such as extending specific engineering durations, or delaying a major component delivery. Businesses use what-if scenarios to determine the effect different costs or investments have on profit and other financial indicators.
Answer option D is incorrect. Resource leveling can cause your project's duration to increase.
Answer option C is incorrect. Schedule analysis is the review of the schedule, but does not examine other possibilities for completing the project work.
Answer option B is incorrect. Root cause analysis could help you determine the reasons why the project is running late, but it is not the best choice for this question as it is not a control schedule process tool and technique.

**QUESTION NO: 184**

You are the project manager of a software development project. Your project team will be creating a web-based software application that will allow your company's customers to browse your website, search inventory, and place orders among other things. Your project team will, on a regular basis, need to update their computer virus prevention software, update their operating

systems, and perform other maintenance on their computers in order to complete the project. This maintenance work is not directly tied to the project deliverables, but it is needed in order for the project to be completed. What term best describes this maintenance work?

A. Project management overhead
B. Discrete effort
C. Level of effort
D. Cost of conformance to quality

**Answer: C**

**Explanation:**
The level of effort term describes the ongoing maintenance associated with the project work, but not a contribution to the deliverables of the project work. Level of Effort (LOE) is a project activity which must be done to support other work activities or the entire project effort. It usually consists of short amounts of work which must be repeated periodically. LOE is used to define the amount of work performance within a period of time and is measured in man days or man hours per day/week/month.
Answer option B is incorrect. Discrete effort describes the activities that can be linked directly to the project work packages.
Answer option A is incorrect. Project management overhead is an example of apportioned effort.
Answer option D is incorrect. The cost of conformance to quality describes the dues, such as the subscription for the anti-virus software that must be spent, so the project can reach its objectives.

**QUESTION NO: 185**

You are the project manager for the GHB Organization. Management has asked that you review your recent SPI to determine why there was a schedule variance. They'd also like you to explain what approach you'll do to counteract the SPI going forward in the project. You complete the variance analysis and report to management that you'll be fast tracking a portion of your project work. What will be the management's concern with, when it comes to fast tracking the project?

A. Added costs for the additional project labor
B. Added risk
C. Continued variances in the SPI
D. Slippage in the project quality

**Answer: B**

**Explanation:**
When the project manager elects to use fast tracking the project manager is allowing phases of the project to overlap. When phases overlap there is added risk to the project. 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.
Answer option C is incorrect. Management's greatest concern is about the added risks of fast tracking and not about the SPI.
Answer option A is incorrect. Costs are added when the project manager elects to crash a project.
Answer option D is incorrect. Quality may suffer, but the most prominent concern is the added risks to the project work.

**QUESTION NO: 186**

Donna's project has a budget at completion of $1,987,560 and she is currently 40 percent complete. Her project schedule called for her to be 45 percent complete but there have been some complications in the project. These complications have caused Donna to spend $125,000 more than what the work she has completed is worth. Based on this information what is the cost performance index (CPI) for Donna's project?

A. 86
B. $920,024
C. .90
D. .86

**Answer: D**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instance, the actual costs are $125,000 more than what the work is worth, which means you'll need to find the earned value, $795,024 and add $125,000 to find the actual costs of the project, which are $920,024.
Answer option A is incorrect. This is a trick as 86 is not the same value as .86. On your PMP exam pay attention to these little details.
Answer option C is incorrect. .90 is slightly more than the Schedule Performance Index of this project.
Answer option B is incorrect. This value represents the actual cost of the project.

**QUESTION NO: 187 CORRECT TEXT**

Fill in the blank with an appropriate phrase. The _____is defined in terms of either the product or the type of customer or industry sector.

Answer: Application area

**QUESTION NO: 188**

You are the project manager for your organization. Your project is doing fine on time and cost, but management wants to address the project performance for future accomplishment. Management has asked you to begin reporting and forecasting your project's health based on a moving average, extrapolation, trend estimation, and growth curve. What type of forecasting method is management asking you to use?

A. Judgmental methods
B. Causal/econometric methods
C. Time series methods
D. Estimate at completion method

**Answer: C**

**Explanation:**
These are examples of a time series method for forecasting project performance. Another method that fits with the time series method of forecasting is earned value management. Forecasting is the process of estimating or predicting in unknown situations. Forecasting is about predicting the future as accurately as possible with the help of all the information available, including historical data and knowledge of any future events that might impact forecasts. The forecasting methods are categorized as follows: Time series method: It uses historical data as the basis for estimating future outcomes. Causal/econometric method: This forecasting method is based on the assumption that it is possible to identify some factors that might influence the variable that is being forecasted. If the causes are understood, projections of the influencing variables can be made and used in the forecast. Judgmental method: Judgmental forecasting methods incorporate intuitive judgments, opinions, and subjective probability estimates. Other methods: Other methods may include probabilistic forecasting, simulation, and ensemble forecasting.
Answer option B is incorrect. Causal/econometric methods do not use the moving average, but models such as linear regression and non- linear regression.
Answer option A is incorrect. Judgmental methods for forecasting are based on intuition, opinions, and probability estimates.
Answer option D is incorrect. The estimate at completion method is an earned value management formula, which is part of the time series method for reporting and forecasting performance.

**QUESTION NO: 189**

Kenny is the project manager for the NHQ organization. She is creating the project duration estimates. She has stressed to her project team that they will need to create accurate and reliable project duration estimates without padding their estimates for errors or risks. Kenny is also relying

on historical information to help her predict the duration of the project work. Jennifer, one of the project team members, wants to know how Kenny will account for the certain-to-happen errors and delays in the project schedule. What approach should Kenny use in the project?

A. Rewards and recognition for completing the project work without delays
B. Analogous estimating
C. Three-point estimates
D. Management reserve

**Answer: D**

**Explanation:**
Management reserve is an allotment of time added to the end of the project schedule. When delays happen within the project, the delays are subtracted from the management reserve.
Answer option C is incorrect. Kenny is not using a three-point estimate in this instance.
Answer option A is incorrect. Rewards and recognitions are a good incentive for accurate work, but errors and delays may still happen and the rewards would not necessarily prevent delays in the project.
Answer option B is incorrect. Kenny may be using some type of analogous estimating to predict activity duration, but the best answer is the reliance on the management reserve.

**QUESTION NO: 190**

John is the project manager for the ABC project. He is finalizing the budget of the project. He is concerned about the direct costs involved in the project. Which of the following can be considered a direct cost in the project?

A. Cost of electrical utilities
B. Salaries of management directly involved in the project
C. Subcontract cost
D. Accounting support cost

**Answer: C**

**Explanation:**
Direct costs can be traced directly to a cost object such as a product. In other words, direct costs do not have to be allocated to a product, department, or other cost object. For example, if a company produces Chairs, the cost of the wood and the cost of the carpenter are direct costs. These costs are traceable by the production department. On the other hand, the rent of the production area, warehouse, and office is not a direct cost.
Answer options A, D, and B are incorrect. These are examples of indirect costs.

**QUESTION NO: 191**

Which of the following group activity techniques allows a large number of ideas to be sorted into groups for review and analysis?

A. Idea/mind mapping
B. Nominal group technique
C. Delphi technique
D. Affinity diagram

**Answer: D**

**Explanation:**
The various group creativity techniques are as follows: Brainstorming: It is a technique used to generate and collect multiple ideas related to the project and product requirements. Nominal group technique: It is a technique used to enhance brainstorming with a voting process used to rank the most useful ideas for further brainstorming or prioritization. Delphi technique: It is a techniques used to identify potential risk. In this technique, the responses are gathered via a questionnaire from different experts and their inputs are organized according to their contents. Idea/mind mapping: It is a technique used to map the ideas generated by brainstorming to reflect the commonality and differences in understanding and generating new ideas. Affinity diagram: It is a technique used to allow a large number of ideas to be sorted into groups for review and analysis.

**QUESTION NO: 192**

Which of the following techniques is used to perform 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?

A. Imminent activity management
B. Predecessor-only diagramming
C. Rolling wave planning
D. Decomposition

**Answer: C**

**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 options B and A are incorrect. These are not valid project management terms.
Answer option D is incorrect. Decomposition is the process of breaking down work packages into the activity list.

**QUESTION NO: 193**

You're a project manager and you've completed your project schedule. The schedule will take 18 months to complete the project work. Throughout the schedule there are instances that the project work will require the project team members to work more than fifty hours per week. If you must adhere to a maximum of 45 hours of project work per team member, per week, what will likely happen to your project schedule as it stands right now?

A. Nothing, the 45 hours limit is a guideline.
B. The project will take longer to complete.
C. The project will take less time to complete.
D. The project will require more resources.

**Answer: B**

**Explanation:**
If a resource leveling heuristic, such as 45 hours maximum per time period, is enforced on the project, then the project schedule will take longer to complete. What is resource leveling heuristics? Resource leveling heuristics is a prioritization method that allocates inadequate resources to critical path activities first. It is a schedule network analysis technique useful to a schedule that has already been analyzed by the critical path method. It is used when shared or critical essential resources are only available at certain times, in limited quantities, or to keep resource usage at a constant level. It is a technique that resolves resource conflicts by delaying tasks within their slack allowances. Resource leveling is the process in which project teams come across problems when developing their project schedules. If a company has multiple projects running simultaneously that require the same resources, then problems can arise. It can often cause the critical path method to change.
Answer option A is incorrect. The 45-hour limit is a restriction on the project.
Answer option C is incorrect. The project will not take less time to complete because the project team members won't be able to complete as much work in the same amount of time.
Answer option D is incorrect. The project may require more resources if the project manager and management want the project to finish by a particular date. In this question, however, the focus is on what will happen to the project schedule, not the project staffing.

**QUESTION NO: 194**

A project team installs 2,500 light fixtures in a new office building, and each light fixture takes one hour to install. The project manager can predict that it will take 2,500 hours to complete the work.

However, which of the following statements most accurately describes this parametric estimate assumption?

A. As workers complete the installation, efficiency will increase and durations will decrease.
B. As workers complete the installation, errors and risks will increase the actual completion.
C. As workers complete the installation, effort will diminish and efficiency will decrease.
D. As workers complete the installation, labor will diminish so duration will increase.

**Answer: A**

**Explanation:**
When project team workers complete repetitive tasks, efficiency through learning will diminish the overall duration of the project tasks. A parametric estimate is an estimate that uses a parameter to predict the costs of the project, such as cost per network drop or cost per software license. Parametric estimating technique utilizes the statistical relationship that exists between a series of historical data and a particular delineated list of other variables.
Answer options B, D, and C are incorrect. These are not the valid statements.

**QUESTION NO: 195**

Andy is the project manager for his project. Andy and his project team are identifying stakeholders who can significantly impact the project, what the level of participation for each identified stakeholder may be, and classifying the stakeholders by common characteristics, concerns, and their perception of the project. Andy and his project team want to define an approach as a result of this information to gain support from the stakeholders for their project. What should Andy and his project team create in this scenario?

A. Stakeholder assessment information
B. Stakeholder register
C. Communications management plan
D. Stakeholder management strategy

**Answer: D**

**Explanation:**
Andy and his project team are creating the stakeholder management strategy. The goal is to identify a method to gain support through communications for the project. The stakeholder management strategy is an approach to raise the support and decrease negative impacts of stakeholders during the complete project life cycle. It consists of the following essential elements: Key stakeholders who can significantly impact the project Level of participation in the project desired for each identified stakeholder Stakeholder groups and their management
Answer option B is incorrect. The stakeholder register contains the stakeholder's identification information, assessment information, and stakeholder classification, but not the management

strategy.
Answer option A is incorrect. Stakeholder assessment information is part of the stakeholder register.
Answer option C is incorrect. The communications management plan defines how and when communication will happen.

**QUESTION NO: 196**

You are the project manager of the NHQ project. Your project has a budget of $1,258456 and is scheduled to last for three years. Your project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, you have spent $525,000. Management needs a performance report regarding the NHQ project. Management is concerned that this project will be over budget upon completion. Based on the current performance value what should you report to management regarding the variance at completion?

A. -$21,618
B. -$62,922
C. Zero - you would not know what this will cost until the project is complete.
D. -$54,044

**Answer: D**

**Explanation:**
The variance at completion can be found by subtracting the estimate at completion from the budget at completion. In this instance, it is:
Variance at completion = EAC - BAC
= $1,258,456 - $1,312,500.
= -$54,044
Answer option C is incorrect. You can calculate the variance at completion.
Answer option A is incorrect. This is the cost variance for the project.
Answer option B is incorrect. This is the schedule variance for the project.

**QUESTION NO: 197**

You work as a Project Manager for Tech Perfect Inc. Several projects are running under your supervision. Martha, the team leader of a project, provides you performance indexes of her project. The cost variance (CV) of her project is -20. What does this figure depict?

A. Spending is right on target.
B. Costs are lower than planned.
C. The project is behind schedule.

D. Costs are higher than planned.

**Answer: D**

**Explanation:**
According to the question, the cost variance of the project is -20, which is a negative figure. The negative CV depicts that the costs are higher than planned. What is CV? Cost variance (CV) is a measure of cost performance on a project. The variance notifies if costs are higher than budgeted or lower than budgeted. The cost variance is calculated based on the following formula: CV = Earned Value (EV) - Actual Cost (AC) A positive value means that spending is less than budgeted, whereas a negative value indicates that costs are higher than originally planned for the project.
Answer option B is incorrect. This result is drawn when the CV value is positive.
Answer option A is incorrect. If the CV is zero, it shows that spending is right on target.
Answer option C is incorrect. This result is depicted by viewing the schedule variance (SV), not the CV. What is SV? 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 = Earned Value (EV) - 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.

**QUESTION NO: 198**

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 are likely to be only 60 percent complete. Your project has a BAC of $745,000 and you have spent $440,000 of the budget-to-date. What is your cost variance for this project?

A. 11,667
B. $-111,750
C. There is no variance.
D. $7,000

**Answer: D**

**Explanation:**
The cost variance is the earned value minus the actual costs. In this project, you have spent less than what the project is worth, so the project has a positive cost variance. Cost variance (CV) is a measure of cost performance on a project. The variance notifies if costs are higher than budgeted or lower than budgeted. The cost variance is calculated based on the following formula: CV = Earned Value (EV) - Actual Cost (AC) A positive value means that spending is less than budgeted, whereas a negative value indicates that costs are higher than originally planned for the project.
Answer option B is incorrect. -$111,750 is the cost variance of the project.

Answer option A is incorrect. This is the variance at completion for the project.
Answer option C is incorrect. There is a cost variance, albeit a positive one.

**QUESTION NO: 199**

You work as a Project Manager for Tech Perfect Inc. Several projects are running under your supervision. Martha, a team leader of a project, informs you about the performance indexes of her project. The schedule performance index (SPI) of her project is 0.835. What does this figure indicate?

A. The schedule performance is right on target.
B. The schedule performance is better than expected.
C. The cost performance is better than expected.
D. The schedule performance is below expectation.

**Answer: D**

**Explanation:**
According to the question, the SPI of Martha's project is 0.835. This figure is less than 1. Hence, it shows that the schedule performance is below expectation. What is SPI? 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 options B and A are incorrect. An SPI value of 1 or above indicates that the schedule performance is either right on target or better than expected.
Answer option C is incorrect. SPI has nothing to do with cost performance.

**QUESTION NO: 200**

Sam works as a project manager for BlueWell Inc. Which of the following processes will he use for selecting a scheduling method, scheduling tool, incorporating project specific data within that scheduling tool to develop a project specific schedule model, and generating project schedule?

A. Constructability Analysis process
B. Schedule Maintenance process
C. Schedule Development process
D. Perform Integrated Change Control process

**Answer: C**

**Explanation:**

The schedule development process is used for selecting a scheduling method, scheduling tool, incorporating project specific data within that scheduling tool to develop a project specific schedule model, and generating project schedule. Schedule development is the process of analyzing activity sequences, durations, resource requirements, and schedule constraints to create the project schedule. Inserting the activities, durations, and resources into the scheduling tool generates a schedule with planned dates for completing the project activities. The goal of the schedule development is to form the processes such that the stakeholders can use it in the creation of the project. Schedule development consists of two main sections:

ArticlesItemsReportsHelp

1.Input and Data: The starting point for any schedule is the input of information developed during the planning process.

Define schedule scope

Breakdown structure relationships

Schedule specification

Feedback from stakeholders

Cost estimate model

2.Creating Schedule: This process provides basic knowledge in an outline structure for a study of the means, methods, and tools necessary for the project schedule development process.

Types of schedules

Activities

Durations

Relationships

Constraints and calendars

Cost and resource loading

Schedule quality analysis and compliance review

Schedule basis documentation

Answer option B is incorrect. Schedules maintenance is a method to account progress and to forecast trends, progress, and completion. Schedules are used to manage successful execution of projects. A schedule models the plan using resources and execution strategy to gather the project objectives. Periodic updates are undertaken to determine the actual progress achieved. Information obtained in the updating process, along with trend analysis and forecast of future progress, is reported to stakeholders. These progress updates include schedule maintenance to account for nominal changes to the execution plan. Depending upon the nature of change, the schedule and assumptions upon which the schedule was based significantly change. The schedule must be re-examined and updated, as necessary, to develop a new baseline for measuring further progress. Schedule maintenance consists of the following elements:

Baseline Schedule

Tracking Schedule Progress

Cost and Resource Management

Schedule Change Management

Acceleration

Schedule Maintenance Feedback

Answer option D is incorrect. Perform Integrated Change Control is the process of reviewing all change requests, approving changes, and controlling changes to the deliverables and organizational process assets in a project. Perform Integrated Change Control has to do with influencing the things that cause change, determining that the change is required or has happened, and managing the change.

Answer option A is incorrect. Constructability analysis is a process that starts in the initial planning phases and persists all over the entire planning cycle and into the implementation phase of the project. Constructability analysis during the planning process examines the methods and cost of installed equipment and materials, technology, site conditions, resources, and related infrastructure. The benefit of constructability analysis is to reduce both the time and cost of a project. Constructability analysis is repeatedly performed throughout the life-cycle of a project in order to optimize cost, plan, and schedule while mitigating risk. It is a very important process that needs to be performed early in planning to allow alternatives to be considered and integrated into the design.

**QUESTION NO: 201**

Which of the following processes involves the periodic collection and analysis of baseline versus actual data to understand and communicate the project progress and performance as well as to forecast the project results?

A. Identify stakeholders
B. Performance reporting
C. Plan communications
D. Stakeholder analysis

**Answer: B**

**Explanation:**

The report performance process is used for gathering and distributing performance information. It consists of status reports, progress measurements, and forecasts. The report performance process contains the periodic collection and analysis of baseline versus actual data to understand and communicate the project progress and performance as well as to forecast the project results.

Answer option A is incorrect. Identify stakeholder process is used to identify all people or organizations impacted by the project and document relevant information regarding their interest, involvement, and impact on project success.

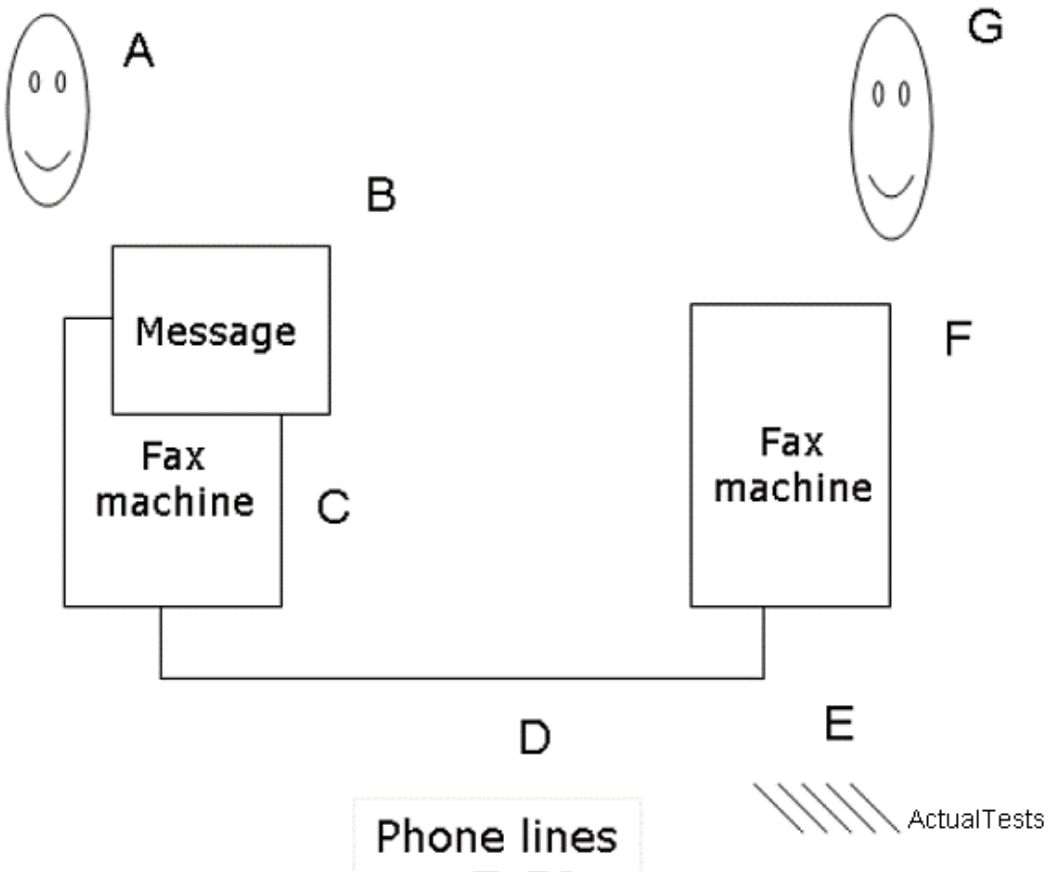
Answer option C is incorrect. Plan communication is the process of determining the project stakeholder information needs and defining a communication approach.

