Chapter 13

*Student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | A project monitoring system involves all of the following EXCEPT      |  |  | | --- | --- | | A. | Determining what data to collect. |  |  |  | | --- | --- | | B. | Determining how, when, and who will collect the data. |  |  |  | | --- | --- | | C. | Adjusting the data. |  |  |  | | --- | --- | | D. | Analysis of the data. |  |  |  | | --- | --- | | E. | Reporting current progress. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. | Nancy tells her supervisor that as of right now, $1.05 worth of work has been accomplished for each $1 worth of scheduled work. Nancy got this information from viewing the      |  |  | | --- | --- | | A. | SV. |  |  |  | | --- | --- | | B. | TCPI. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | E. | PCIB. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. | Jessica just received the following information on her project: PV = 200, EV = 300, AC = 250, BAC = 1500, EAC = 1208. In terms of cost at completion.      |  |  | | --- | --- | | A. | The project will currently finish under budget. |  |  |  | | --- | --- | | B. | The project will currently finish over budget. |  |  |  | | --- | --- | | C. | The project will currently finish on budget. |  |  |  | | --- | --- | | D. | The project will currently finish behind schedule. |  |  |  | | --- | --- | | E. | There is insufficient information to draw conclusions. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. | The first step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Set a baseline plan. |  |  |  | | --- | --- | | B. | Determine the project objectives. |  |  |  | | --- | --- | | C. | Determine the project deliverables. |  |  |  | | --- | --- | | D. | Analyze the project budget. |  |  |  | | --- | --- | | E. | Review the project priority matrix. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. | The second step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Review the baseline plan with top management. |  |  |  | | --- | --- | | B. | Analyze inputs to control system. |  |  |  | | --- | --- | | C. | Compare plan against actual. |  |  |  | | --- | --- | | D. | Measure progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. | The third step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Review the baseline plan with top management. |  |  |  | | --- | --- | | B. | Analyze inputs to the control system. |  |  |  | | --- | --- | | C. | Compare the plan against actual performance. |  |  |  | | --- | --- | | D. | Measure both progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. | The final step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Take appropriate action. |  |  |  | | --- | --- | | B. | Prepare a report to top management. |  |  |  | | --- | --- | | C. | Follow up on corrective action. |  |  |  | | --- | --- | | D. | Measure progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. | In monitoring project time (schedule) performance, actual performance should be compared to      |  |  | | --- | --- | | A. | Budgets for the current year. |  |  |  | | --- | --- | | B. | Top management's targets. |  |  |  | | --- | --- | | C. | Project network schedule derived from the WBS/OBS. |  |  |  | | --- | --- | | D. | Progress on similar past projects. |  |  |  | | --- | --- | | E. | Previous status reports. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. | A \_\_\_\_\_\_\_\_\_\_\_ Gantt chart is a simple and effective way to depict progress on a project.      |  |  | | --- | --- | | A. | Baseline |  |  |  | | --- | --- | | B. | Control |  |  |  | | --- | --- | | C. | Variance |  |  |  | | --- | --- | | D. | Tracking |  |  |  | | --- | --- | | E. | Simple | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10. | A tool used to monitor past project schedule performance and current performance, and to estimate future schedule trends is a simple line chart known as a      |  |  | | --- | --- | | A. | Project control chart. |  |  |  | | --- | --- | | B. | Gantt chart. |  |  |  | | --- | --- | | C. | PERT chart. |  |  |  | | --- | --- | | D. | Network diagram. |  |  |  | | --- | --- | | E. | Milestone chart. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11. | The earned value system starts with the time-phased costs that provide the project baseline, which is called the      |  |  | | --- | --- | | A. | Planned budgeted value of work scheduled. |  |  |  | | --- | --- | | B. | Planned budgeted value of work completed. |  |  |  | | --- | --- | | C. | Earned value of work scheduled. |  |  |  | | --- | --- | | D. | Scheduled value of work scheduled. |  |  |  | | --- | --- | | E. | Scheduled value of work completed. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12. | The earned value of a project is the      |  |  | | --- | --- | | A. | Project cost to date adjusted for project scope changes. |  |  |  | | --- | --- | | B. | Total project cost to date. |  |  |  | | --- | --- | | C. | Cost incurred minus the planned cost. |  |  |  | | --- | --- | | D. | Percent of the original budget that has been earned by actual work. |  |  |  | | --- | --- | | E. | The planned time-phased baseline of the value of work scheduled. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. | The cost variance for a project is calculated by      |  |  | | --- | --- | | A. | EV - AC. |  |  |  | | --- | --- | | B. | AC - SV. |  |  |  | | --- | --- | | C. | PV - EV. |  |  |  | | --- | --- | | D. | CV - EV. |  |  |  | | --- | --- | | E. | EV - PV. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14. | The schedule variance for a project is calculated by:      |  |  | | --- | --- | | A. | EV - AC |  |  |  | | --- | --- | | B. | AC - SV |  |  |  | | --- | --- | | C. | PV - EV |  |  |  | | --- | --- | | D. | CV - EV |  |  |  | | --- | --- | | E. | EV - PV | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15. | Baseline project budgets are derived from      |  |  | | --- | --- | | A. | The organization's overall budget. |  |  |  | | --- | --- | | B. | Time-phasing the work packages. |  |  |  | | --- | --- | | C. | Top management directions. |  |  |  | | --- | --- | | D. | The total direct, direct project overhead and G&A overhead costs. |  |  |  | | --- | --- | | E. | The earned value system. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16. | Of the following costs, which are NOT included in baseline?      |  |  | | --- | --- | | A. | Suppliers |  |  |  | | --- | --- | | B. | Equipment |  |  |  | | --- | --- | | C. | Labor |  |  |  | | --- | --- | | D. | Budget reserves |  |  |  | | --- | --- | | E. | Contractors | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17. | When someone familiar with each task estimates what percent of the task has been completed or how much of the task remains, they are creating a method for assigning costs to the baseline called the      |  |  | | --- | --- | | A. | 0/100 percent rule. |  |  |  | | --- | --- | | B. | Task complete rule. |  |  |  | | --- | --- | | C. | Degree complete rule. |  |  |  | | --- | --- | | D. | Work complete rule. |  |  |  | | --- | --- | | E. | Percent complete rule. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18. | Which performance index is the most potentially misleading?      |  |  | | --- | --- | | A. | CPI |  |  |  | | --- | --- | | B. | EV |  |  |  | | --- | --- | | C. | CV |  |  |  | | --- | --- | | D. | SV |  |  |  | | --- | --- | | E. | EAC | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19. | Which of the following are required to assess the current status of a project using the earned-value cost/schedule system?      |  |  | | --- | --- | | A. | BAC, EAC, and ETC |  |  |  | | --- | --- | | B. | VAC, EAC, and BAC |  |  |  | | --- | --- | | C. | CV, SV, and BAC |  |  |  | | --- | --- | | D. | PV, EV, and AC |  |  |  | | --- | --- | | E. | TCPI, EV, and PV | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. | Which of the following methods of variance analysis is the best indicator of how far off the budget a project will be at completion?      |  |  | | --- | --- | | A. | BAC |  |  |  | | --- | --- | | B. | EAC |  |  |  | | --- | --- | | C. | ETC |  |  |  | | --- | --- | | D. | VAC |  |  |  | | --- | --- | | E. | TCPI | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21. | Which of the following methods will measure the cost efficiency of the work accomplished to date?      |  |  | | --- | --- | | A. | SV/CV |  |  |  | | --- | --- | | B. | EV/PV |  |  |  | | --- | --- | | C. | EV/AC |  |  |  | | --- | --- | | D. | AC/SV |  |  |  | | --- | --- | | E. | AC/CV | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. | Which of the following methods will measure the scheduling efficiency of the work accomplished to date?      |  |  | | --- | --- | | A. | SV/CV |  |  |  | | --- | --- | | B. | EV/PV |  |  |  | | --- | --- | | C. | EV/AC |  |  |  | | --- | --- | | D. | AC/SV |  |  |  | | --- | --- | | E. | AC/CV | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23. | A CPI or SPI value less than one indicates that the project is      |  |  | | --- | --- | | A. | Under cost or behind schedule. |  |  |  | | --- | --- | | B. | Over cost or ahead of schedule. |  |  |  | | --- | --- | | C. | Under cost or ahead of schedule. |  |  |  | | --- | --- | | D. | Over cost or behind schedule. |  |  |  | | --- | --- | | E. | On cost or on schedule. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24. | The value that tells you the planned value of work that has actually been completed is the      |  |  | | --- | --- | | A. | SV. |  |  |  | | --- | --- | | B. | PV. |  |  |  | | --- | --- | | C. | EV. |  |  |  | | --- | --- | | D. | AC. |  |  |  | | --- | --- | | E. | CV. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25. | The indicator that tells you the amount each remaining dollar must earn in order for the project to stay within budget is the      |  |  | | --- | --- | | A. | PCIC. |  |  |  | | --- | --- | | B. | VAC. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | E. | TCPI. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26. | A project manager learns that the project is only earning $.90 of planned work for each dollar spent by looking at the      |  |  | | --- | --- | | A. | EV. |  |  |  | | --- | --- | | B. | BAC. |  |  |  | | --- | --- | | C. | SV. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | E. | CPI. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27. | A project manager notices that $1,000 worth of work that was scheduled to be completed at this time has not been accomplished. They know this by looking at the      |  |  | | --- | --- | | A. | EV. |  |  |  | | --- | --- | | B. | TCPI. |  |  |  | | --- | --- | | C. | SV. |  |  |  | | --- | --- | | D. | PCIB. |  |  |  | | --- | --- | | E. | EAC. | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28. | Sally receives the following information on her project: PV = 100, AC = 75, EV = 100. How well is the project doing in terms of budget?      |  |  | | --- | --- | | A. | Right on budget |  |  |  | | --- | --- | | B. | 25 under budget |  |  |  | | --- | --- | | C. | 25 over budget |  |  |  | | --- | --- | | D. | 50 under budget |  |  |  | | --- | --- | | E. | 50 over budget | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29. | Jim receives the following information on his project: PV = 1000, EV = 1200, AC = 800, BAC = 2000, EAC = 1333. How is the project doing in terms of schedule?      |  |  | | --- | --- | | A. | More work has been done than planned |  |  |  | | --- | --- | | B. | Less work has been done than planned |  |  |  | | --- | --- | | C. | The same amount of work has been done than planned |  |  |  | | --- | --- | | D. | The project has cost less than planned |  |  |  | | --- | --- | | E. | There is not enough information to draw a conclusion | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30. | Which of the following is NOT true regarding scope creep?      |  |  | | --- | --- | | A. | It commonly occurs late in projects |  |  |  | | --- | --- | | B. | It is frequently unnoticed until time delays or cost overruns are observed |  |  |  | | --- | --- | | C. | It wears down team motivation and cohesiveness |  |  |  | | --- | --- | | D. | Project suppliers resent frequent changes |  |  |  | | --- | --- | | E. | Scope changes can represent significant opportunity | |