Answer option D is incorrect. Stakeholder analysis is the identification of stakeholder needs, wants and expectations. It involves the documentation, prioritization, and quantification of the needs to help define the project scope. Stakeholders' interests may be positively or negatively affected by

execution or completion of the project and they may also exert influence over the project and its deliverables.

**QUESTION NO: 202**

The figure given below demonstrates the communications model for a project. What role does component C play in the communication model?




A. Encoder
B. Transporter
C. Sender
D. Medium

**Answer: A**

**Explanation:**
The fax machine is the encoder of the message. The communication model shows the traversal of information between two hosts, known as the sender and the receiver. The key components of the model are as follows: Encode: It is used to crypt or code the message into a language that is understood by others. Decode: It is used to decrypt the message back into the meaningful codes. Message and feedback message: It is the output of encoding. Noise: It is referred to anything, which interferes with the transmission and understanding of the message. Medium: It is the method used to convey the message. In the communication process, it is the duty of the sender to send clear and complete information to the receiver so that it is properly received by the receiver,

and for confirming that it is properly understood. The duty of the receiver is to make sure that the information received is understood and acknowledged properly. A failure in communication can negatively impact the project.
Answer option C is incorrect. The sender is the person sending the message.
Answer option D is incorrect. The medium is the telephone lines between the two fax machines.
Answer option B is incorrect. The transporter is not a valid term for the communication model.

**QUESTION NO: 203**

Mark is the project manager of the NHQ Project. Mark wants to create a salience model as part of his communications planning and scheduling. What does a salience model do for a project?

A. Describes classes of stakeholders based on their power, urgency, and legitimacy.
B. Classifies stakeholders based on their influence and impact.
C. Describes classes of stakeholders based on their power and influence.
D. Groups stakeholders based on their power and interest.

**Answer: A**

**Explanation:**
A salience model uses three values to classify stakeholders: power, urgency, and legitimacy in the project. The salience model is a technique for categorizing stakeholders according to their importance. The various difficulties faced by the project managers are as follows: How to choose the right stakeholders? How to prioritize competing claims of the stakeholders communication needs? Stakeholder salience is determined by the evaluation of their power, legitimacy and urgency in the organization. Power is defined as the ability of the stakeholder to impose their will. Urgency is the need for immediate action. Legitimacy shows the stakeholders participation is appropriate or not. . The model allows the project manager to decide the relative salience of a particular stakeholder.
Answer option D is incorrect. This is a description of a power/interest grid.
Answer option B is incorrect. This is a description of an influence/impact grid over the project.
Answer option C is incorrect. This is a description of a power/impact over the project.

**QUESTION NO: 204**

You are the project manager for the GHY Project. This project has stakeholders, both internal and external, that need to receive performance reports from you on a regular basis. You have decided that in addition to emailing the weekly performance report, you will also keep the performance reports available on your secured project management Website. The Website is an example of what type of communication reporting?

A. Pull
B. Push
C. Passive
D. Asynchronous

**Answer: A**

**Explanation:**
A Website is an example of a pull communication. This means the information is available, but the reader must go to the source and retrieve the information. Pull communication is defined by what the reader wants and what interests he has in retrieving the information. In other words, the information is available, but the reader must go to the source and retrieve the information. This type of communication is used by advertising agencies to draw clients into retail establishments to receive messages. Customers decide on when and how they will act on the messages in the pull model of communications. Some virtual examples of pull communication are:
Blogs
Wikipedia
Websites
Answer option D is incorrect. This does not describe the communication model or how information is distributed.
Answer option C is incorrect. Passive communication is a not a project management term to describe communications.
Answer option B is incorrect. Push communication describes the process of delivering the communication to the recipients, such as through email.

**QUESTION NO: 205**

You work as a project manager for BlueWell Inc. You and your project team is undergoing the decision making process for the project. You want to involve key participants to gain acceptance and commitment to make the solution work. Which of the following phases of the decision- making model defines this process of work?

A. Ideas to action
B. Problem definition
C. Problem solution generation
D. Solution action planning

**Answer: D**

**Explanation:**
The various phases of the decision making process are as follows: Problem definition: This phase explores, clarifies and defines the problem. Problem solution generation: This phase draws out the new idea generating process by brainstorming multiple solutions and rejecting premature

decisions. Ideas to action: This phase defines the evaluation criteria, rate pros and cons of alternatives and helps in selecting the best solution. Solution action planning: This phase involves key participants to gain acceptance and commitment to make the solution work. Solution evaluation planning: This phase performs the post implementation analysis, evaluations and lessons learned. Evaluation of the outcome and process: This phase evaluates how well the problem was solved or project goals were achieved.

**QUESTION NO: 206**

Billy is the project manager of the PQW Project and she has an assigned project budget of $655,000. Currently she is 80 percent complete with the project though she was scheduled to be 100 percent done by this date. She has spent $490,000 to date and other than the project schedule, which was delayed because of a vendor, the project is going well. What should Billy report as her schedule performance index for this project?

A. 1.23
B. 100 percent because the vendor caused her lateness
C. .80
D. $524,000

**Answer: C**

**Explanation:**
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. You can find the planned value by multiplying where Billy should be in the project, 100 percent, by the project's budget. In this instance the planned value is $655,000 because she is to be 100 percent complete.
Answer option B is incorrect. The SPI simply reports a value not an explanation.
Answer option A is incorrect. 1.23 is the cost performance index for the project.
Answer option D is incorrect. $524,000 is the earned value for the project.

**QUESTION NO: 207**

Which of the following techniques is used in businesses to determine the effect different costs or investments have on profit and other financial indicators?

A. Schedule analysis

B. Resource leveling
C. What-if scenario analysis
D. Root cause analysis

**Answer: C**

**Explanation:**
What-if scenario analysis explains the analysis of the question "What if the situation represented by scenario 'X' happens?". This What-If Scenario Analysis shortly named as WIS

A. A schedule network analysis is performed using the schedule to compute the different scenarios, such as extending specific engineering durations, or delaying a major component delivery. Businesses use what-if scenarios to determine the effect different costs or investments have on profit and other financial indicators.
Answer option A is incorrect. The schedule analysis is the review of the schedule, but does not examine other possibilities for completing the project work.
Answer option D is incorrect. The root cause analysis helps to determine the reasons why the project is running late.
Answer option B is incorrect. The resource leveling causes the project's duration to increase. It is a technique that resolves resource conflicts by delaying tasks within their slack allowances. The resource leveling is the process in which project teams come across problems when developing their project schedules.

**QUESTION NO: 208**

Allen is the project manager for his organization. He is reviewing the resource requirements for his organization. He has discovered that his project needs Henry, the application developer, for two months, but Henry has a conflict and is already scheduled with another project manager in the organization. This is an example of which of the following?

A. Resource competition
B. Matrix organization
C. Resource requirement
D. Resource constraint

**Answer: D**

**Explanation:**
Because this project needs the specific resource of Henry, the application developer, and Henry is not available, it is considered as a resource constraint. Recall that a constraint is anything that limits the project manager's option.
Answer option C is incorrect. A resource requirement is simply the need for an application developer.

Answer option B is incorrect. This is likely a matrix organization, but it is not the best answer for this question.
Answer option A is incorrect. While there may be some competition for skilled resources, such as Henry, the application developer, it is not the best answer for this question.

**QUESTION NO: 209**

Della works as a Project Manager for BlueWell Inc. A number of projects are running under her guidance. You, being a team leader of a project, provide Della the performance indexes of your project. The schedule variance (SV) of your project is zero. What does this figure depict?

A. Project is right on target.
B. Project is ahead of the schedule.
C. Project is behind the schedule.
D. Costs are higher than planned.

**Answer: A**

**Explanation:**
According to the question, the schedule variance (SV) of the project is zero. A value of 0 indicates that the project is right on target. 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 = Earned Value (EV) - 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.
Answer option C is incorrect. The negative SV means that project is behind the schedule.
Answer option D is incorrect. This result can be drawn by looking at the cost variance (CV) of the project.
Answer option B is incorrect. The positive SV depicts that the project is ahead of the planned schedule.

**QUESTION NO: 210**

You are the project manager of the NQQ project. You are working with your project team to create the activity duration estimates for the project. For each reported activity duration, your project team offers you an addition of five percent extra time for risks, errors, or aggressive estimating. What does Parkinson's Law state about this scenario?

A. Work expands to fulfill the amount of time allotted to it.
B. Risks will be allowed into activities in which management creates risk provisions.

C. Laborers will create errors when time has been allotted for errors to exist.
D. Errors will be allowed into assignments when management creates error opportunity.

**Answer: A**

**Explanation:**
Parkinson's Law states that the work will expand to fulfill the time allotted to it. When you allow five percent additional time per activity the work will expand to consume the additional time that has been allotted to the project task. In other words, activities will not be completed early even if there are no errors or risks.
Answer options B, D, and C are incorrect. These are not the valid definitions of Parkinson's Law.

**QUESTION NO: 211**

You work as a project manager for BlueWell Inc. You are going through a project with your project team. Some of your project team members are reporting that their activities are running late because there are lag times between activities that do not need to be there. You examine the schedule and see that the lag times have been incorporated into the project schedule for quality control reviews. You also learn that the quality control reviews are not being completed as planned. What is the best approach in this scenario?

A. Since the quality control inspections are not being completed, remove the lag time from the project.
B. Take corrective action and determine when the quality control inspection has happened so far in the project, perform quality control on the deliverables where the inspection was skipped, and ensure that quality control will happen from this point forward.
C. Since the quality control inspections are not being completed, take corrective action and ensure that the inspections continue from this point forward.
D. Discuss with the project team that the lag times should not affect the project schedule because they were built into the project schedule to begin with. Even if the quality control inspections were happening the time was allotted in the schedule for the inspections.

**Answer: B**

**Explanation:**
The best answer is to make certain quality control happens in the project. This means reviewing past work and ensuring that future inspections are met.
Answer option A is incorrect. Removing the lag time does not solve the problem. It actually removes quality control requirements.
Answer option C is incorrect. Only inspecting future work for quality control ignores potential past quality issues in the project.
Answer option D is incorrect. While this answer is technically correct, it does not address the quality faults that may be creeping into the project deliverables.

**QUESTION NO: 212**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are upposed to be at your second milestone, which accounts for half of the project completion. There have been some errors in the project, which has caused you to spend $2,073,654. Based on the estimate at completion, what is this project's to-complete performance index?

A. -$108,120
B. 1.02
C. $4,608,120
D. 0.98

**Answer: D**

**Explanation:**
The to-complete performance index when based on the estimate at completion uses the formula (BAC-EV)/(EAC-AC). In this instance, the answer is 0.98, which means the project is likely to reach its performance objectives. To-complete Performance Index (TCPI) is the measured projection of the anticipated performance required to achieve either the BAC or the EA
C. 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 B is incorrect. This is the value of TCPI using the BAC approach.
Answer option C is incorrect. This is the estimate at completion for this project.
Answer option A is incorrect. -$108,120 is the variance at completion



**QUESTION NO: 213**

Gary is the project manager for his organization. The projects that Gary manages for project customers are often very similar in nature so Gary uses a schedule network template to help plan the project work. For Gary's current project, he has used a network template that includes just a portion of the project work adapted to the current project. When Gary uses a portion of a network template diagram this is called what term?

A. Analogous
B. Hanger
C. Fragment network

D. Parametric

**Answer: C**

**Explanation:**
This is an example of a fragment network. By adapting the network template to the current project and just using a portion of the template, the template is fragmented. A schedule network diagram template is used to speed up the preparation of networks of project activities. It comprises of the whole project, or a portion of the project activity. The various parts or portions of a project schedule network diagram are known as a subnetwork or a fragment network. When projects have related necessities and components, project managers can develop more efficient network diagrams by using the schedule network diagram templates.
Answer option D is incorrect. Parametric is an estimating technique that uses a parameter, such as $199 per installation, for a group of installation activities.
Answer option A is incorrect. Analogous estimates use historical information to predict the cost or duration of the current project.
Answer option B is incorrect. While this term, sometimes, describes a task within the project network diagram that does not connect to other paths, it is not a valid term.

**QUESTION NO: 214**

You are the project manager for your organization. You are working with your virtual team to create activity duration estimates for your current project. This virtual team is comprised of team members from around the world. Much of this process will be completed by geographical locations though some conferences will require all the team members to participate and to coordinate the activities that will interact between the different sites. The project manager must consider all of the following when creating the activity duration estimates except for which one?

A. Project calendar
B. Critical path
C. Resource calendar
D. Time zone differences

**Answer: B**

**Explanation:**
When it comes to creating the project's activity duration estimating, the critical path is not yet a concern. The critical path will be determined by the duration of the project activities and the sequencing of the project events. A critical path is the sequence of project activities, which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path

is called a sub-critical or non-critical path. These results allow managers to prioritize activities for the effective management of project completion, and to shorten the planned critical path of a project by pruning critical path activities, by "fast tracking" (i.e., performing more activities in parallel), and/or by "crashing the critical path" (i.e., shortening the durations of critical path activities by adding resources).
Answer option C is incorrect. The resource calendar must be considered for the availability of the project resource.
Answer option A is incorrect. The project calendar must be considered to determine when the project work is allowed to take place in the different sites.
Answer option D is incorrect. Time zone differences must be considered for communication demands and coordination of events between the geographical sites.

**QUESTION NO: 215**

You are the project manager for your organization. You are discussing an upcoming project with management and they would like you to begin decomposing the project work packages into activities as soon as possible. You have explained to the management that you would like to involve your roject team before the decomposition of the work packages begins. Why would you want your project team to involve in this activity?

A. To understand the exact type of work the project team will be completing
B. To help the activity go faster
C. To get better and more accurate results through the decomposition
D. To create assignments for the project team as the activities are discussed

**Answer: C**

**Explanation:**
Involving the project team is needed as part of the work package decomposition to get better and more accurate results. The project team comprises the people completing the work and often the experts that can direct the discussion and decomposition efforts. The decomposition technique is used to further divide all project deliverables into smaller component activities. Activities correspond to the effort required to complete a work package. Each and every work package in the WBS is decomposed into the activities needed to create the work package deliverables. Involving team members in the decomposition technique results in better and more precise outcomes.
Answer option B is incorrect. While the team may help the activity decomposition go faster, this is not the best choice for this question.
Answer option A is incorrect. Through the decomposition process, the project manager will learn about the project work, but this is not the primary reason to involve the project team.
Answer option D is incorrect. It is possible to create assignments while completing the activity list, but usually all of the activities are defined and sequenced, and then resources are assigned to

manage availability and utilization.

**QUESTION NO: 216**

Sam is the project manager for his organization. His project is not doing well on project schedule performance, and management wants him to predict how the project schedule and cost will end. Management has asked Sam to report and forecast his project's performance based on the Delphi Method, scenario building, technology forecasting, and to forecast by analogy. What forecasting method is management asking Sam to use?

A. Judgmental methods
B. Time series methods
C. Causal/econometric methods
D. Earned value management method

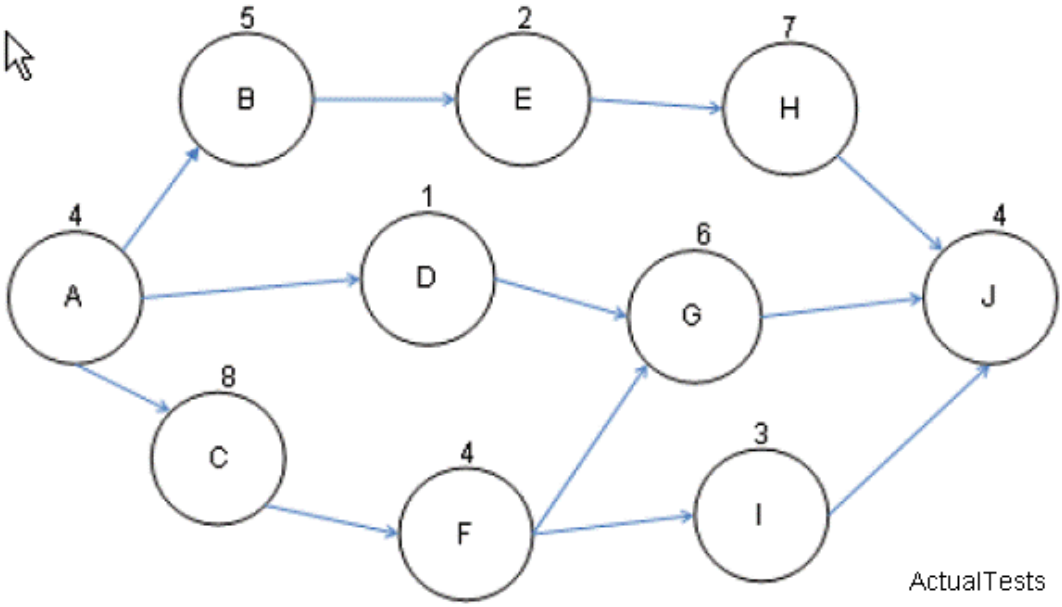
**Answer: A**

**Explanation:**
Management is asking Sam to use the judgmental methods to predict how the project will finish on time and cost. The judgmental forecasting method incorporates intuitive judgments, opinions and subjective probability estimates. Some examples of judgmental forecasting are as follows: Composite forecasts Surveys Delphi method Scenario building Technology forecasting Forecast by analogy
Answer option B is incorrect. Time series methods of forecasting use earned value management, moving average, extrapolation, linear prediction, trend estimation, and growth curve.
Answer option D is incorrect. The earned value management method is actually a part of the time series forecasting method.
Answer option C is incorrect. The causal/econometric methods use linear and non-linear regression, autoregressive moving average, and econometrics.



**QUESTION NO: 217**

You work as the project manager for Blue Well Inc. You are working with your project team to schedule the days the project work will take place. You have created a project network diagram as shown in the figure:




Based on this diagram, find out the earliest day on which Activity G can be started.

A. Day 13
B. Day 7
C. Day 22
D. Day 17

**Answer: D**

**Explanation:**
The earliest Activity G can start is Day 17. This is because activities A, D, C, and F must all be completed before Activity G can start.
Answer option A is incorrect. Day 13 does not account for Activity F since Activity F is also a predecessor to Activity G.
Answer option C is incorrect. Day 22 is the earliest Activity G can finish.
Answer option B is incorrect. Day 7 is not a valid answer.

**QUESTION NO: 218**

What schedule analysis simulation tool allows you, the project manager, to review possible combinations of events such as optimistic, most likely and pessimistic outcomes for your project?

A. PERT
B. Monte Carlo
C. PMIS
D. GERT

**Answer: B**

**Explanation:**
The Monte Carlo simulation tool allows a project manager to explore "what-if" analysis for the project schedule and possible combinations of events in the project. Monte Carlo simulation is a process for iteratively evaluating a deterministic form using sets of random numbers as inputs. This method is repeatedly used when the model is complex, nonlinear, or involves more than just a couple of vague parameters. Monte Carlo simulation is named after the city in Monaco , where the major attractions are casinos that have games of chance. Gambling games, such as roulette, dice, and slot machines, exhibit random behavior. This technique works particularly well when the process is one where the underlying probabilities are known but the results are more difficult to determine. It is a process that generates hundreds or thousands of probable performance outcomes based on probability distribution for cost and schedule on individual tasks. The outcomes are then used to generate a probability distribution for the project as a whole.
Answer option D is incorrect. GERT is the Graphical Evaluation Review Technique and is a visual mapping of the project work including branches and loop backs within the project.
Answer option A is incorrect. PERT is the Program Evaluation and Review Technique and is used for project scheduling and time estimating.
Answer option C is incorrect. PMIS is a project management information system, such as Microsoft Project, and often includes what-if analysis tools, but it's not the best answer for this question.

**QUESTION NO: 219**

You are the project manager for your organization. Your project will be utilizing a piece of equipment during its process of completion. There is some concern that your project's use of the equipment may conflict with another project. What document will help you determine when and how long you will use the shared equipment?

A. Project schedule
B. Project scope
C. Project calendar
D. Resource calendar

**Answer: D**

**Explanation:**
The resource calendar defines when and how long a resource will be utilized. Not all resources are human - facilities, equipment, and other things are resources that must be scheduled. A resource calendar is used to make sure that work resources (people and equipment) are scheduled only when they are available for work. They affect a specific resource or category of resources. By default, the working time settings in the resource calendar are the same as in the project calendar. However, a user can customize the resource calendar to show individual schedule information, such as vacations, leaves of absence, or equipment maintenance time.

Answer option B is incorrect. The project scope would not address resource utilization.
Answer option A is incorrect. The project schedule is not the best answer for this question. The project schedule is an in depth plan of the important project phases, activities, milestones, tasks, and the resources allocated to each task.
Answer option C is incorrect. The project calendar documents when the project work will take place, not the utilization of resources.

**QUESTION NO: 220**

Virginia is the project manager for her company. She has used a previous project as a basis for her current project because they are similar in nature. Virginia has adapted nearly all of the previous project plans for her current project - including the project schedule, risk register, and communications management plan. She has worked with management to update the plans to adapt them to the current project. What are the previous project management plans called in this instance?

A. Expert judgment
B. Analogous estimate
C. Templates
D. Parametric estimate

**Answer: C**

**Explanation:**
The best answer for this question is a template. When projects adapt previous project plans for the current project, it is an example of a project template. Template is an activity list or a part of the activity list taken from the previous project and used in a new project.
Answer option D is incorrect. A parametric estimate is an estimate that uses a parameter to predict the costs of the project, such as cost per network drop or cost per software license. Parametric estimating technique utilizes the statistical relationship that exists between a series of historical data and a particular delineated list of other variables.
Answer option A is incorrect. Expert judgment is not the best choice for this question. Expert judgment is a technique based on a set of criteria that has been acquired in a specific knowledge area or product area. It is obtained when the project manager or project team requires specialized knowledge that they do not possess. Expert judgment involves people most familiar with the work of creating estimates. Preferably, the project team member who will be doing the task should complete the estimates. Expert judgment is applied when performing administrative closure activities, and experts should ensure the project or phase closure is performed to the appropriate standards.
Answer option B is incorrect. Analogous is an estimating technique that uses the values of parameter, such as scope, cost, budget, and duration or measures of scale such as size, weight, and complexity from a previous, similar activity as the basis for estimation of the same parameter

for a future activity. It is a top-down estimating technique and is a form of expert judgment. It provides a lower degree of accuracy than other estimating techniques. This technique is primarily used when there is a limited amount of detailed information about the project or program.

**QUESTION NO: 221**

In which of the following process groups does Integration Change Control Process fall?

A. Execution
B. Initiating
C. Planning
D. Monitoring and Controlling

**Answer: D**

**Explanation:**
The Integration Change Control process is a part of Project Integration Management knowledge area group. It falls under the Monitoring and Controlling process group. Monitoring and controlling is a process group or stage that starts when the project is in the executing stage. This process overlaps the executing stage. Monitoring and controlling consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project. The key benefit is that project performance is observed and measured regularly to identify variances from the project management plan. Monitoring and controlling includes: Measuring the ongoing project activities (where we are). Monitoring the project variables (cost, effort, ...) against the project management plan and the project performance baseline (where we should be). Identify corrective actions to properly address issues and risks (How can we get on track again). Influencing the factors that could circumvent integrated change control so only approved changes are implemented. In multi-phase projects, the monitoring and controlling process also provides feedback between project phases, in order to implement corrective or preventive actions to bring the project into compliance with the project management plan. What is Project Integration Management? Project Integration Management is one of the nine Project Management Knowledge areas. It comprises the following processes:
Develop Project Charter
Develop Preliminary Project Scope Statement
Develop Project Management Plan
Direct and Manage Project Execution
Monitor and Control Project Work
Integrated Change Control
Close Project
These processes occur throughout the project and are repeated quite often during the working of the project. They ensure that the various elements of the project are properly coordinated.

**QUESTION NO: 222**

You are the project manager of the NHL Project for your organization. You are working with your project team to create the schedule baseline for this project. According to you, which of the following statements describes how the schedule baseline is created?

A. It is derived from the constraints of the project.
B. It is assigned to the project by management.
C. It is created by the stakeholders.
D. It is developed from the schedule network analysis.

**Answer: D**

**Explanation:**
The schedule baseline is a specific version of the project schedule developed from the schedule network analysis. It is built by networking individual work elements and verifying the path or paths with the longest total duration. That path is then compared against the project due date, or it may serve as the determinant of the project end date. Schedule baseline is a project schedule used in measuring project progress. It helps provide a comparison with the actual progress of work against the schedule and to determine if performance to date is within acceptable parameters. Any change caused by change in scope of the project invalidates the original schedule and requires a new baseline schedule.
Answer option A is incorrect. Management may impose constraints on the project, but according to the PMI, the baseline is developed from schedule network analysis.
Answer option B is incorrect. Constraints on the project typically include time, cost, and scope (among others), but the schedule baseline is only concerned with the time limits of the project.
Answer option C is incorrect. Project stakeholders are those entities within or without an organization, which: Sponsor a project or, Have an interest or a gain upon a successful completion of a project. Examples of project stakeholders include the customer, the user group, the project manager, the development team, the testers, etc. Stakeholders are anyone who has an interest in the project. Project stakeholders are individuals and organizations that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project's objectives and outcomes. The project management team must identify the stakeholders, determine their requirements and expectations, and, to the extent possible, manage their influence in relation to the requirements to ensure a successful project.

**QUESTION NO: 223**

Joe is the project manager of the HJN Project. Joe's project is a renovation of an office building. There must be 30 hours between the painting activity and the carpet activity in the project

schedule to eliminate the risk of wet paint getting on the carpet. What is the best approach Joe can do to alleviate this issue?

A. Add lead time to the painting activity.
B. Change the relationship of the carpet activity and the painting activity to finish-to-finish.
C. Create a dummy activity between the painting activity and the carpet activity for the duration of the drying process.
D. Add lag time to the carpet activity.

**Answer: D**

**Explanation:**
By adding lag time to the carpet activity, Joe can move the start time of the carpet activity by 30 hours. A lag time is a delay between the predecessor and the successor tasks. Sometimes it may be needed to schedule a delay between the predecessor and the successor tasks. For example, if two coats of paint are required to paint a car, then the final coat should be applied only when the first coat dries. This delay is known as the lag time. The lag time is entered as a positive value. The lag time can be entered as a duration or as a percentage of the predecessor's task duration. It is entered on the Predecessor tab in the Task Information dialog box.
Answer option A is incorrect. A lead time is the time that overlaps between the predecessor and the successor tasks. The successor task can start before the predecessor task finishes.
Answer option C is incorrect. Dummy activities are not the preferred method of project scheduling.
Answer option B is incorrect. Changing the relationship of the activity to finish-to-finish would not prevent the activities from overlapping.

**QUESTION NO: 224**

You have created the project network diagram for your project. Management is reviewing the network diagram and they are curious as to why you have included levels of effort activities as start-to-start and finish-to-finish successor activities for work that uses particular manufacturing equipment. You explained that the levels of effort activities are maintained for the equipment. This relationship and scheduling scenario is also known as what term?

A. Project management overhead
B. Hammock activity
C. Subproject
D. Finish-to-Start

**Answer: B**

**Explanation:**
This is also known as a hammock activity, as the SS and FF relationship hangs off of the activities in the project network diagram. A hammock activity is a schedule or project planning term for

grouping of subtasks that "hangs" between two end dates it is fixed to. It groups subtasks that are not related in the hierarchical sense of a Work Breakdown Structure. It also groups subtasks that are not related in a logical sense of a dependency where one subtask must wait for another. A hammock activity usually refers to report information that is time-dependent and lasts from the initial to the latest date of the activities it encompasses. By using a hammock activity, the top management is able to see an overview of the project without being besieged by details.
Answer option D is incorrect. Finish-to-start is the most common relationship between project activities in the project network diagram.
Answer option A is incorrect. Project management overhead describes the work that supports the project objectives, but is not linked directly to the project deliverables.
Answer option C is incorrect. A subproject is a discrete set of work that contributes to the project, but branches off the primary project work. A subcontract portion of the project is an example of a subproject.

**QUESTION NO: 225**

Ned is the project manager for his organization. Ned is using a standard tool to capture, store, and distribute information to the stakeholders about the project costs, schedule, and performance. What term is assigned to this communication tool?

A. Project management information system
B. Table reporting
C. Reporting system
D. Communications management system

**Answer: C**

**Explanation:**
This is simply an example of a reporting system. It can be part of the project management information system, but for your examination, the PMBOK acknowledges this tool directly as part of project performance reporting. Reporting system is a tool and technique used for reporting performance. It is a standard means to store, capture, and give out the information to the stakeholders about the project costs, performance, and schedule.
Answer option A is incorrect. The project management information system does more than just communicating the performance. It is a tool to help the project manager plan and monitor the project.
Answer option D is incorrect. The PMBOK does not mention a communications management system.
Answer option B is incorrect. Table reporting is one output of a reporting system, not the entire system.

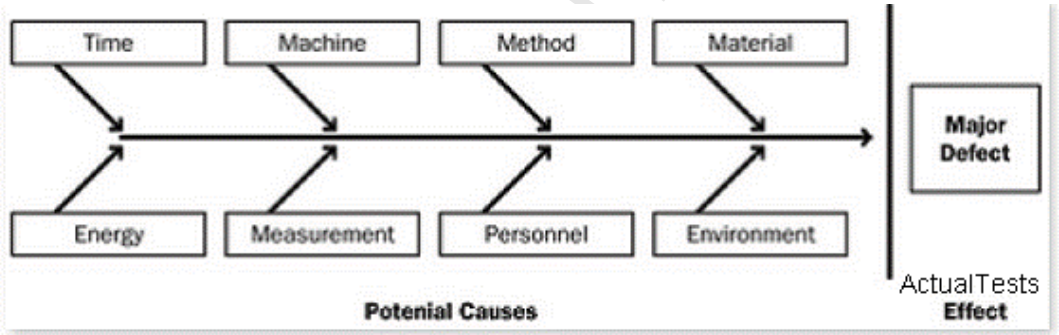
**QUESTION NO: 226**

You work as a project manager for BlueWell Inc. Which of the following tools/techniques will you use to demonstrate how a process behaves over time, and when a process is subject to special cause variation, resulting in an out-of-control condition?

A. Pareto Chart
B. Ishikawa Diagram
C. Scatter Chart
D. Control Chart

**Answer: D**

**Explanation:**
You should use the control charts to demonstrate how a process behaves over time, and when a process is subject to special cause variation, resulting in an out-of-control condition. Control charts are graphical representations of different processes. These charts contain the maximum and minimum values allowed. Control charts are used to determine whether or not a process is stable or has predictable performance. A process is considered out of control when a data point exceeds a control limit or if seven consecutive points are above or below the mean.
Answer option B is incorrect. The Ishikawa diagram (or fishbone diagram or also cause-and-effect diagram) are diagrams, that shows the causes of a certain event. A common use of the Ishikawa diagram is to identify potential factors causing an overall effect. It helps identify causal factors and contributing causes.




It is known as a fishbone diagram because of its shape, similar to the side view of a fish skeleton. It is considered as a basic tool of quality management.
Answer option A is incorrect. A Pareto chart is a special type of bar chart where the values being plotted are arranged in descending order. The graph is accompanied by a line graph, which shows the cumulative totals of each category, left to right. The chart is named after Vilfredo Pareto, and its use in quality assurance was popularized by Joseph M. Juran and Kaoru Ishikawa.
Answer option C is incorrect. A scatter chart is a type of display using Cartesian coordinates to display values for two variables for a set of data. The data is displayed as a collection of points, each having the value of one variable determining the position on the horizontal axis and the value of the other variable determining the position on the vertical axis. A scatter diagram shows the pattern of relationship between two variables. This tool allows the quality team to study and

identify the possible relationship between changes observed in two variables. Dependent variables versus independent variables are plotted. The closer the points are to a diagonal line, the more closely they are related.

**QUESTION NO: 227**

All of the following statements about the critical path are false except for which one?

A. The critical path cannot be crashed.
B. The critical path is the shortest path in the project network diagram.
C. The critical path is always one path with the longest duration.
D. The critical path shows the project's earliest date for completion.

**Answer: D**

**Explanation:**
The only statement that is true is that the critical path shows the project's earliest date for completion. A critical path is the sequence of project activities, which add up to the longest overall duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path. These results allow managers to prioritize activities for the effective management of project completion, and to shorten the planned critical path of a project by pruning critical path activities, by "fast tracking" (i.e., performing more activities in parallel), and/or by "crashing the critical path" (i.e., shortening the durations of critical path activities by adding resources).
Answer option C is incorrect. There can be more than one critical path, as two paths in the project network diagram can both take the same amount of time and be longer than any other paths in the project.
Answer option A is incorrect. The critical path can be, and often is, crashed with extra resources in an attempt to recover the project schedule.
Answer option B is incorrect. The critical path is the longest path to project completion.

**QUESTION NO: 228**

What component of the change management system is responsible for evaluating, testing, and documenting changes created to the project scope?

A. Scope Verification
B. Configuration Management System

C. Project Management Information System
D. Integrated Change Control

**Answer: B**

**Explanation:**
The change management system is comprised of several components that guide the change request through the process. When a change request is made that will affect the project scope. The Configuration Management System evaluates the change request and documents the features and functions of the change on the project scope. What is Configuration Management System? Configuration Management System is a subsystem of the overall project management system. It is a collection of formal documented procedures used to identify and document the functional and physical characteristics of a product, result, service, or component of the project. It also controls any changes to such characteristics, and records and reports each change and its implementation status. It includes the documentation, tracking systems, and defined approval levels necessary for authorizing and controlling changes. Audits are performed as part of configuration management to determine if the requirements have been met.
Answer option D is incorrect. Integrated Change Control, part of the change control system, does not document changes to the features and functions of the project scope. It evaluates the change's impact on eight knowledge areas: scope, time, cost, quality, human resources, communication, risk, and procurement. What is Perform Integrated Change Control? Perform Integrated Change Control is the process of reviewing all change requests, approving changes, and controlling changes to the deliverables and organizational process assets in a project. Perform Integrated Change Control has to do with influencing the things that cause change, determining that the change is required or has happened, and managing the change.
Answer option A is incorrect. Verify scope is a process of formalizing acceptance of the completed project deliverables. It is an inspection- driven process the stakeholders will complete to inspect the project scope deliverables. It is typically performed at the end of the phase and at the end of the project.
Answer option C is incorrect. The Project Management Information System (PMIS) is an information system consisting of the tools and techniques used to gather, integrate, and disseminate the outputs of project management processes. It is used to support all aspects of the project from initiating through closing, and can include both manual and automated systems. It is the parent of the change control process. It is a system that includes all of the change control processes for scope, time, cost, and procurement. Configuration management is part of the PMIS.

**QUESTION NO: 229**

Your project team has identified a project risk that must be responded to. The risk has been recorded in the risk register and the project team has been discussing potential risk responses for the risk event. The event is not likely to happen for several months but the probability of the event is high. Which one of the following is a valid response to the identified risk event?

A. Risk audit
B. Technical performance measurement
C. Earned value management
D. Corrective action

**Answer: D**

**Explanation:**
Corrective actions include contingency plans and workaround plans, which are valid risk responses.
Answer option B is incorrect. The technical performance measurement may be part of the analysis of the risk, but not part of the response.
Answer option A is incorrect. A risk audit may be appropriate once the risk event and response has been identified.
Answer option C is incorrect. The impact of the risk event may affect earned value management calculations, but EVM in and of itself is not a valid risk response.

**QUESTION NO: 230**

There are seven inputs to the estimate activity durations process. Which one of the following is NOT an input to this process?

A. Scope baseline
B. Activity attributes
C. Activity list
D. Activity resource requirements

**Answer: A**

**Explanation:**
The scope baseline is not an input to the estimate activity durations process. The project's scope statement is an input, but according to the PMBOK, the scope baseline is not. The seven inputs to this process are: activity list, activity attributes, activity resource requirements, resource calendars, project scope statement, enterprise environmental factors, and organizational process assets.
Answer options C, B, and D are incorrect. These all are an input to the estimate activity durations process.

**QUESTION NO: 231**

In which of the following group decision making techniques does the largest block in a group decide the group decision even if a bulk is not achieved?

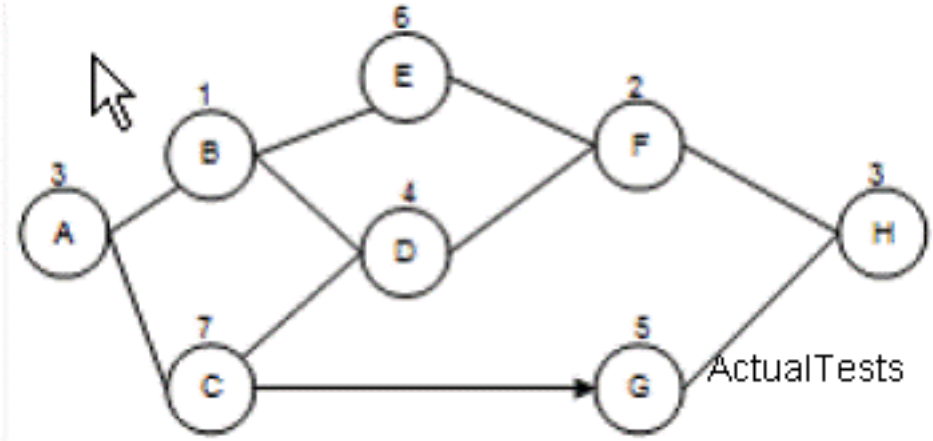
A. Majority
B. Unanimity
C. Dictatorship
D. Plurality

**Answer: D**

**Explanation:**
The various techniques of group decision making are as follows: Unanimity: In this technique, everyone agrees on a single course of action. Majority: In this technique, more than 50% of the members of the group support the decisions. Plurality: In this technique, the largest block in a group decides even if a bulk is not achieved. Dictatorship: In this technique, one individual makes the decision for the group.

**QUESTION NO: 232**

You are project manager of HHK project. Examine the network diagram given below:




A vendor reports that he will be four days late on the materials you'll need in order to complete Activity E. Based on the project network diagram, how many days can Activity E be delayed?

A. Four days
B. Six days
C. Five days
D. Zero, it is on the critical path.

**Answer: A**

**Explanation:**
Activity E has four days of float. The entire project will take 19 days to complete. 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 option D is incorrect. Activity E is not on the critical path.
Answer options C and B are incorrect. These are incorrect calculations of the amount float available for Activity
E.

**QUESTION NO: 233**

Paula works as a project manager for her organization. She is working with the project team to define the activity attributes. Which of the following is NOT a valid activity attribute?

A. Activity Name
B. Activity ID
C. Risk event
D. WBS ID

**Answer: C**

**Explanation:**
Risk events are not associated with the activity attributes, but are recorded in the project risk register. Risk events are the distinct and particular occurrence that negatively affects a decision or a plan. Activity attributes are an output of the Define Activity process. These attributes refer to the multiple components that frame up an activity. The components for each activity during the early stages of the project are the Activity ID, WBS ID, and Activity name. At the later stages, the activity attributes include Activity codes, Predecessor activity, activity description, logical relationship, successor activity, leads and lags, imposed dates, and constraints and assumptions. Activity attributes are used for schedule development and for ordering, selecting, and sorting the planned schedule activities in a number of ways within reports.



**QUESTION NO: 234**

You are the project manager of the NGG Project. This project will be using a new material that the project team has never worked with before. You'd like to use some preventive action to ensure that the installation of the new materials is successful in the project. Which one of the following project actions is an example of the best preventive action for this project?