|  |  |
| --- | --- |
| 31. | \_\_\_\_\_\_\_\_ holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 32. | The first step in creating a project control system for measuring and evaluating project performance is to set a \_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 33. | The value that tells you the planned value of the actual work completed is \_\_\_\_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 34. | When someone familiar with each task estimates what percent of the task has been completed or how much of the task remains, they are creating a method for assigning costs to the baseline called the \_\_\_\_\_\_\_\_\_\_\_\_ rule.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 35. | Because of their easy-to-understand visual format, \_\_\_\_\_\_\_\_ charts are the most favored, used, and understandable tool used to report project schedule status.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 36. | The indicator that tells you the planned time-phased value of the work that is scheduled is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 37. | Baseline project budgets are derived from time-phasing the work \_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 38. | The \_\_\_\_\_\_\_\_ variance is the difference between the earned value and the actual costs for the work completed to date.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 39. | The \_\_\_\_\_\_\_\_ variance is the difference between the earned value to date and the baseline schedule.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 40. | \_\_\_\_\_\_\_\_ is simply the percent complete times the original budget.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 41. | Conditions or scope can change, which, in turn, will require a change to the \_\_\_\_\_\_\_\_\_\_ plan to recognize the new information.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 42. | The project network schedule is derived from the \_\_\_\_\_\_\_ and it serves as the baseline to compare against actual performance.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 43. | A negative CV indicates the project is \_\_\_\_\_\_\_\_ budget.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 44. | The \_\_\_\_\_\_\_\_ rule assumes credit is earned for having performed the work once it is completed. This rule is usually used for work packages having very short durations.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 45. | The ratio that measures the amount of value each remaining dollar in the budget must earn to stay within the budget is the \_\_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 46. | The \_\_\_\_\_\_\_\_\_ index measures the project percent complete in relation to the resources that were budgeted.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 47. | Given that the AC = 300, PV = 400 and EV = 500, this project is \_\_\_\_\_\_\_\_\_ budget.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 48. | Given a BAC of 5,500 and an EAC of 6,000, the project is expected to be completed \_\_\_\_\_\_\_\_\_ budget.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 49. | An SPI index of 1.22 indicates that the project is \_\_\_\_\_\_\_\_ of schedule.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 50. | Although it is very difficult to measure, measuring \_\_\_\_\_\_\_\_ performance is as important as measuring schedule and cost performance.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 51. | The final step in the project control process for measuring and evaluating project performance is to take appropriate \_\_\_\_\_\_\_\_.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 52. | In some cases, conditions or scope can change, which, in turn, will require a change in the baseline plan to recognize new information.    True    False |