A. Hire a subject matter expert to train the project team how to install the materials.
B. Purchase additional materials so in case the team wastes materials during their installation.
C. Hire a subject matter expert to install the new materials.
D. Create incentive by rewarding the project team if they don't waste the materials.

**Answer: A**

**Explanation:**
In order to ensure that the installation of the new materials is successful in the project, you should hire a subject matter expert to train the project team how to install the materials. This is the best preventive action that you can take in case the project team has never worked on the material.
Answer option C is incorrect as while this approach may work it's not the best corrective action as the project team isn't learning how to use the new materials.
Answer option B is incorrect as this approach practically encourages the team to waste materials without training them how to install the materials properly.
Answer option D is incorrect as the incentive program is flawed if the team doesn't understand how to install the new materials to begin with.

**QUESTION NO: 235**

John works as a project manager for BlueWell Inc. His project has a budget of $795,000 and he has spent $325,000 on the project. But, he has completed only 40 percent of the project work till now. Management wants to know what the project's cost performance index is. What value will John report?

A. 0.76
B. 0.85
C. 0.80
D. 0.92

**Answer: D**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target.
In this instance, it's
EV = 0.40 * 750,000
= 300,000

CPI = EV/AC
= 300,000/325,000
= 0.92

**QUESTION NO: 236**

Yolanda is the project manager for her organization. She is creating a performance report for her sponsor. Typically, the performance report includes all of the following factors except for which one?

A. Current status of risk and issues
B. Quality control activities
C. Analysis of past performance
D. Work to be completed next

**Answer: B**

**Explanation:**
Quality control activities are not included in the performance report, but are documented in the quality management plan. A performance report is made by the project team detailing activities, milestones, problems, accomplishments, and identified issues. Performance reports are used to report some key information as follows: Current status Scheduled activities Significant accomplishment for the period Forecasts Issues
Answer option C is incorrect. Analysis of past performance can be included in the performance report to make the report more elaborate.
Answer option A is incorrect. Current status of risk and issues can be included in the performance report.
Answer option D is incorrect. Work to be completed next can be included in the performance report.

**QUESTION NO: 237**

Holly is the project manager for her organization. Her current project is running late and her project customer has asked Holly to find a method to apply corrective actions to the project schedule. Holly is exploring the concept of crashing the project. Which of the following statements is true about crashing the activities in Holly's project?

A. The activities to be crashed must have additional quality control metrics associated with them.
B. The activities to be crashed cannot be of fixed duration.
C. The activities to be crashed cannot have risks associated with them greater than 0.80.
D. The activities cannot be on the critical path in order to be crashed.

**Answer: B**

**Explanation:**
Crashing adds effort to the project activities. Activities that are of fixed duration, for example software testing, would not finish faster with added resources. Crashing is a schedule compression technique to obtain the greatest amount of compression for the least incremental

cost. Crashing works for activities where additional resources will shorten the duration. Approving overtime, bringing in additional resources, paying to expedite delivery to activities on the critical path are examples of crashing.
Answer option D is incorrect. Activities on the critical path can be crashed.
Answer option C is incorrect. Activities with risks can be crashed.
Answer option A is incorrect. Additional quality control metrics are not necessary just because Holly elects to crash her project.

**QUESTION NO: 238**

John is a scheduler in ABC Company. He has to plan an activity for the schedule models. Which of the following activities will he use to make the schedule models? . Each correct answer represents a complete solution. Choose all that apply.

A. Hammocks
B. Critical path scheduling
C. Flags
D. Tasks

**Answer: A,C,D**

**Explanation:**
An activity is an individual component of work that is logically linked to other activities to outline the schedule. Its key characteristics include an overall duration based upon the resources applied to it (manpower, material, and equipment), a start and completion date that is tied to a work calendar, and an association with other activities (predecessor and successors). Following are the various types of activities in schedule creation: Tasks: A task is an activity that needs to be accomplished within a defined period of time. Milestones: 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. Flags: Flags shall occur at appropriate intervals of approximately each month. The flags shall be located on the critical path and be incorporated into the baseline, all targets, and the current schedule. Hammocks: Hammocks are a summary pseudo "activity" representing a group of related activities that collectively cover some portion of a project.
Answer option B is incorrect. The Critical Path scheduling, or Critical Path Analysis, is a mathematically based algorithm for scheduling a set of project activities.

**QUESTION NO: 239**

You are the project manager for your organization. You have worked with the project team to create the project scope statement. The key stakeholders have signed off on the project scope and they are eager for you and the project team to begin creating the deliverables identified within

the project scope. What process must you and the project team complete next in this scenario?

A. Create the activity list.
B. Create the WBS.
C. Create the risk assessment.
D. Determine the project budget.

**Answer: B**

**Explanation:**
Once the project scope statement has been approved, the project manager and the project team should decompose the project scope statement into the WBS.
Answer option A is incorrect. Before the activity list may be created, the WBS is needed. The activity list is based on the work packages identified in the WBS.
Answer option C is incorrect. Creating the risk assessment for the project is part of project planning, but it is not the most appropriate process to complete at this time.
Answer option D is incorrect. Determining the project budget is the process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline. Determining the project budget is a part of project cost management.

**QUESTION NO: 240**

Your organization wants to start a new project. The study shows that the new project will save organization approximately $200,000 per year. Now it is required to move forward with the project. Which of the following documents will define the project justification?

A. Feasibility study
B. Project charter
C. Work breakdown structure
D. Project scope

**Answer: B**

**Explanation:**
The project charter defines the business needs, the project justification, the current requirements, and the new warehouse your organization wants to create. The project charter is the document that formally authorizes a project. The project charter provides the project manager with the authority to apply organizational resources to project activities. According to PMBOK Guide, the project charter should address the following information:
Requirements that satisfy customer, sponsor, and other stakeholder needs, wants and expectations Business needs, high-level project description, or product requirements that the project is
undertaken to address

Project purpose or justification
Assigned Project Manager and authority level
Summary milestone schedule
Stakeholder influences
Functional organizations and their participation
Organizational, environmental and external assumptions
Organizational, environmental and external constraints
Business case justifying the project, including return on investment
Summary budget
If required, it also authorizes the next project phase, and updates the charter. The project manager should always be assigned prior to the start of planning, and preferably while the project charter is being developed.
Answer option C is incorrect. The decomposition of the project scope results in the project's Work Breakdown Structure (WBS). The work packages of the WBS will help the project manager and team create accurate time and cost estimates.
Answer option A is incorrect. The feasibility study is usually created before the project scope, though not always. This document defines the likelihood of the project being able to reach its objectives.
Answer option D is incorrect. The project scope defines all that the project should complete.

**QUESTION NO: 241**

Complete this sentence:
_____ is the process of collecting and distributing performance information including status reports, progress measurements, and forecasts.

A. Corrective action
B. Report performance
C. Earned value management
D. Monitor and control project performance

**Answer: B**

**Explanation:**
Report performance is a project process that collects and distributes information on the project work.
Answer option C is incorrect. Earned value management may be used as the tool and technique for determining project performance.
Answer option D is incorrect. Monitor and control project performance is not a project process so this choice is not valid.
Answer option A is incorrect. Corrective action is a response to project performance to bring the project back into alignment with expectations.

**QUESTION NO: 242**

You are the project manager of the NHQ Project. You are coaching Alice, a new project manager, on the relationships in a project network diagram. Which relationship type between activities are the most common?

A. SS
B. FS
C. FF
D. SF

**Answer: B**

**Explanation:**
The finish-to-start relationship type is the most common in a project network diagram. It means that the predecessor activity must finish before its successor activity can start. For example, the carpet must be installed before the painting activity can begin. What is precedence diagramming method (PDM) in sequence activities? Precedence diagramming method (PDM) is used in critical path methodology for building a project schedule network diagram that uses boxes or rectangles, referred to as nodes, to represent activities, and join each other with arrows that show the logical relationship that exists between them. This technique is also known as Activity-On-Node (AON).It includes four types of dependencies or logical relationships: Finish-to-start(FS): The initiation of the successor activity depends upon the completion of the predecessor activity. Finish-to-finish(FF): The completion of the successor activity depends upon the completion of the predecessor activity. Start-to-start(SS): The initiation of the successor activity depends upon the initiation of the predecessor activity. Start-to-finish(SF): The completion of the successor activity depends upon the initiation of the predecessor activity.



**QUESTION NO: 243**

If you are the project manager of the BNQ Project and you add "waiting time" between two activities, then what have you added in the project?

A. You have added lag time to the project activities.
B. You have added management reserve to the project activities.
C. You have added lead time to the project activities.
D. You have added float to the project activities.

**Answer: A**

**Explanation:**

Lag time is positive time that requires the successor activity to wait for a defined amount of time, such as three days, before it can begin. Lag time does not change the task relationship, but requires a "waiting time" before the starting of the activity can begin. A lag time is a delay between the predecessor and the successor tasks. Sometimes it may be needed to schedule a delay between the predecessor and the successor tasks. For example, if two coats of paint are required to paint a car, then the final coat should be applied only when the first coat dries. This delay is known as the lag time. The lag time is entered as a positive value. The lag time can be entered as a duration or as a percentage of the predecessor's task duration. It is entered on the Predecessor tab in the Task Information dialog box.
Answer option D is incorrect. Float is a natural event that is discovered through the forward pass when using the critical path method. Float cannot be arbitrarily added as lag.
Answer option C is incorrect. Lead time actually brings activities closer together and causes them, in some cases, to overlap.
Answer option B is incorrect. Management reserve is a pool of time allotted for unscheduled changes and events that affect the project duration.

**QUESTION NO: 244**

You are the project manager for your project. Your project is scheduled to last for one year and you are currently forty percent complete with the project. Based on your current performance measurements you have an SPI of .95 and a cost variance of -$24,000. You need to report this information to the management, but you will also need a solution to present with the variance information. Which one of the following can you present to the management as a part of the control schedule tools and techniques for variances?

A. Work performance measurements
B. Corrective actions
C. Trim the project scope
D. Causes of variances

**Answer: B**

**Explanation:**
The only tool and technique for controlling the schedule is a corrective action. You should always report problems to management, the project customers, or key stakeholders as defined in the Communications Management Plan, but you should also always present a solution to the problem. A corrective action is a change implemented to address a weakness identified in a management system. Normally corrective actions are implemented in response to a customer complaint, abnormal levels of internal nonconformity, nonconformities identified during an internal audit or adverse or unstable trends in product and process monitoring such as would be identified by SP C. It is method of identifying and eliminating the causes of a problem, thus preventing their reappearance. Examples of a corrective action are : Improvements to maintenance schedules

Improvements to material handling or storage
Answer option C is incorrect. Trimming the project scope, which is a change request, is not a tool and technique for control the scheduling. It is, however, an output of the control schedule process and is sometimes a valid decision if the project is slipping on schedule performance.
Answer option A is incorrect. Work performance measurements are not a tool and technique for controlling the project schedule.
Answer option D is incorrect. The causes of the variance can help you determine the best action to take, but it is not a tool and technique for schedule control.

**QUESTION NO: 245**

Alicia works as a project manager for NacTec project. She is undergoing the project monitoring phase in her project. Which of the following will she choose to accomplish the task? Each correct answer represents a complete solution. Choose all that apply.

A. Reports
B. Meetings
C. Diaries
D. Future planning

**Answer: A,B,C**

**Explanation:**
Project monitoring should be worked out to verify all the working actions, including investments. Project monitoring helps the project staff to know how things are going, as well as giving early warnings of possible troubles and difficulties. The methods used in monitoring a project are as follows:
1.Reports: Reports will help to identify the progress and problems easily and early. Reports must be completed in a standardized form at regular, predetermined intervals by all the team members. Reports should be short and brief.
2.Diaries: It is a helpful way of recording information.
3.Finances: An understanding of the basic concepts of project fianance are important in making a project. Careful budgeting and planning will provide a great help in finance. 4.Meeting: There should be periodic meeting of team members to resolve the issues. This will help to monitor the problems easily and efficiently.
Answer option D is incorrect. This is the information that is used for monitoring to be useful. It is not a monitoring method.

**QUESTION NO: 246**

You are the project manager for your organization. You have created the project schedule and have presented it to the management for their approval. Management decides to enforce resource

leveling heuristics on your project schedule. What will likely happen to your project now?

A. It will require fewer resources due to the cut in the project scope.
B. It will require additional resources for the additions to the project scope.
C. It will require additional resources if it is to finish in the same amount of time, as originally predicted.
D. It will require a new scope baseline to reflect the management change in the project approach.

**Answer: C**

**Explanation:**
Resource leveling heuristics limits the amount of time a resource is allowed to work in a given time period. This action typically increases the project duration. By adding additional resources to effort-driven activity the project can still complete, often, in the same schedule, otherwise the duration of the project will increase.
Answer option B is incorrect. Resource leveling heuristics does not change the project scope.
Answer option A is incorrect. This is not an instance of cutting the project scope.
Answer option D is incorrect. The project scope baseline is not affected by resource leveling heuristics.

**QUESTION NO: 247**

Which of the following allows activities to be done in parallel that would normally be done in sequence?

A. Lag time
B. Lead time
C. Fast tracking
D. Crashing

**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.
Answer option D is incorrect. Crashing is a process in that the project manager adds more resources to effort-driven activities in an attempt to shorten their duration.
Answer option A is incorrect. A lag time is a delay between the predecessor and the successor tasks. Sometimes it may be needed to schedule a delay between the predecessor and the successor tasks. For example, if two coats of paint are required to paint a car, then the final coat should be applied only when the first coat dries. This delay is known as the lag time. The lag time is entered as a positive value. The lag time can be entered as a duration or as a percentage of the

predecessor's task duration. It is entered on the Predecessor tab in the Task Information dialog box.
Answer option B is incorrect. A lead time is the time that overlaps between the predecessor and the successor tasks. The successor task can start before the predecessor task finishes. For example, if a task can start when its predecessor is one-fourth finished, a finish-to-start dependency with a lead time of 25 percent for the successor task can be specified. The lead time is entered as a negative value. The lead time can be entered as a duration or as a percentage of the predecessor's task duration. It is entered on the Predecessor tab in the Task Information dialog box.

**QUESTION NO: 248**

You are the project manager of the QAQ Project. The QAQ Project has a BAC of $2,786,121. You are currently 20 percent complete with this project, though you should be 25 percent complete with the project work. The project has consumed $595,000 of the project budget to date. Management has asked you, based on the current project performance, what the project's estimate to complete will be considering the current project schedule variance. What is the ETC for this project?

A. $2,975,000
B. 1.02
C. $139,306
D. $2,380,000

**Answer: D**

**Explanation:**
The estimate to complete wants to know how much more money the project will need to complete its objectives. The estimate to complete (ETC) is the expected cost needed to complete all the remaining work for a scheduled activity, a group of activities, or the project. ETC helps project managers predict what the final cost of the project will be upon completion. The formula for the ETC is EAC- AC. The EAC is BAC/CPI.
Answer option A is incorrect. This is the estimate at completion based on the current project performance.
Answer option C is incorrect. This is the current schedule variance.
Answer option B is incorrect. 1.02 is the to-complete performance index based on the BAC.

**QUESTION NO: 249**

You work as the project manager for BlueWell Inc. Mark, a project team member, has some doubts related to the outputs of the control schedule process. Which of the following is an output of the control schedule process?

A. Project schedule
B. Lessons learned
C. Change request
D. Activity resource requirement

**Answer: C**

**Explanation:**
Only change request is a valid answer. The five outputs of the control schedule process are work performance measurements, organizational process assets updates, change requests, the project management plan updates, and project document updates. Change requests are requests to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets or revise schedules. These requests for a change can be direct or indirect, externally or internally initiated, and legally or contractually imposed or optional. A Project Manager needs to ensure that only formally documented requested changes are processed and only approved change requests are implemented.
Answer option D is incorrect. Activity resource requirement is not an output of the control schedule process.
Answer option A is incorrect. The project schedule is not an output of the control schedule process.
Answer option B is incorrect. Lessons learned is not an output of the control schedule process.

**QUESTION NO: 250**

Kay is the project manager of the QUI Project. This project is done but is also considerably over budget. Kay has elected to crash the project in order to recoup schedule delays but this increased the project costs. What should Kay do with the information regarding the schedule delays and cost overruns?

A. Create an entry in the lessons learned documentation and explain her reasoning behind the corrective actions.
B. Create an exceptions report.
C. Create a variance report.
D. File the information as part of the project final report.

**Answer: A**

**Explanation:**
When there have been significant corrective action decisions the reasoning behind the decision should be documented in the lessons learned documentation. What is lessons learned documentation? Lessons learned documentation is prepared to contribute to the lessons learned knowledge database of the organization. It includes the causes of issues, the reasoning behind the corrective action chosen, and other types of lessons learned about stakeholder management.

Lessons learned are documented so that they become part of the historical database for the project/program and the performing organization. The lessons learned are compiled, formalized, and stored through out the project's/program's duration.
Answer option C is incorrect. A variance report may be appropriate but cost and schedule variances are reported differently. Kay could create a cost variance report and a schedule variance report, but not one report for both project attributes.
Answer option B is incorrect. An exceptions report is the same as a variance report. Kay would create a separate exceptions report for cost, and another for schedule.
Answer option D is incorrect. The information may go into the project final report but it should be included in the project's lessons learned information when it is discovered.

**QUESTION NO: 251**

What is the formula to find the schedule performance index?

A. EV-PV
B. EV/AC
C. EV/PV
D. EV-AC

**Answer: C**

**Explanation:**
The schedule performance index shows how well the project is performing on schedule. It is found by dividing the earned value by the planned value. 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 = Earned Value (EV) - 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.
Answer option D is incorrect. EV-AC is the project's cost variance.
Answer option B is incorrect. EV/AC is the project's cost performance index.
Answer option A is incorrect. EV-PV is the project's schedule variance.

**QUESTION NO: 252**

You are the project manager for your organization. You are working through the control schedule process. According to the PMBOK, there are four inputs to this process. Which one of the following is NOT an input to the control schedule process?

A. Schedule data

B. Work performance information
C. Project management plan
D. Project schedule

**Answer: A**

**Explanation:**
Schedule data is not an input to the control schedule process. Organizational process assets are the final input to the control schedule process. The inputs of schedule control process are as follows: Project Management Plan Project Schedule Work Performance Integration Organizational Process Assets
Answer option C is incorrect. The project management plan is an input to the control schedule process.
Answer option D is incorrect. The project schedule is an input to the control schedule process.
Answer option B is incorrect. Work performance information is an input to the control schedule process.

**QUESTION NO: 253**

You are the project manager for your organization. You are working with your project team to develop the project schedule. You would like to automate much of the scheduling by using Microsoft project. Microsoft project as a scheduling tool is an example of what tool and technique for the Develop Schedule Process?

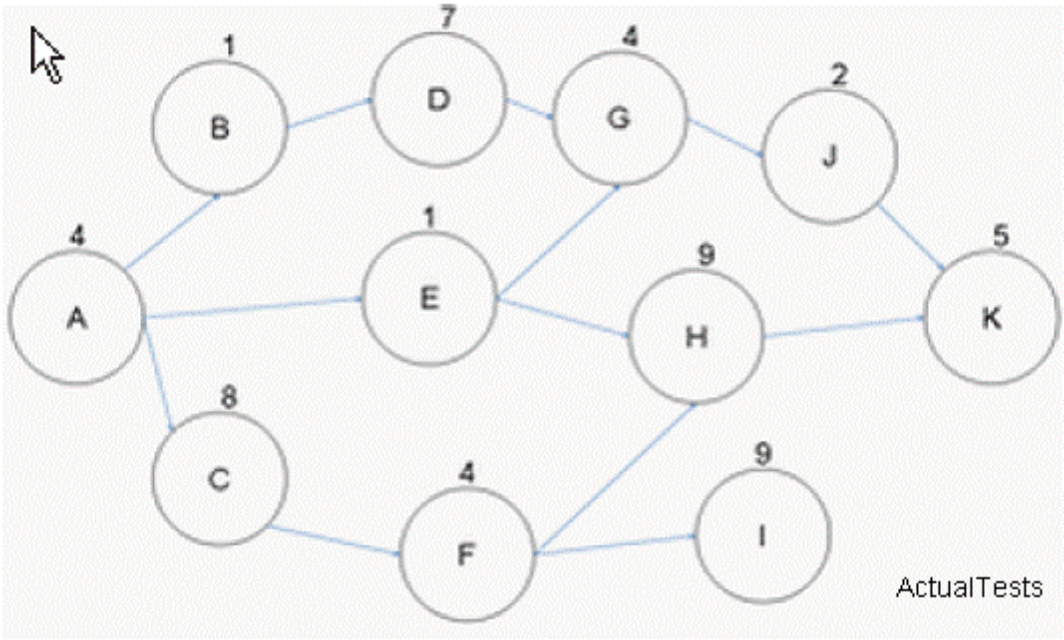
A. Organizational process asset
B. Scheduling tool
C. Project Management Information System
D. Project office software

**Answer: B**

**Explanation:**
According to the PMBOK, automated scheduling tools expedite the scheduling process. The scheduling tool is used in combination with manual methods or further project management software to carry out the schedule network analysis to produce an updated project schedule.
Answer option C is incorrect. The project management information system is the complete project management software package beyond just the scheduling portion.
Answer option D is incorrect. This is not a valid answer.
Answer option A is incorrect. While the software may be made available as a part of organizational process assets, the best answer is the scheduling tool.

**QUESTION NO: 254**

You are the project manager for the NGH project. The figure given below represents the small project you are completing for your organization.




How much float can you use on Activity G if Activity B actually takes eight days to complete?

A. Four
B. Three
C. Seven
D. Zero

**Answer: D**

**Explanation:**
If Activity B uses seven days of float, which it can, it does not allow Activity D, G, or J to have any float available. This is because the total duration of path ABDGJK cannot exceed 30 days, the duration of the project. If Activity B uses the seven days of float, then the path meets the project's duration at Day 30.
Answer options B and A are incorrect. These are not the valid calculation.
Answer option C is incorrect. Seven represents the amount of float available on Activity G before Activity B uses the available float.

**QUESTION NO: 255**

Robert is the project manager for his organization. Management has asked Robert to provide them with the metric he uses to measure deliverables status, costs incurred, and especially how he measures the schedule progress for schedule adherence. What project component could Robert provide for management?

A. Milestone list
B. Cost management and the project schedule
C. Work performance measurements
D. Project management plan

**Answer: C**

**Explanation:**
Work performance measurements are metrics that are defined to collect performance and progress of the project. Typical metrics are deliverables, schedule, and costs, though additional metrics, such as quality, can be added. Work performance measurements are created from the work performance information. WPMs are an output of Control schedule, Control cost, and Control scope processes, which are monitoring and controlling processes. WPMs consist of planned versus actual performance indicators with respect to scope, schedule, and cost. They are documented and communicated to the stakeholders and are used to make project activity metrics, such as the following: Planned vs. Actual Technical performance and Scope performance Planned vs. Actual Schedule performance Planned vs. Actual Cost performance
Answer option D is incorrect. The project management plan is too broad and is not the best choice.
Answer option B is incorrect. The cost management plan and the project schedule would not provide all the information that management has requested.
Answer option A is incorrect. The milestone list does not include performance metrics.

**QUESTION NO: 256**

Harry works as a project manager for BlueWell Inc. He is determining the budget of the project. According to the PMBOK, there are seven inputs to this process. Which one of the following is NOT an input to the determine budget process?

A. Contract
B. Reserve analysis
C. Scope baseline
D. Project schedule

**Answer: B**

**Explanation:**
Reserve analysis is not an input to the determine budget process. It is a technique used for determining the budget. The inputs to the determine budget process are as follows: Activity cost estimates Basis of estimates Scope baseline Project schedule Resource calendars Contracts Organizational process assets

**QUESTION NO: 257**

You are the project manager of the NNN Project. Stakeholders in the two-year project have requested to send status reports to them via email every week. You have agreed and are sending the reports on each Thursday. After six months of the project, the stakeholders are pleased with the project progress and they would like you to reduce the status reports to every two weeks. What process will examine the change to this project process and implement it in the project?

A. Project change control process
B. Perform integrated change control process
C. Configuration management
D. Communications management

**Answer: B**

**Explanation:**
Although this appears to be a simple change the project manager must still follow the rules of the project's change control system. Perform Integrated Change Control is the process of reviewing all change requests, approving changes, and controlling changes to the deliverables and organizational process assets in a project. Perform Integrated Change Control has to do with influencing the things that cause change, determining that the change is required or has happened, and managing the change.
Answer option D is incorrect. Communications management is the execution of the communications management plan.
Answer option A is incorrect. The project change control process not valid as it's the parent of the integrated change control process, which is more accurate for this question.
Answer option C is incorrect. Configuration management is the documentation and control of the product's features and functions.



**QUESTION NO: 258**

You are the project manager of the NNN Project. Stakeholders in the two-year project have requested to send status reports to them via email every week. You have agreed and are sending the reports on each Thursday. After six months of the project, the stakeholders are pleased with the project progress and they would like you to reduce the status reports to every two weeks. What process will examine the change to this project process and implement it in the project?

A. Project change control process
B. Perform integrated change control process
C. Configuration management
D. Communications management

**Answer: B**

**Explanation:**
Although this appears to be a simple change the project manager must still follow the rules of the project's change control system. Perform Integrated Change Control is the process of reviewing all change requests, approving changes, and controlling changes to the deliverables and organizational process assets in a project. Perform Integrated Change Control has to do with influencing the things that cause change, determining that the change is required or has happened, and managing the change.
Answer option D is incorrect. Communications management is the execution of the communications management plan.
Answer option A is incorrect. The project change control process not valid as it's the parent of the integrated change control process, which is more accurate for this question.
Answer option C is incorrect. Configuration management is the documentation and control of the product's features and functions.

**QUESTION NO: 259**

You are the project manager of the GYG Project. A new scope change is being considered for your project. You are concerned, however, that the scope change may add costs, risks, and adversely affect the project schedule. What project management process is responsible for evaluating the full effect of a proposed scope change on your project?

A. Scope change control
B. Schedule change control
C. Integrated change control
D. Change Control Board approval process

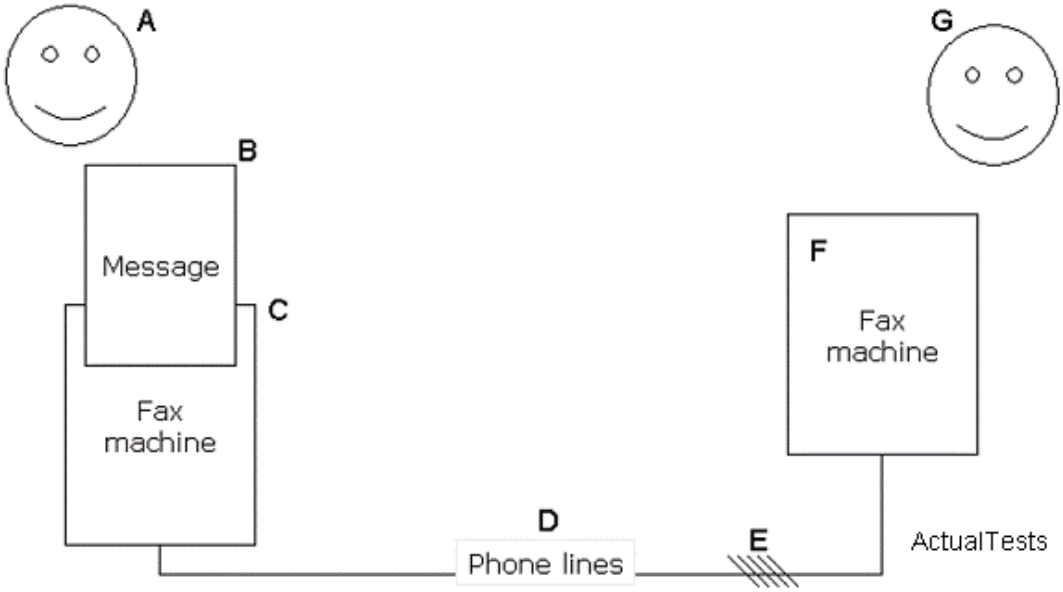
**Answer: C**

**Explanation:**
The integrated change control process reviews proposed changes and determines what effect the change will have on the entire project. This includes scope, time, cost, quality, human resources, communication, risk, and procurement. Integrated change control is a way to manage the changes incurred during a project. It is a method that manages reviewing the suggestions for changes and utilizing the tools and techniques to evaluate whether the change should be approved or rejected. Integrated change control is a primary component of the project's change control system that examines the affect of a proposed change on the entire project.
Answer option A is incorrect. Scope change control focuses only on the effect of the change on the project scope.
Answer option B is incorrect. Schedule change control focuses only on the effect of the change on the schedule.
Answer option D is incorrect. The Change Control Board is a committee of key stakeholders,

usually management, the project manager, and the project customer, to evaluate proposed changes. This board, however, is not a project process.

**QUESTION NO: 260**

The figure given below demonstrates the communication model for a project. What role does the component D play in the communication model?




A. Sender
B. Medium
C. Encoder
D. Transporter

**Answer: B**

**Explanation:**
The phone lines are the medium between the sender/encoder and the decoder/receiver. The communication model shows the traversal of information between two hosts, known as the sender and the receiver. The key components of the model are as follows: Encode: It is used to crypt or code the message into a language that is understood by others. Decode: It is used to decrypt the message back into the meaningful codes. Message and feedback message: It is the output of encoding. Noise: It is referred to anything, which interferes with the transmission and understanding of the message. Medium: It is the method used to convey the message. In the communication process, it is the duty of the sender to send clear and complete information to the receiver so that it is properly received by the receiver, and for confirming that it is properly understood. The duty of the receiver is to make sure that the information received is understood and acknowledged properly. A failure in communication can negatively impact the project.
Answer option A is incorrect. The sender is the person sending the message.
Answer option C is incorrect. The encoder is the outgoing fax machine.
Answer option D is incorrect. The transporter is not part of the communication model.

**QUESTION NO: 261**

You work as a scheduler for your organization. You are developing a schedule and its constraints for the SAP project. There are nine inputs to develop a project schedule. Which of the following is NOT an input to the schedule development process?

A. Work breakdown structure
B. Activity attributes
C. Resource calendars
D. Activity list

**Answer: A**

**Explanation:**
The WBS is not an input, directly, to the develop schedule process. Technically, you will need the scope baseline, which does include the WBS. The inputs in developing a schedule process are of nine types, which are as follows:
Activity list
Activity attributes
Project schedule network diagrams
Activity resource requirements
Resource calendars
Activity duration estimates
Project scope statement
Enterprise environmental factors
Organization process assets



**QUESTION NO: 262**

You work as a project manager for BlueWell Inc. You must communicate on a regular basis with all of your project stakeholders. In your project, you have 755 stakeholders. How many communication channels exist in the project?

A. 284,635
B. 570,025
C. 569,270
D. 755

**Answer: A**

**Explanation:**

The number of communication channels describes the number of opportunities for stakeholders to communicate amongst themselves and for communication to be broken down. To find the number of communication channels, you can use the formula of N(N-1)/2 where N represents the number of stakeholders.
Total number of communication channels = N(N-1)/2
= 755(755-1)/2
= 284,635
Answer option D is incorrect. This is the number of stakeholders.
Answer option C is incorrect. 569,270 is not a valid calculation of this formula.
Answer option B is incorrect. 570,025 is not a valid calculation of this formula.

**QUESTION NO: 263**

A project manager is reviewing her project performance. Her project has a BAC of $950,000 and is currently 40 percent complete, though it was scheduled to be 45 percent complete at this time. Her project has spent $387,526. Management would like to know if there is a schedule variance. What is the planned value for this project?

A. -$47,500
B. 0.89
C. $427,500
D. 0.98

**Answer: C**

**Explanation:**
The planned value is the percentage of where the project should be times the budget at completion. In this instance, it is 45 percent of the $950,000. Here, it can be calculated as follows: PV = 45% of BAC = 0.45 * 950,000 = 427,500 Planned value (PV) is the authorized budget assigned to the schedule work to be accomplished for a schedule activity or work breakdown structure component. It serves as a baseline against which actual performance is measured. The theory of planned value is of vital importance to the project management team and it is important to keep careful track of this. The term planned value can also be in some situations referred to by the project management team and the project management team leader as the budgeted cost of work scheduled (BCWS).
Answer option A is incorrect. -$47,500 is the schedule variance (SV = EV-PV).
Answer option B is incorrect. This is the schedule performance index (SPI = EV/PV).
Answer option D is incorrect. This is the cost performance index (CPI = EV/AC).

**QUESTION NO: 264**

You are the project manager for GGY Project. You are working with your project team to record the actual durations for the activities they have completed in the project schedule. Mary, one of your project team members, wants to know why you need to know how long it actually took the project team to complete their assignments as long as the project work is completed. Which of the following is the best response for Mary's query?

A. Actual durations need to be recorded to track process improvement.
B. Actual durations need to be recorded to create the schedule baseline.
C. Actual durations need to be recorded to measure the actual progress of the project.
D. Actual durations need to be recorded to perform quality control on the project management processes.

**Answer: C**

**Explanation:**
The best answer is to track actual durations to measure the actual progress of the project. Actual duration is the time, in the calendar units, between the actual start date of the schedule activity and either the data date of the project schedule if the schedule activity is in development or the actual finish date if the schedule activity is complete.
Answer option B is incorrect. The schedule baseline is not created based on actual durations.
Answer option A is incorrect. Process improvement is part of the quality management knowledge area, but it is not a reason to track actual durations.
Answer option D is incorrect. Quality control is the inspection of the project deliverables. It is not concerned with the actual durations of project work. The improvement of the project processes is defined in the Process Improvement Plan.

**QUESTION NO: 265**

Which of the following is an output of the Develop Project Charter process?

A. Enterprise environmental factors
B. Contract
C. Business case
D. Project charter

**Answer: D**

**Explanation:**
The Develop Project Charter process documents the formal authorization of a project or a phase. It also documents initial requirements that satisfy the stakeholder's needs and expectations. It is used to validate the decisions made during the previous iteration of the Develop Project Charter process. The various inputs of this process are as follows:
Project statement of work

Business case
Contract
Enterprise environmental factors
Organizational process assets
The output of the Develop project Charter process is as follows:
Project charter

**QUESTION NO: 266**

You are the project manager of the NHQ Project. This project has a Budget at Completion of $750,000 and is expected to take 18 months to complete. The project is supposed to be 75 percent complete, but due to some errors the project is only 60 percent complete. At this time the project has spent $465,500. Management has asked you to review the project work and report the project's SPI. What is the SPI for this project?

A. 0.97
B. 0.80
C. $562,500
D. -$112,500

**Answer: B**

**Explanation:**
The project's schedule performance index (SPI) can be found by using the formula; earned value/planned value. The earned value is the percent of the project completed times the BAC. The planned value is the percentage of where the project should be times the budget at completion. In this instance, the formula reads: $450,000/562500 = 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. This value is the project's Cost Performance Index (CPI).
Answer option D is incorrect. This value is the schedule variance for the project.
Answer option C is incorrect. $562,500 is the planned value for the project.

**QUESTION NO: 267**

You are the project manager of the NHQ project. This project is currently running about 15 percent behind schedule and the management has asked you to rectify the problem. You have elected to crash the project. What does this term mean?

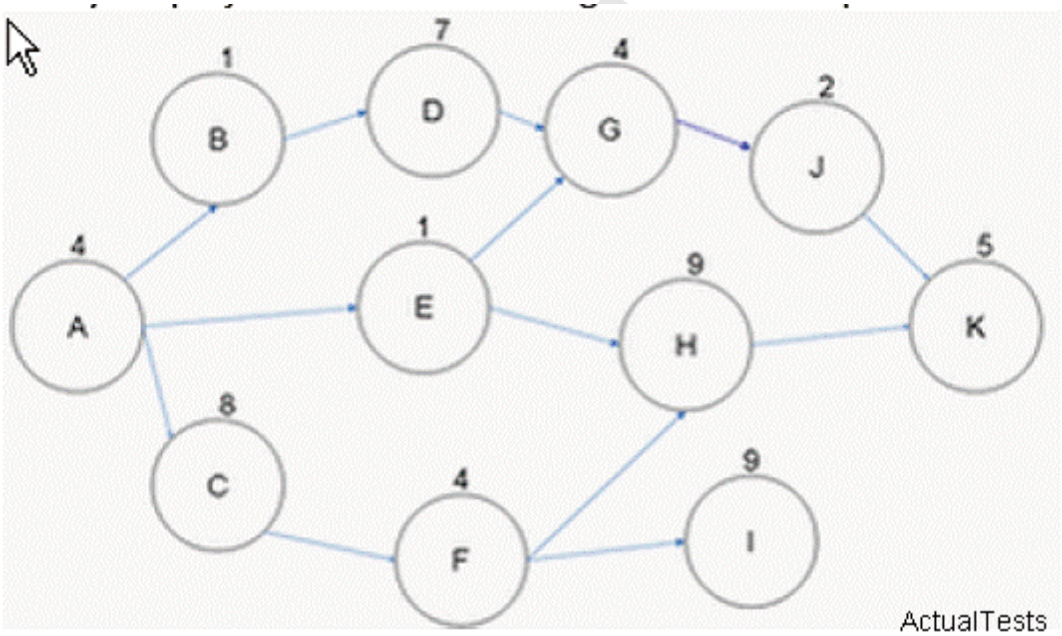
A. Reject all proposed change requests for the project.
B. Add resources to the project work.
C. Add cost to the project budget.
D. Cut non-value added activities to the project.

**Answer: B**

**Explanation:**
Crashing means that the project manager will add resources to the project to complete effort-driven activities in the project. This schedule compression technique adds costs to the project.
What is crashing? Crashing is a schedule compression technique to obtain the greatest amount of compression for the least incremental cost. Crashing works for activities where additional resources will shorten the duration. Approving overtime, bringing in additional resources, paying to expedite delivery to activities on the critical path are examples of crashing.
Answer option C is incorrect. Crashing does generally add costs to the project because of the labor added, but this is not the best choice for the question.
Answer options D and A are incorrect. These are not the valid definitions of crashing.

**QUESTION NO: 268**

You work as a project manager for BlueWell Inc. By referring to the figure given below, you along with your project team is calculating the latest completion of an activity.




What is the latest your project team can complete Activity I?

A. Day 29
B. Day 26

C. Day 25
D. Day 30

**Answer: D**

**Explanation:**
Activity I can actually take all the way to Day 30 to complete. Note in the figure that Activity I does not need to be completed before Activity K can begin. This allows Activity I to take until Day 30 to complete as its late finish.
Answer option C is incorrect. This is the earliest Activity I may finish.
Answer options B and A are incorrect. These are not the valid calculation.

**QUESTION NO: 269**

You are the project manager for your organization. Maagement has asked you for this current project. You use the critical chain method to create the project network diagram rather than the more traditional critical path method. What is the critical chain method?

A. It examines only the non-critical path activities that are considered near critical, if the float is one day or less.
B. It examines only the critical path activities to determine when the project completion date may be.
C. It examines the availability of needed project resources to determine when activities may actually happen.
D. It generates a Gantt chart that reflects the availability of project resources and considers working and non-working days for the project.

**Answer: C**

**Explanation:**
The critical chain method is similar to the critical path method, but it considers the availability of project resources. The critical path method assumes that the project resources are available for the identified project work in the sequence of the work as defined in the project network diagram. The Critical Chain method is a project management technique in which schedule network analysis is used for the purpose of modifying and determining a set of project schedules to account for more inadequate than estimated project financial resources. This method tends to keep the resources levelly loaded, but requires the resources to be flexible in their start times and to quickly switch between tasks and task chains to keep the whole project on schedule. In the Critical Chain method, projects are completed more rapidly and with better scheduling consistency.
Answer options B, A, and D are incorrect. These are not valid definitions for the critical chain method.

**QUESTION NO: 270**

Amy works as a project manager for BlueWell Inc. Her organization wants her to create a new warehouse. Which of the following documents will she create to define the business needs, the project justification, and the current requirements?

A. Project scope
B. Feasibility study
C. Project charter
D. Work breakdown structure

**Answer: C**

**Explanation:**
The project charter defines the business needs, the project justification, and the current requirements for the new warehouse that an organization wants to create. The project charter is the document that formally authorizes a project. The project charter provides the project manager with the authority to apply organizational resources to project activities. According to PMBOK Guide, the project charter should address the following information: Requirements that satisfy customer, sponsor, and other stakeholder needs, wants and expectations Business needs, high-level project description, or product requirements that the project is undertaken to address Project purpose or justification Assigned Project Manager and authority level Summary milestone schedule Stakeholder influences Functional organizations and their participation Organizational, environmental and external assumptions Organizational, environmental and external constraints Business case justifying the project, including return on investment Summary budget If required, it also authorizes the next project phase, and updates the charter. The project manager should always be assigned prior to the start of planning, and preferably while the project charter is being developed.
Answer option A is incorrect. The decomposition of the project scope results in the project's Work Breakdown Structure (WBS). The work packages of the WBS will help the project manager and team create accurate time and cost estimates.
Answer option B is incorrect. The feasibility study is usually created before the project scope, though not always. This document defines the likelihood of the project being able to reach its objectives.
Answer option D is incorrect. The project scope defines all that the project should complete.

**QUESTION NO: 271**

You have 83 project stakeholders from all across your organization. Some of the stakeholders, such as functional management, require weekly communication from you, while other stakeholders, such as the end users, only need quarterly progress updates. Where can you record this communication requirements based on your stakeholder analysis?

A. Project communications management plan
B. Project reporting structure
C. Project schedule
D. Project scope management plan

**Answer: A**

**Explanation:**
The project communications management plan is a document to define who needs what information, when the information is needed, and the modality the information is expected. Stakeholder communication preferences are also recorded here. What is Project Communication Management? Project Communications Management is one of the nine Knowledge Areas. It employs the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. The following processes are part of Project Communications Management: Identify Stakeholders
Plan Communications
Distribute information
Manage Stakeholder Expectations
Report Performance
The Project Communications Management processes provide the critical links among people and information that are necessary for successful communications. These processes interact with each other and with the processes in the other Knowledge Areas as well.
Answer option D is incorrect as the project scope management plan defines how the scope is created, managed, how changes to the scope are managed, and how the scope is validated.
Answer option B is incorrect as the project reporting structure defines who reports to whom, not the preferences and requirements for communication.
Answer option C is incorrect as the project schedule defines when project activities are to occur.

**QUESTION NO: 272**

You are the project manager of the NHQ project. This project is slightly larger than the TR project, in which you also served as the project manager. You decide to use the actual activity duration of the GTR project as a basis for your current NHQ project. This, you reason, will save time for your project, as the previous project has provided the information. Which one of the following terms best describes the action you are doing in this scenario?

A. You are creating an analogous estimate.
B. You are creating a bottom-up estimate.
C. You are relying on expert judgment.
D. You are creating a rough order of magnitude estimate.

**Answer: A**

**Explanation:**
This is an example of analogous estimate as you are creating an analogy between two similar projects. This estimating approach is also known as a top-down estimate type, and is somewhat unreliable.
Answer option C is incorrect. Expert judgment relies on experts, consultants, or subject matter experts to guide your project decisions. An analogous estimate is a form of expert judgment, but this is not the best choice for this question.
Answer option B is incorrect. A bottom-up estimate creates an activity duration estimate for each work package in the WBS. It is the longest estimate type to create, but it also the most reliable.
Answer option D is incorrect. A rough order of magnitude estimate is a quick estimate, usually for project costs, that often has a broad range of variance attached to the estimate.

**QUESTION NO: 273**

You are the project manager of the MQQ project. Unfortunately, this project is not performing well and you must do something to address the problems in your project. Based on your planning for monitoring and controlling project performance, you know that there are three outputs of performance reporting. Which one of the following is the only output that is most appropriate for this poorly performing project?

A. Organizational process assets update
B. Performance reports
C. Performance re-baselining
D. Change requests

**Answer: D**

**Explanation:**
Change requests are an output of performance report, and allow the project manager to address corrective actions and preventive actions to help the project get back in alignment with performance baselines.
Answer option B is incorrect. While performance reports are an output of the performance reporting, these reports do not specifically address the problems in the project.
Answer option A is incorrect. Updating the organizational process assets is an important activity, but it does not address the poor performance directly.
Answer option C is incorrect. Performance re-baselining is not an output of performance reporting so this choice is not valid.

**QUESTION NO: 274**

Gary is the project manager of the NGH project for his organization. He and the project team have created the initial WBS. Before Gary and the project team begin creating the activity list, Gary

wants the project team to help him create a unique numbering system for the deliverables identified in the WBS. What numbering system can Gary and the project team apply to the WBS to identify the components of the WBS?

A. Code of accounts
B. Chart of accounts
C. Component numbering
D. Activity linkage sequencing

**Answer: A**

**Explanation:**
The code of accounts is a hierarchical numbering system that uniquely identifies each deliverable of the WBS and segments the WBS by levels of numbering.
Answer option C is incorrect. Component numbering is not a valid term for project management.
Answer option B is incorrect. A chart of accounts is a financial tracking and assignment tool for common deliverables and activities an organization performs for its customers.
Answer option D is incorrect. Activity linkage sequencing is not a valid project management term.

**QUESTION NO: 275**

John works as the project manager for Blue Well Inc. He is identifying the phases within the scope of work for the project plan. Which of the following can be categorized as a project phase? Each correct answer represents a complete solution. Choose all that apply.

A. Concrete
B. Pre-construction
C. Engineering
D. Conceptual engineering

**Answer: B,C,D**

**Explanation:**
A phase is a combination of associated activities that represent a distinct stage within a project. A phase can have distinct start and finish dates and include several stages of planning and work. Each project has a defined scope of work, such as a unique product or service. Some examples of phases within the scope of work for a project plan are conceptual engineering, pre-construction, and engineering.
Answer option A is incorrect. Concrete is an activity, not a project phase.

**QUESTION NO: 276**

Della works as a project manager for BlueWell Inc. She has asked her assistant Beth to provide activity duration estimate for an activity. Beth provides Della the following estimate chart:

| Estimates | Duration (Days) |
|---|---|
| Pessimistic (TP) | 24 |
| Most likely (TM) | 28 |
| Optimistic (TO) | 36 |



What will be the activity duration according to the PERT three-point analysis?

A. 19
B. 24
C. 29
D. 46

**Answer: C**

**Explanation:**
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.
Here it is,
TE = ( 24 + 28*4 + 36) / 6
= 272/6
= 29 (approx)
Answer options B, D, and A are incorrect. These are not the valid answers for this question.

**QUESTION NO: 277**

You are the project manager of the NHQ project. Your project has a budget of $1,258,456, and is scheduled to last for three years. Your project is currently forty percent complete though it should be forty-five percent complete. In order to reach this point of the project, you have spent $525,000. Management needs a performance report regarding the NHQ project. Management is concerned that this project will be over budget upon completion. Management would like to create a report telling them how much more the project will need to complete. What value should you tell

management?

A. $566,305
B. $787,504
C. $1,312,504
D. $733,456

**Answer: B**

**Explanation:**
The project will need $787,504 more to complete. This formula, the estimate to complete, is estimate at completion minus the actual costs. Here,
CPI = EV/AC =(0.40*1,258,456)/525000= 0.95882, and
ETC = EAC - AC
= (BAC/CPI) - AC
=(1,258,456/0.95882) - 525000
= 1,312,504- 525000
= 787,504
The estimate to complete (ETC) is the expected cost needed to complete all the remaining work for a scheduled activity, a group of activities, or the project. ETC helps project managers predict what the final cost of the project will be upon completion. The formula for the ETC is EAC- AC. The EAC is BAC/CPI.
Answer option C is incorrect. This is the estimate at completion.
Answer option A is incorrect. This is the planned value.
Answer option D is incorrect. This is not a valid value based on the current project performance.

**QUESTION NO: 278**

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 are likely to be only 60 percent complete. Your project has a BAC of $745,000 and you have spent $440,000 of the budget-to-date. What is your schedule variance for this project?

A. $11,667
B. 1.02
C. $7,000
D. $-111,750

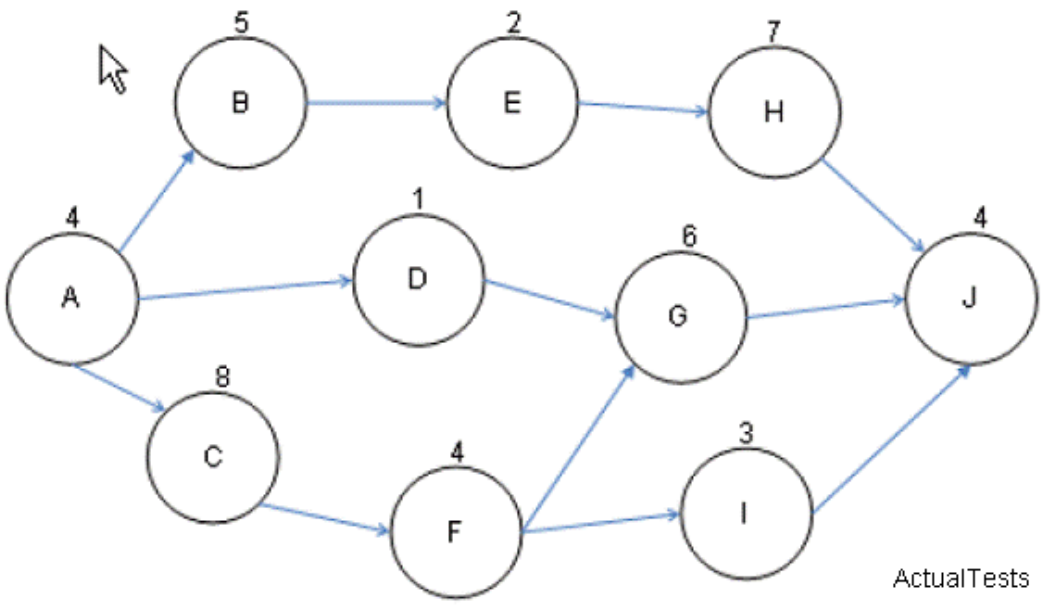
**Answer: D**

**Explanation:**
The schedule variance is found by subtracting the planned value from the earned value. In this instance, it is $447,000 minus $558,750. 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 = Earned Value (EV) - 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.
Answer option C is incorrect. $7,000 is the cost variance for this project.
Answer option A is incorrect. $11,667 is the variance at completion for this project.
Answer option B is incorrect. 1.02 is the cost performance index for this project.

**QUESTION NO: 279**

Jeff is the project manager of the GHY Project for his organization. He has created the project network diagram as shown in the figure:




Management is reviewing the network diagram, and they are concerned about the latest date that Activity I can finish. What is the latest day Activity I can finish without affecting the project end date?

A. Day 20
B. Day 22
C. Day 17
D. Day 19

**Answer: B**

**Explanation:**
Activity I must finish by Day 22, so that Activity J can start by Day 23. If Activity I finishes later than Day 22, the project will be late.
Answer option D is incorrect. Day 19 is the earliest Activity I can finish.

Answer option A is incorrect. Day 20 is the latest Activity I can start.
Answer option C is incorrect. Day 17 is the earliest Activity I can start.

**QUESTION NO: 280**

You are the project manager for your organization. You have recently noted some risks associated with some of the activities in your project. These risks can have schedule and costs impacts on your project and you need to address the risks through qualitative and quantitative analysis to confirm the depth of possible impact. Where should you document the risk information concerning the activities in your project schedule?

A. Risk management plan
B. Schedule management plan
C. Risk register
D. Activity attributes

**Answer: C**

**Explanation:**
The project risks are documented in the risk register - including the probability and impact information. The risk register is an output of the Identify Risks process. Risk register is a document that contains the results of the qualitative risk analysis, quantitative risk analysis, and risk response planning. Description, category, cause, probability of occurring, impact on objectives, proposed responses, owner, and the current status of all identified risks are put in the risk register.

Answer option A is incorrect. The risk management plan addresses that how risks will be identified, monitored, and controlled.
Answer option D is incorrect. The activity attributes information is needed, but risks are not part of the activity attributes.
Answer option B is incorrect. The schedule management plan addresses how the schedule will be created, executed, and controlled.

**QUESTION NO: 281**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are up posed to be at your second milestone which accounts for half of the project completion. There have been some errors in the project which has caused you to spend $2,073,654. What is this project's schedule variance?

A. 10 percent

B. -$48,654
C. -$225,000
D. 0.98

**Answer: C**

**Explanation:**
The schedule variance can be found by subtracting the planned value from the earned value. In this instance, it is $2,025,000 minus $2,250,000. 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 = Earned Value (EV) - 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.
Answer option B is incorrect. This is the cost variance for the project.
Answer option A is incorrect. 10 percent is not a valid answer.
Answer option D is incorrect. This is not a valid variance for this question; variances are typically negative numbers.

**QUESTION NO: 282**

You are the project manager for your organization. Your current project has a schedule variance of -$37,500 and a schedule performance index of 0.94. What do these values mean in regard to project performance?

A. Your project is likely to be late and over budget.
B. Your project is performing well.
C. Your project has a planned value of $600,000.
D. Your project is six percent off schedule and has a considerable schedule variance.

**Answer: D**

**Explanation:**
A schedule variance is found by subtracting the planned value from the earned value. A -$37,500 schedule variance is considerable for most projects, but combined with a schedule that is six percent off schedule is more serious. The size of the project, however, and the defined project budget, needs to be determined to evaluate how serious the variance is. 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 = Earned Value (EV) - 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.

Answer option B is incorrect. This project is not performing well based on the given information.
Answer option A is incorrect. This project is likely to be late, but we do not know how costs are performing in this question.
Answer option C is incorrect. There is not enough information to determine how well the project is performing from this answer.

**QUESTION NO: 283**

You are the project manager for the NHQ project. The management has reminded you that you must not allocate any project team member for more than 25 hours per work week on your project. This policy is because your organization is in a weak matrix and the project team members are on several projects at once within the organization. The 25-hour limit per resource is an example of which one of the following?

A. Expert judgment
B. Enterprise environmental factor
C. Resource limitation
D. Organizational process asset

**Answer: B**

**Explanation:**
The limit on each work is an organizational policy for each project. Policies, rules, and organizational requirements are the enterprise environmental factors.
Answer option D is incorrect. Organizational process assets are things that have been created for the project manager, such as software, templates, guidelines, and other resources that will assist the project manager in completing the project.
Answer option C is incorrect. While this could be a resource limitation, it is not a valid project management term. Resource leveling heuristics or a project constraint would have been acceptable answers.
Answer option A is incorrect. Expert judgment happens, when the project manager relies on someone with more knowledge on a topic to help the project manager make the best project decision.

**QUESTION NO: 284**

You are the project manager of the HGH Project. Thomas, your project sponsor, asked you to submit status reports every week, but now he wants you to submit the status reports every other week. What project management plan would you need to update to reflect this change from Thomas?

A. Scope management plan
B. Performance management plan
C. Communications management plan
D. Project management plan

**Answer: C**

**Explanation:**
The communications management plan needs to be updated whenever there is a change in the frequency, type, or audience of communication. The communication management plan is a document that contains information that is required by the stakeholders. It also documents when and how the information should be distributed. It describes the information delivery needs, its format and level of detail. The communication management plan is contained in or is a subsidiary of the project management plan.
Answer option D is incorrect. The project management plan is a collection of subsidiary plans, including the communications management plan.
Answer option A is incorrect. The scope of the project is not being changed in this example, so there is no need to update the plan.
Answer option B is incorrect. There is no plan by the name of performance management plan, so this choice is incorrect.

**QUESTION NO: 285**

Andy is the project manager of the NHGQ project for his organization. He has elected to use a three-point estimate for his project. His project team, however, is complaining about participating in this estimate type because of the time it takes to predict the duration of activities. Andy, as the project manager, tells the project team that they must create the time estimate, as it will help this project and future similar projects. What is a three-point estimate?

A. Each activity must be estimated for its optimistic, pessimistic, and most likely duration.
B. Each activity must be estimated for its optimistic, pessimistic, and most likely duration and then an average for the estimate is created.
C. A three-point estimate, also known as PERT, uses the formula optimistic, plus four times the most likely, plus the pessimistic. This value is then divided by six.
D. A three-point estimate, also known as GERT, uses the formula optimistic, plus four times the most likely, plus the pessimistic. This value is then divided by six.

**Answer: B**

**Explanation:**
A three-point estimate requires that each activity be estimated for its optimistic, most likely, and pessimistic duration. Once the three estimates have been created, an average of the duration estimates is found and this is the recorded duration for the project work.

Answer option A is incorrect. This is not a complete explanation of a three-point estimate.
Answer option C is incorrect. This is a definition of PERT, a similar time estimating technique.
Answer option D is incorrect. This is definition of PERT, but this answer uses the term GERT so it is not a valid choice.

**QUESTION NO: 286**

You work as a Project Manager for Media Perfect Inc. Several projects are running under your supervision. Rick, team leader of a project, provides you performance indexes of his project. The schedule variance (SV) of his project is 25. What does this figure depict?

A. Project is behind the schedule.
B. Costs are higher than planned.
C. Project is right on target.
D. Project is ahead of the schedule.

**Answer: D**

**Explanation:**
According to the question, the schedule variance (SV) of the project is 25, which is a positive value. The positive SV depicts that the project is ahead of the planned schedule. What is SV? 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 = Earned Value (EV) - 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.
Answer option A is incorrect. The negative SV means that project is behind the schedule.
Answer option C is incorrect. The zero SV means that project is right on target.
Answer option B is incorrect. This result can be drawn by looking at the cost variance (CV) of the project. What is CV? Cost variance (CV) is a measure of cost performance on a project. The variance notifies if costs are higher than budgeted or lower than budgeted. The cost variance is calculated based on the following formula: CV = Earned Value (EV) - Actual Cost (AC) A positive value means that spending is less than budgeted, whereas a negative value indicates that costs are higher than originally planned for the project.

**QUESTION NO: 287**

You are the project manager for the NQQ Project for your organization. You and the project team are creating the activity list for the NQQ Project. You have instructed the project team members that they should include an activity identifier and a scope of work description for each activity in the activity list. Why is this information needed?

A. To track the work to the project requirements
B. To maintain profit and loss statements for the project
C. To help the project team understand what work is required to be completed
D. To communicate the work to be completed to the project stakeholders

**Answer: C**

**Explanation:**
The primary reason for including the activity identifier and the scope of work description for each activity is to ensure the project team understands what work is required to be completed.
Answer option B is incorrect. Profit and loss statements are not required for all projects and they are linked to actual performance against a project baseline.
Answer option D is incorrect. Communicating to the stakeholders is always a good idea, but stakeholders would not usually need to know the activity details. Their focus is on project benefits and deliverables.
Answer option A is incorrect. A requirements traceability matrix is the tool to link requirements to project deliverables.

**QUESTION NO: 288**

Harry is the project manager of a large network installation project. This project requires Harry to add network cable to each office and cubicle of a 14-story office building. Harry will receive a bonus for good time and cost performance in this project. What law of economics would prevent Harry from exponentially adding labor to the project work in an effort to complete the work in a very small amount of time?

A. Parkinson's Law
B. Law of Diminishing Returns
C. Law of Economics
D. Moore's Law

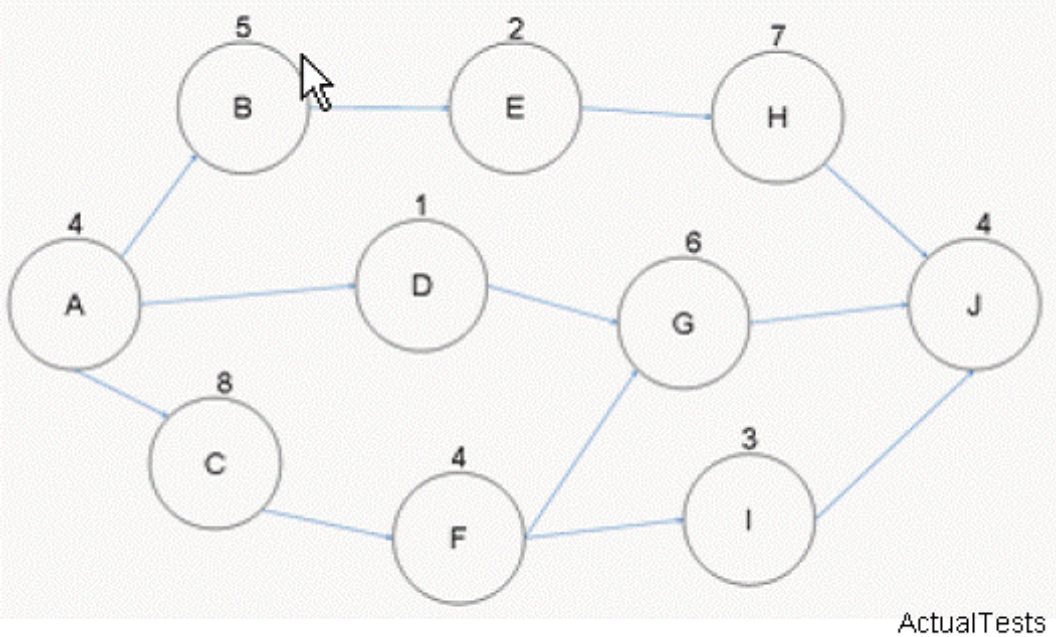
**Answer: B**

**Explanation:**
The law of diminishing returns state that the user cannot exponentially add labor to a project to reduce the amount of time required to complete the project work. In other words, Harry cannot keep doubling the workforce on this project to reduce the project duration down to just a few minutes. The law of diminishing returns state that "the user will get less and less output when he add additional doses of an input while holding other inputs fixed. In other words, the marginal product of each unit of input will decline as the amount of that input increases holding all other inputs constant." Diminishing returns mean that the extra labor causes output to fall, which means that the MPL is negative. In other words, the change in output per unit increase in labor is negative and total output is falling.

Answer option C is incorrect. This is not a valid project management term.
Answer option A is incorrect. Parkinson's Law states that work will expand to the amount of time allotted to it.
Answer option D is incorrect. Moore 's Law is based on Intel's Gordon Moore who stated that processor speeds generally double in power every 18 months.

**QUESTION NO: 289**

You are the project manager for your organization. You are coaching Allen, a junior project manager, on how the details of the project's critical path are calculated. Examine the figure given below:




What is the critical path of this project?

A. ABEHJ
B. ACFGJ
C. ADGJ
D. ACFIJ

**Answer: B**

**Explanation:**
The critical path is discovered by summing the duration of each activity node in each chain of activities in the project network diagram. In this figure, the critical path is ACFGJ, which is 26 days, the longest chain of activities in the project.
Answer option A is incorrect. This path's duration is 22 days.
Answer option D is incorrect. This path's duration is 23 days.
Answer option C is incorrect. This path's duration is 15 days.

**QUESTION NO: 290**

You work as a stakeholder for ABC Inc. You are on an important feature of a project that appears too difficult to execute. Issues like acceptable type of bugs and number of bugs for user acceptance seem to have affected the project. What is the rate of risk factor in such a situation?

A. Risk factors are rated high.
B. Risk factors are rated low.
C. Risk factors are rated medium-high.
D. Risk factors are rated medium.

**Answer: A**

**Explanation:**
This happens when most of the stakeholders are concerned about risks. Risk factors are determined for the scope of the project, requirements, design and strategy, technology, processes (for development, payment, change management, risk management, and closing the project), and conditions of the project. Risk factors are high when most of the stakeholders have concerns. Even if one important feature of a project appears too difficult to execute, the risk is high. Issues like acceptable type of bugs and number of bugs for user acceptance, terms for closing the project, payments not being clear or misunderstood, make the project highly risky.
Answer option B is incorrect. Risks are low when issues like the format of the forms are not finalized but the functionality is thoroughly understood and solutions are approved.
Answer option D is incorrect. Risks are rated medium when a very small number of stakeholders have a few concerns. For example, the development team may not have very advanced knowledge of the technology but could provide some work around. Another could be that the customer's people cannot finalize a few unimportant workflows.
Answer option C is incorrect. It is an invalid answer.



**QUESTION NO: 291**

Jenny works as a Project Manager for Blue Well Inc. She is measuring the schedule efficiency of her project. The key values are provided in the table below:

MeasurementsValues
BCWP (or EV) 425
BCWS (or PV) 400
ACWP (or AC) 510
What is the schedule performance index (SPI) of the project at the current point of time?

A. 1.082
B. 0.88
C. 1.0625
D. 0.96

**Answer: C**

**Explanation:**
According to the question, you are required to calculate the schedule performance index (SPI) of the project. 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. Here, SPI is calculated as follows: SPI = EV / PV = 425/400 = 1.0625 As the SPI (1.0625) is greater than 1, it shows that the schedule performance is better than expected. What is BCWP (or EV)? Budgeted cost of work performed (BCWP) or Earned Value (EV) is the value of completed work. It is the budgeted amount for the work actually completed on the schedule activity during a given time period. What is BCWS (or PV)? Budgeted Cost of Work Scheduled (BCWS) or Planned Value (PV) is the authorized budget assigned to the scheduled work to be accomplished for a schedule activity or Work Breakdown Structure (WBS) component. What is ACWP (or AC)? Actual cost of work performed (ACWP) or Actual Cost (AC) is the total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity. It is the cost of the work to date, including direct and indirect costs. AC is money that has actually been expended to date.

**QUESTION NO: 292**

Fred is the project manager of a hotel restoration project. The hotel has 456 rooms. All rooms need to be primed and painted. Before each room can be painted, the primer must cure for twenty-four hours. Fred has arranged these tasks with a finish to start relationship between the priming and the painting. What else should Fred do to account for the twenty-four hours of cure time?

A. Fred should add twenty-four hours of lead time to each of the 456 rooms painting activity to account for the primer's curing time.
B. Fred should add twenty-four hours of lag time to each of the 456 rooms painting activity to account for the primer's curing time.
C. Fred should add an intermediary task with a duration of twenty-four hours.
D. Fred should schedule all 456 hotels rooms to be primed first and then schedule all 456 rooms to be painted to ensure time for the curing.

**Answer: B**

**Explanation:**
Fred should add lag time to each painting activity. Since lag time is waiting time, Fred will have to wait twenty-four hours after the priming is finished before he can start painting. What is a lag? A lag directs a delay in the successor activity. Lags require the dependent activity to have added either to the start date or to the finish date of the activity. For example, in a project of making radio-controlled airplanes, after applying glue and pasting stickers, it requires twenty-four hours to dry the glue. Any activity can be started after that only. This period, of twenty-four hours, is a lag.
Answer option C is incorrect. There is no reason to add an intermediary task as waiting. Adding lag time is the most appropriate as there are fewer activities to manage.
Answer option D is incorrect. Priming all of the room first and then painting all of the rooms would cause Fred to readjust the entire sequencing of activities. In addition, we do not know the reason why Fred has scheduled all the rooms to be primed and then painted. There may be successor activities in the project that need to enter each room, such as carpeting, as soon as a room has been painted. If that were the case the additional activities would have to wait for all of the priming to be completed and then the sequential rooms to be painted before they could start.
Answer option A is incorrect. Lead time actually moves activities closer together rather than farther apart. Lead time would cause the painting and priming activities to overlap, something that Fred does not want to happen. What is a lead? A lead allows an acceleration of the successor activity. It works just the opposite of lag. For example, in a software application project, before designing is fully completed for first phase, a program development group can start this phase programming. This overlapping of timing is a lead.

**QUESTION NO: 293**

You work as a project manager for Honeywell Inc. You have been distributing performance information, including status reports, progress measurement, and forecasts to various stakeholders. A trainee of this company wants to know what are the inputs for generating performance reports. Which of the following are the necessary inputs? Each correct answer represents a part of the solution. Choose two.

A. Variance analysis
B. WPM
C. WPI
D. Change request

**Answer: B,C**

**Explanation:**
According to the scenario, you can use the following inputs in order to generate performance reports:
WPI: Work performance information is the data gathered on the status of the project schedule activities that are performed to accomplish the project work. This data is collected as part of the

Direct and Manage Project Execution processes. WPI includes the following:
Deliverables status
Schedule Progress
Costs incurred
WPM: Work performance measurements are created from the work performance information. WPMs are an output of Control schedule, Control cost, and Control scope processes, which are monitoring and controlling processes. WPMs consist of planned versus actual performance indicators with respect to scope, schedule, and cost. They are documented and communicated to the stakeholders and are used to make project activity metrics, such as the following:
Planned vs. Actual Technical performance and Scope performance
Planned vs. Actual Schedule performance
Planned vs. Actual Cost performance
Answer option A is incorrect. Variance analysis is an after-look at what caused a difference between the baseline and the actual performance. It is one of the tools and techniques used for report performance.
Answer option D is incorrect. Change requests are requests to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets or revise schedules. These requests for a change can be direct or indirect, externally or internally initiated, and legally or contractually imposed or optional. A Project Manager needs to ensure that only formally documented requested changes are processed and only approved change requests are implemented.

**QUESTION NO: 294**

Your project is installing 8,000 light fixtures in a new building. Each of the light fixtures is to be installed exactly the same way but you have discovered that some of the fixtures are installed incorrectly. You and the project team meet and agree to fix the fixtures and to install all future fixtures the same way. This is an example of what executing activity?

A. Risk response
B. Team development
C. Risk mitigation
D. Corrective action

**Answer: D**

**Explanation:**
This is an example of corrective action. The project team will fix the mistake and they have learned from their mistake so it won't happen again.
Answer option C is incorrect. Risk mitigation is defined as monies spent or actions taken to reduce the probability and impact of an identified risk event.
Answer option A is incorrect. A risk response is an action to counteract an identified risk.

Answer option B is incorrect. There may be some team development happening in this instance but we don't have enough information to know for certain. Team development is an activity that brings the whole team cohesion, interdependency, and trust.

**QUESTION NO: 295**

You are the project manager of the GHY project. Your project has a BAC of $675,000 and is forty percent complete though you were supposed to be forty-five percent complete. Due to some errors early in the project, you had to spend $278,000 of your project's budget to reach this point. Management is asking for a variance report. What part of your project has the largest variance?

A. Cost, with a variance of -$8,000
B. Schedule, with a variance of -$33,750
C. Cost, with a variance of $278,000
D. Schedule, with a variance of -$20,000

**Answer: B**

**Explanation:**
Your schedule variance is -$33,750. You can find this by using the formula earned value-minus planned.
Answer option C is incorrect. Cost is not the largest variance in the project.
Answer option A is incorrect. Cost is not the largest variance in the project (it is -$8,000).
Answer option D is incorrect. -$20,000 is the variance at completion for the project.

**QUESTION NO: 296**

You work as a project manager for BlueWell Inc. Some of the activities in your project are not being completed on time. You reviewed these activities with your project team and discovered that the time estimates for the project are much more aggressive than what they are actually experiencing in the completion of the activities. You elect to create a new schedule for the project. What project Management process are you working with when you create a new target schedule?

A. Develop schedule
B. Estimate activity durations
C. Control schedule
D. Estimate activity resources

**Answer: C**

**Explanation:**
In severe cases, new schedule duration estimates with new forecasted start and finish dates are needed. In these instances, it is an example of using the control schedule process. Control

schedule process is a method of monitoring the status of the project to update project progress and deal with the changes to the schedule baseline. It is concerned with:
Determining the current status of the project
Influencing the factors that create schedule changes
Determining that the project schedule has changed
Managing the actual changes as they occur
Control schedule is a component of the Perform Integration Change Control process.
Answer option D is incorrect. The activity resources would only address the addition or replacement of resources needed to complete the project work.
Answer option B is incorrect. This is a tempting choice, but new schedules are a part of the control schedule process.
Answer option A is incorrect. Develop schedule is not the best choice for this question.

**QUESTION NO: 297**

Mark works as a project manager for BlueWell Inc. He is making relevant information available to the project stakeholders as required. According to Mark, which of the following are NOT the tools and techniques of the Distribute Information process?

A. Communication requirements analysis
B. Information distribution tool
C. Communication method
D. Communication technology

**Answer: A,D**

**Explanation:**
These tools and techniques are used in the Plan communications process. The tools and techniques used in the Distribute information process are as follows: Communication methods: These methods includes individual and group meetings, computer chats, audio and video conferences and other remote communications methods to distribute information. Information distribution tools: Various information distribution tools can be used to distribute information such as electronic tools, electronic conferencing tools, hard copy document distribution etc.

**QUESTION NO: 298**

Adrian is the project manager for her project. This new project needs to identify all the stakeholders that will be affected by the project's outcome. How stakeholders are usually identified?

A. Stakeholders are usually identified through a stakeholder register.

B. Stakeholders are identified by the project team, project sponsor, and management.
C. Stakeholders are identified through the project customers.
D. Stakeholders are usually identified by interviewing identified stakeholders and expanding the list until all potential stakeholders are included.

**Answer: D**

**Explanation:**
Stakeholders are interviewed and can help identify other stakeholders that should be included in the project communications.
Answer option B is incorrect. According to the PMBOK, this is not the best answer.
Answer option A is incorrect. Stakeholders are entered into a stakeholder register, not identified by it.
Answer option C is incorrect. Project customers are stakeholders.

**QUESTION NO: 299**

You are the project manager of the NHQ Project. Management has told you that resource leveling will be enforced on your project, but they still want you to complete the project by July 2. With the current resources you have and the resource leveling imposed, you would not be able to finish by the constraint. What document should you update to address this situation?

A. Project activity resource requirements
B. Project schedule management plan
C. Project scope
D. Project charter

**Answer: A**

**Explanation:**
The activity resource requirements will need to be addressed because the imposed constraint will cause a need for more resource to complete the activities by July 2. What is resource leveling heuristics? Resource leveling heuristics is a prioritization method that allocates inadequate resources to critical path activities first. It is a schedule network analysis technique useful to a schedule that has already been analyzed by the critical path method. It is used when shared or critical essential resources are only available at certain times, in limited quantities, or to keep resource usage at a constant level. It is a technique that resolves resource conflicts by delaying tasks within their slack allowances. Resource leveling is the process in which project teams come across problems when developing their project schedules. If a company has multiple projects running simultaneously that require the same resources, then problems can arise. It can often cause the critical path method to change.
Answer option C is incorrect. The project scope does not need to be addressed as there has not been a request to reduce or increase the project scope.

Answer option B is incorrect. The project charter will not change. In fact, the charter will rarely, if ever, change once has been approved and signed.
Answer option D is incorrect. The schedule management plan would not be the biggest concern in this instance. The plan defines how the schedule will be created, executed, monitored and controlled.

**QUESTION NO: 300**

You are creating a status report to show how your project is progressing. Management is interested in several key activities and their status. You need to report work performance information to management. All of the following are example of work performance information you should include in your report except for which one?

A. How the project is performing on its schedule.
B. Performance of the selected project vendors
C. Which activities have been started and which activities have been finished.
D. Percent of completion for the in-progress activities

**Answer: B**

**Explanation:**
Vendor performance, while important, is not part of the work performance information.
Management is interested in the how well the project is performing, what activities are currently underway, and what's been completed to date.
Answer option A is incorrect the project's performance on schedule should be reported
Answer option C is incorrect as management is interested in what activities have been started and finished.
Answer option D is incorrect as management does want to know the percent of completion for the in-progress activities



**QUESTION NO: 301**

Which of the following are the outputs to the Determine Budget process? Each correct answer represents a complete solution. Choose all that apply.

A. Project document updates
B. Scope baseline
C. Cost performance baseline
D. Project funding requirements

**Answer: A,C,D**

**Explanation:**
The outputs to the determine budget process are as follows: Cost performance baseline: The cost performance baseline is an authorized time-phased budget at completion. Project funding requirements: The project funding requirements are determined from total funding requirements and periodic funding requirements. Project document updates: The project document updates consists of risk register, cost estimates and project schedule.
Answer option B is incorrect. Scope baseline is an input to the determine budget process.

**QUESTION NO: 302**

What forecasting method would your project use if your project customer requires an autoregressive moving average for performance forecasting?

A. Judgmental methods
B. Time series method
C. Ensemble forecasting
D. Causal/econometric method

**Answer: D**

**Explanation:**
The autoregressive moving average is an example of a causal/econometric method for the forecasting project performance. The casual/econometric forecasting method uses the assumption that it is possible to identify the underlying factors, which might influence the variable being forecasted. For example, sales of umbrellas might be associated with weather conditions. If the causes are understood, projections of the influencing variables can be made and used in the forecast. Some examples of casual/econometric forecasting method are as follows: Regression analysis using linear regression or non-linear regression Autoregressive moving average (ARMA) Autoregressive integrated moving average (ARIMA) Econometrics
Answer option B is incorrect. The time series method relies on the earned value, moving average, extrapolation, and growth curve.
Answer option A is incorrect. The judgmental methods use intuition, the Delphi method, and forecast by analogy.
Answer option C is incorrect. The ensemble forecasting is not part of the causal/econometric method for forecasting.

**QUESTION NO: 303**

You are the project manager of the GUH project. You are using the critical chain scheduling method as your approach to project scheduling. What two items can you compare in the critical chain method to determine if corrective action is appropriate?

A. Amount of buffer remaining to the amount of resources available
B. Amount of buffer remaining to the amount of buffer used
C. Availability of project resources and project buffer
D. Amount of buffer needed to the amount of buffer remaining

**Answer: D**

**Explanation:**
The difference between the buffer needed and the buffer remaining can determine whether corrective action is appropriate.
Answer option C is incorrect. This is not an accurate description of how the critical chain determines the need for corrective action.
Answer option B is incorrect. This is not an accurate description of how the critical chain determines the need for corrective action.
Answer option A is incorrect. This is not an accurate description of how the critical chain determines the need for corrective action.

**QUESTION NO: 304 CORRECT TEXT**

Fill in the blank with an appropriate phrase. The _____contains the schedule components and the rules for relating and using the components to represent the process for completing a project.

Answer: Scheduling tool

**QUESTION NO: 305**

Cathy is the project manager of the NNQ Project. She currently has completed 45 percent of the project but was scheduled to have 65 percent of the project completed. This project has a budget of $344,000 and was scheduled to last four months. Cathy has spent $198,998 to date on the project. Based on this information, what is the estimate at completion for the NNQ Project?

A. -$98,217.78
B. -$44,198
C. $441,025.64
D. $243,219.78

**Answer: C**

**Explanation:**
The estimate at completion (EAC) formula is the Budget at Completion (BAC)/Cost Performance Index (CPI). In this instance, the CPI is .78 and the BAC is $344,000. Cathy's project isn't doing too well.
Answer option D is incorrect. This value represents the estimate to complete for the project.

Answer option B is incorrect. This value represents the negative cost variance.
Answer option A is incorrect. This value represents the negative value the project will have once all the work is completed.

**QUESTION NO: 306**

Maurice is the project manager of the NHQ Project and his project team has just finished the project activities. The quality control team reports that the project deliverables are perfect. The only thing left to in the project is to verify scope. This process will be performed by the project stakeholders. Maurice is required to submit a final project report and report on the project performance. Maurice's project had a budget of $234,000 but the project spent $245,000. In the final report management wants to know the project's cost performance index (CPI). What value should Maurice report?

A. -$11,000
B. .96
C. There is not enough information to know.
D. 1

**Answer: B**

**Explanation:**
Cost performance index (CPI) is used to calculate performance efficiencies. It is used in trend analysis to predict future performance. CPI is the ratio of earned value to actual cost. The CPI is calculated based on the following formula: CPI = Earned Value (EV) / Actual Cost (AC) If the CPI value is greater than 1, it indicates better than expected performance, whereas if the value is less than 1, it shows poor performance. The CPI value of 1 indicates that the project is right on target. In this instance, the earned value is $234,000 as the project work is 100 percent. The actual costs are $245,000.
Answer option D is incorrect. This is the schedule performance index value.
Answer option A is incorrect. This is the variance at completion for the project.
Answer option C is incorrect. There is enough information to find the answer.

**QUESTION NO: 307**

You are the project manager of the GHQ Project. You are working with your project team to create the project network diagram. You have created the PND and are identifying the critical path with your team using your project management information system. All of the activities on the critical path are showing in red in the software that you are using to evaluate the critical path. What are schedule activities on the critical path called?

A. Critical activities
B. Action items
C. High alert activities
D. Red rated activities

**Answer: A**

**Explanation:**
Schedule activities on the critical path are called critical activities. Critical activity is a specific schedule activity on the critical path that takes place within a project schedule. Critical activities are mainly determined during the execution and deployment of the critical path method. In project management terms, critical activity refers to being on the major critical path, the most important path of life of an activity. Critical activity can also be defined as the work elements that must be carefully monitored, documented, and managed to make the success of an organization, program, or project. An activity that has a total float equal to zero is believed to be a 'critical activity', which means if an interruption in the finish time of an activity occurs, then the entire project will be delayed by the same amount of time. A critical activity generally has free float equal to zero.
Answer options D, C, and B are incorrect. These are not valid answers for this question.

**QUESTION NO: 308**

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 and they'd like to know what your schedule variance is. Considering that the project has a BAC of $567,899, you are thirty percent complete, and you have spent $179,450. What is the schedule variance for this project?

A. -$45,789
B. -$56,790
C. There is not enough information to know.
D. -$30,268

**Answer: B**

**Explanation:**
The schedule variance can be found by subtracting the planned value from the earned value. In this instance, it is $170,370 minus $227,160. SV = 170,370 - 227,160 = -56,790 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 = Earned Value (EV) - 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.
Answer option A is incorrect. $45,789 is not a valid calculation.

Answer option D is incorrect. -$30,268 is the expected variance at completion.
Answer option C is incorrect. There is enough information to know.

**QUESTION NO: 309**

Which of the following characteristics of conflict and the conflict management process should be recognized by the project managers while handling conflict in a team environment? Each correct answer represents a complete solution. Choose all that apply.

A. Conflict resolution should focus on issues, not personalities.
B. Conflict is natural and forces a search for alternatives.
C. Openness resolves conflict.
D. Conflict is an individual issue.

**Answer: A,B,C**

**Explanation:**
The characteristics of conflict and the conflict management process recognized by the project managers while handling conflict in a team environment are as follows: Conflict is natural and forces a search for alternatives. Openness resolves conflict. Conflict resolution should focus on issues, not personalities. Conflict is a team issue. Conflict resolution should focus on the present, not the past.

**QUESTION NO: 310**

What formula would you use if your project had a BAC of $450,000, you have spent $191,000, and you are 40 percent complete though you are supposed to be 55 percent done and management wants to know your project's schedule performance index?

A. ($450,000 - $180,000) / ($450,000 - $191,000)
B. $450,000 - $477,500
C. $180,000 / $247,500
D. $180,000 - $247,500

**Answer: C**

**Explanation:**
The schedule performance index can be found by dividing the earned value by the planned value. In this instance, it is $180,000 / $247,500 for a value of .73. 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 D is incorrect. This is the schedule variance formula of EV-PV.
Answer option A is incorrect. This is the TCPI formula of 1.04.
Answer option B is incorrect. This is the VAC formula with a result of -$27,500.

**QUESTION NO: 311**

A company hires a scheduler for one of its projects. What skills should he possess to efficiently work with the project team? Each correct answer represents a complete solution. Choose three.

A. Performance control
B. Execution scheduling
C. Leadership
D. Feasibility planning

**Answer: A,B,D**

**Explanation:**
A scheduler schedules the constraints for the project into phases with respect to the time and resources available. He can be hired from outside a company, or from within a company. The basic roles of a scheduler are as follows: Feasibility Planning: A scheduler is the time management expert who paints a picture of the project. He develops a strategy for delivery and to gain consensus. Execution Schedule: A scheduler works with the project team to optimize and refine the schedule until an agreed schedule has been developed. Performance Control: A schedule is maintained by the scheduler who optimizes outcomes and instructs the project team on their presentation. It is important that the scheduler be aware of the changes and trends related to the project delivery.
Answer option C is incorrect. This is the skill possessed by the project manager.

**QUESTION NO: 312**

Which of the following is NOT an output of the control schedule process?

A. Organizational process assets
B. Change requests
C. Project termination request
D. Project document updates

**Answer: C**

**Explanation:**
The project termination request is not an output of the control schedule. Early termination of a project is a closing process and usually does not stem from the project manager. The outputs of

the control schedule process are as follows: Work Performance Measurements: The work packages and control accounts are documented and communicated to the stakeholders. Organizational Process Assets Updates: The assets that are updated are: corrective actions chosen and the reasons, causes of variance, and other types of lessons learned from project schedule control. Change Requests: It is processed for reviews and disposition through the Perform Integrated Change Control process. Project Management Plan Updates: The elements that need to be updated are: schedule baseline, schedule management plan, cost baseline. Project Document Updates: The elements that need to be updated in project document updates are: schedule data and project schedule.

**QUESTION NO: 313**

You are the project manager of the NHQ project. This project is scheduled to last for six months and will require $345,000 to complete. If the project completes earlier than scheduled, your organization will receive a bonus of $5,000 per day for the early completion. Management has asked you to develop an aggressive schedule to realize as much of the bonus as possible, but you must be careful not to increase project risk beyond an acceptable level of risk exposure. Which of the following approaches is most likely to increase project risk?

A. Using the critical chain method
B. Crashing
C. Adding leads to the project work
D. Fast tracking

**Answer: D**

**Explanation:**
Fast tracking allows entire phases of the project to overlap and this action does increase risks. This is an approach that you would want to avoid in your project.
Answer option B is incorrect. Crashing adds labor to the project and typically drives project costs.
Answer option A is incorrect. The critical chain method considers the availability of project resources as part of its network diagramming technique.
Answer option C is incorrect. Lead time allows project activities to overlap and may introduce project risks, but not to the extent of using fast tracking.

**QUESTION NO: 314**

You are the project manager of the GHY Project. This project is scheduled to last for one year and has a BAC of $4,500,000. You are currently 45 percent complete with this project, though you are supposed to be at your second milestone, which accounts for half of the project completion. There have been some errors in the project, which has caused you to spend $2,073,654. What is this project's planned value?

A. $2,025,000
B. There is not enough information to know
C. $4,500,000
D. $2,250,000

**Answer: D**

**Explanation:**
The planned value is the worth of the project if it were on time. In this instance, the project should be 50 percent complete, so the planned value is half of the project budget - $2,250,000. Planned value (PV) is the authorized budget assigned to the schedule work to be accomplished for a schedule activity or work breakdown structure component. It serves as a baseline against which actual performance is measured. The theory of planned value is of vital importance to the project management team and it is important to keep careful track of this. The term planned value can also be in some situations referred to by the project management team and the project management team leader as the budgeted cost of work scheduled (BCWS).
Answer option C is incorrect. This is the budget at completion.
Answer option A is incorrect. This is the earned value for the project.
Answer option B is incorrect. There is enough information to know.

**QUESTION NO: 315**

You are the project manager for your organization. You want to record some details about the work that the project team has to complete. You want to document the level of effort, where the work is to be performed, and the person who will be responsible for completing the work. Which of the following is the best place to document this information?

A. Activity attributes
B. Project management plan
C. Schedule Management Plan
D. Roles and Responsibilities Matrix

**Answer: A**

**Explanation:**
The activity attributes initially include the Activity ID, WBS ID, and the Activity Name, but it can evolve over time to include other components about the work. Activity attributes are an output of the Define Activity process. These attributes refer to the multiple components that frame up an activity. The components for each activity during the early stages of the project are the Activity ID, WBS ID, and Activity name. At the later stages, the activity attributes include Activity codes, Predecessor activity, activity description, logical relationship, successor activity, leads and lags, imposed dates, and constraints and assumptions. Activity attributes are used for schedule development and for ordering, selecting, and sorting the planned schedule activities in a number

of ways within reports.
Answer option B is incorrect. A project management plan is a formal document that defines how the project is being monitored, controlled, and executed. It is not the best answer.
Answer option D is incorrect. The roles and responsibilities matrix records the work and the person to record the work, but does not offer additional information such as locale for the work, level of effort, and other information.
Answer option C is incorrect. The Schedule Management Plan defines how the schedule will be created, executed, and controlled.

**QUESTION NO: 316**

Steve is the project manager for the POK Project. He is working with the project customers to determine how frequently they'd like to receive the project information. The customers would like weekly status reports on how the project is performing. Where should Steve document this information?

A. Communications management plan
B. Issues log
C. Project schedule
D. Schedule management plan

**Answer: A**

**Explanation:**
The communications management plan defines who needs what information, when the information is needed, and the modality the information is expected in.
Answer option C is incorrect. The project schedule could include project management activities such as schedule communication, but the communications management plan is the best answer as this information is absolutely documented in this plan.
Answer option D is incorrect. The schedule management is not the best location for this information.
Answer option B is incorrect. The request for customer communication is not an issue, so this choice is not the most appropriate.

**QUESTION NO: 317**

Jenny is the project manager for her organization. Her project is not doing well on project schedule performance, and management wants her to predict how the project schedule and cost will end. Management has asked Jenny to report and forecast her project's performance based on the Judgmental methods. Which of the following judgmental methods will Jenny use to accomplish the task? Each correct answer represents a complete solution. Choose all that apply.

A. Forecast by analogy
B. Technology forecasting
C. Autoregressive moving average
D. Scenario building

**Answer: A,B,D**

**Explanation:**
The judgmental forecasting method incorporates intuitive judgments, opinions and subjective probability estimates. Some examples of judgmental forecasting are as follows:
Composite forecasts
Surveys
Delphi method
Scenario building
Technology forecasting
Forecast by analogy
Answer option C is incorrect. Autoregressive moving average is an example of the causal/econometric method.

**QUESTION NO: 318**

You work as a project manager for BlueWell Inc. You are creating the activity list for the project. The activity list is based on the work packages defined in the project's WBS. Activities provide a basis for all of the following information except for which one?

A. Scope baseline
B. Executing
C. Scheduling
D. Estimates

**Answer: A**

**Explanation:**
The project's scope baseline is not derived or provided by the project's activity list. The scope baseline is made of the project's WBS, WBS Dictionary, and the Project Scope Statement. The activity list provides for estimating, scheduling, executing, and monitoring and controlling the project work. The scope baseline is an element of the project management plan. The contents of the scope baseline include the following: Project scope statement: It includes the product scope description and the project deliverables, and defines the product user acceptance criteria. WBS: It defines each deliverable and the decomposition of the deliverables into work packages. WBS dictionary: It contains the detailed description of work and technical documentation for each WBS element.
Answer option D is incorrect. Estimates do provide a basis for creating time and cost estimates.

Answer option B is incorrect. Activities are executed in the project.
Answer option C is incorrect. Activities are scheduled as part of project planning.

**QUESTION NO: 319**

Tom is the project manager of the GHQ Project for his organization and he is working on recovering the project schedule. As Tom examines his schedule, he is especially aware of project activities with hard logic. What is hard logic?

A. Hard logic describes activities that can be completed in any order but are positioned with finish-to-start relationships.
B. Hard logic describes activities that have external constraints, such as a vendor.
C. Hard logic describes activities that must be completed in a particular order unless additional resources with comparable skill sets can be added to the project.
D. Hard logic describes activities that must be completed in a particular order.

**Answer: D**

**Explanation:**
Hard logic, also known as mandatory dependencies, describes activities that must be completed in a particular order. Hard logic is a binding connection between activities. It is also known as mandatory dependency or hard dependency. Hard logic requires activities to take place in a specific order according to the nature of work. It is a well-built connection where an activity cannot start until and unless a previous one is completed. There are also substantial hard logic connections where soft logic does not usually apply. Several activities rely on hard logic for the successful completion of the project.
Answer options B, A, and C are incorrect. These are not a valid description of hard logic.

**QUESTION NO: 320**

You are the project manager for your organization. You are working with your project team to create the schedule baseline for your project. You will also be creating the schedule data for this project. The schedule data typically includes all of the following except for which one?

A. Risk activities
B. Schedule activities
C. Activity attributes
D. Schedule milestones

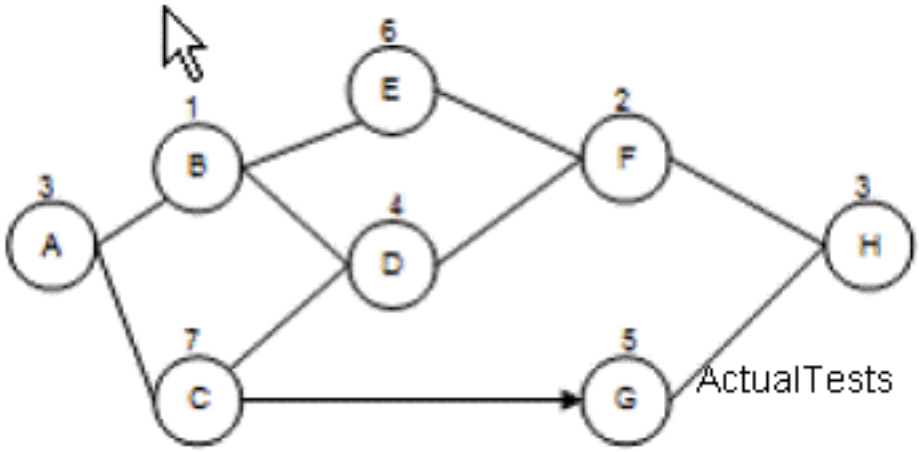
**Answer: A**

**Explanation:**

Risk activities are not part of the schedule data. Risk is documented in the risk register, and monitored and controlled throughout the project. In some instances, risk may be part of the activity attributes. The schedule data includes the schedule milestones, schedule activities, activity attributes, and the assumptions and constraints. The schedule data includes the schedule activities, schedule milestones, activity attributes, and documentation of all known assumptions and constraints. The sum of additional data varies by application area. The schedule data commonly supplied as supporting details includes: Resource requirement by time period, frequently in the category of histogram Alternative schedules, such as best case or worst case, or resource leveled, with or without imposed dates Scheduling of contingency reserves
Answer option D is incorrect. Schedule milestones are part of the schedule data. a
Answer option B is incorrect. Schedule activities are part of the schedule data.
Answer option C is incorrect. Activity attributes are part of the schedule data.

**QUESTION NO: 321**

Mary is the project manager of the H1QZ Project. This project is a subproject of the HQZ Project and the project schedule is fixed and cannot vary. Stephen, a project team member, reports that he's having trouble completing his project assignment and will likely be at least two days late. Examine the figure given below:




If Stephen's assignment is Activity B, what impact will his two days of lateness have on the project end date?

A. The project will complete on time.
B. The project will be late by one day.
C. The project will be late by two days.
D. The project will be early by two days.

**QUESTION NO: 322**

Which of the following provides a method to track project progress during project execution against what was planned?

A. Team members profile
B. Benefit-cost ratio
C. Schedule baseline
D. Detailed project budget

**Answer: C**

**Explanation:**
A schedule baseline provides a method to track project progress during project execution against what was planned. What is schedule baseline? Schedule baseline is a project schedule used in measuring project progress. It helps provide a comparison with the actual progress of work against the schedule and to determine if performance to date is within acceptable parameters. Any change caused by change in scope of the project invalidates the original schedule and requires a new baseline schedule.
Answer options D, A, and B are incorrect. A detailed project budget, team members profile, and benefit-cost ratio will not help you track project progress. What is BCR? A benefit-cost ratio (BCR) is an indicator, used in the formal discipline of cost-benefit analysis, that attempts to summarize the overall value for money of a project or proposal. A BCR is the ratio of the benefits of a project or proposal, expressed in monetary terms, relative to its costs, also expressed in monetary terms. All benefits and costs should be expressed in discounted present values. For e.g., a BCR of $3.8 indicates a payback of $3.8 for each dollar expended.

**QUESTION NO: 323**

You have been hired as a contract project manager for Tech Perfect Inc. The project has already been started. Sufficient details of the project have already been structured. You are working with your team for cost estimation of the project. Which of the following estimating techniques will you use for the highest degree of accuracy?

A. Parametric modeling
B. Analogous
C. Top-down
D. Bottom-up

**Answer: D**

**Explanation:**
According to the question, you have to use the estimating technique that has a higher degree of accuracy. The most accurate estimating technique is bottom-up estimating. What is bottom-up estimating? Bottom-up is a cost estimating technique that involves estimating the cost of individual

work packages or schedule activities with the lowest level of detail. The detailed cost is rolled up (or summarized) to higher levels for total project estimates. This summarized data is very useful for reporting and tracking purposes. Bottom-up estimating provides a higher degree of accuracy, provided the estimates at the work package level are accurate.
Answer options C, A, and B are incorrect. Parametric modeling and analogous estimating techniques use top-down estimation model. These are less accurate than the bottom-up estimation. What is analogous estimating? Analogous is an estimating technique that uses the values of parameter, such as scope, cost, budget, and duration or measures of scale such as size, weight, and complexity from a previous, similar activity as the basis for estimation of the same parameter for a future activity. It is a top-down estimating technique and is a form of expert judgment. It provides a lower degree of accuracy than other estimating techniques. This technique is primarily used when there is a limited amount of detailed information about the project or program. What is parametric modeling? Parametric modeling is an estimating technique that uses parameters, or project characteristics, to forecast project costs. It involves a top-down approach and is similar but more accurate than analogous estimating. It uses historical data and other variables to calculate an estimate for activity parameters, such as scope, cost, budget, and duration.

**QUESTION NO: 324**

Beth is the project manager of the KJH project. Sarah is Beth's administrative assistant and Ben is the project team leader. Beth's project has eight virtual teams throughout the world that will be working on the activities relevant to the deliverables in their locales. Thomas, the project sponsor, has told Beth that he is to be kept abreast of all communication between her project and the stakeholders. In this project, who is the lead person responsible for communication with all stakeholders?

A. Thomas
B. Sarah
C. Each of the team leaders for the eight virtual teams
D. Beth

**Answer: D**

**Explanation:**
Beth, the project manager, is responsible for communication with all stakeholders. According to the PMBOK, the project manager occupies the center of the interactions between stakeholders and the project itself.
Answer option B is incorrect. Sarah may help with the communications, but she is not responsible for the communications.
Answer option A is incorrect. Thomas, the project sponsor, just needs to be kept abreast of the information.

Answer option C is incorrect. The project team leaders for the virtual sites are not responsible for communicating with the project stakeholders.

**QUESTION NO: 325**

What project management plan will document the time frame and frequency for the distribution of required information?

A. Scope Management Plan
B. Communications Management Plan
C. Stakeholder Management Plan
D. Schedule Management Plan

**Answer: B**

**Explanation:**
The project's Communications Management Plan defines what information will be distributed, when it will be distributed, to whom it will be distributed, and the modality of the information.
Answer option D is incorrect. The Schedule Management Plan defines the project work, when the project work will happen, resource utilization, and how the schedule will be monitored and controlled.
Answer option C is incorrect. There is a stakeholder management strategy, but not a Stakeholder Management Plan.
Answer option A is incorrect. The project's Scope Management Plan defines how the scope will be created, how the changes will be allowed, how the scope will be executed, monitored and controlled, and finally closed.

**QUESTION NO: 326 CORRECT TEXT**

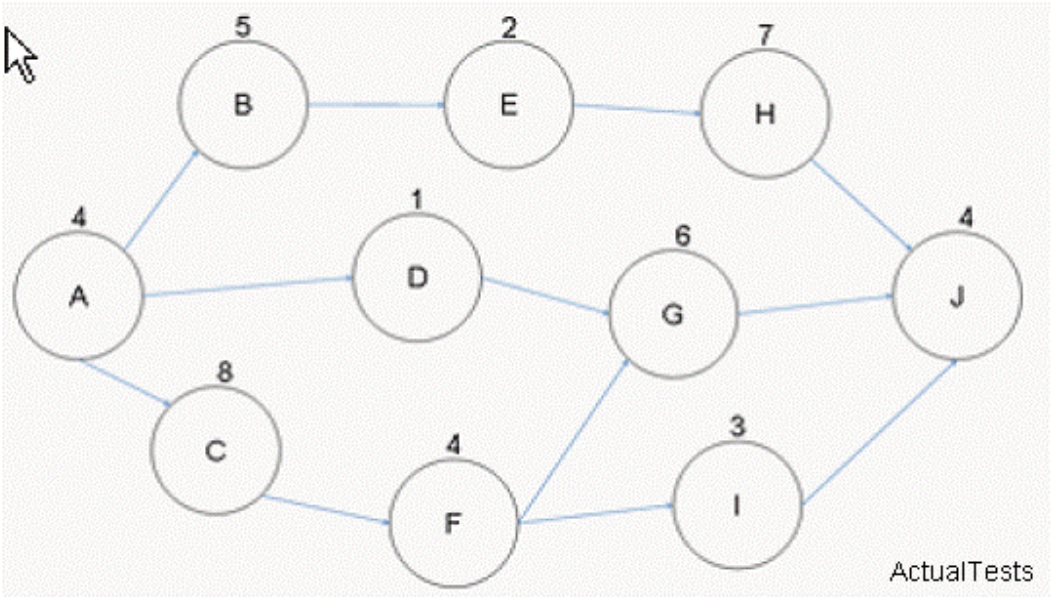
Fill in the blank with the appropriate word. When activities are logically linked, they become the .

_____

Answer: Schedule.

**QUESTION NO: 327**

Examine the figure given below.




In this project network diagram, what is the total float for Activity I?

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

**Answer: A**

**Explanation:**
The float for Activity I is three days. The early start for Activity I is Day 17 and the late start for Activity I is Day 20. Therefore, the difference of the early start and the late start reveals the float as three days. It is possible, and acceptable, to use the difference of the early finish and the late finish to find the float, as the value will be the same amount.
Answer options B, D, and C are incorrect. These are not the valid calculation for the total float.