|  |  |
| --- | --- |
| 53. | The PCIC index measures the project percent complete in relation to the resources that have actually been used so far on the project.    True    False |

|  |  |
| --- | --- |
| 54. | The only accurate method for determining the true time progress of the project is to compare the project network schedule against the actual network schedule to measure if the project is on time.    True    False |

|  |  |
| --- | --- |
| 55. | Schedule variance measures progress in time units.    True    False |

|  |  |
| --- | --- |
| 56. | Earned value is defined as the budgeted cost of the actual work performed.    True    False |

|  |  |
| --- | --- |
| 57. | The baseline is derived from merging information from the work packages with the project network.    True    False |

|  |  |
| --- | --- |
| 58. | Because of their easy-to-understand visual format, tracking Gantt charts are the most favored, used, and understandable option for reporting project status.    True    False |

|  |  |
| --- | --- |
| 59. | The PV, AC and CV are all required to assess the current status of the project.    True    False |

|  |  |
| --- | --- |
| 60. | When revising the estimated cost at completion, there are two approaches. The EACre is determined by experts in the field and the EACf is a mathematical approach which assumes the CPI as the basis for forecasting cost at completion.    True    False |

|  |  |
| --- | --- |
| 61. | The best method for assigning costs to the baseline under the 50/50 rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.    True    False |

|  |  |
| --- | --- |
| 62. | Most changes will not result in serious scope changes and should be absorbed as positive or negative variances.    True    False |

|  |  |
| --- | --- |
| 63. | A "rubber baseline" occurs when, in an effort to disguise poor performance, the baseline changes to constantly match results.    True    False |

|  |  |
| --- | --- |
| 64. | Baseline costs typically include labor, equipment, materials and direct overhead cost.    True    False |

|  |  |
| --- | --- |
| 65. | A project control system allows for comparing actual performance against plan to identify deviations; however, the system doesn't impact the quality of communication between stakeholders.    True    False |

|  |  |
| --- | --- |
| 66. | Two major reasons for creating a baseline are to monitor and report progress and to estimate cash flow.    True    False |

|  |  |
| --- | --- |
| 67. | In calculating schedule variance and cost variance, a negative variance indicates a desirable condition, and a positive variance suggests problems.    True    False |

|  |  |
| --- | --- |
| 68. | An undesirable schedule variance always indicates that the project is running behind schedule.    True    False |

|  |  |
| --- | --- |
| 69. | Progress and performance can be measured quantitatively as well as qualitatively.    True    False |

|  |  |
| --- | --- |
| 70. | A CPI index of 0.97 indicates that the project has spent less money than budgeted.    True    False |

|  |  |
| --- | --- |
| 71. | Rachel notices that the current EV for her project is higher than both the PV and the AC. Rachel has reason to be concerned.    True    False |

|  |  |
| --- | --- |
| 72. | All scope changes that result in increased costs should be avoided.    True    False |

|  |  |
| --- | --- |
| 73. | Although it is very difficult to measure, measuring technical performance is as important as measuring schedule and cost performance.    True    False |

|  |  |
| --- | --- |
| 74. | Deciding what data to collect, actually collecting the data and analyzing it, and reporting this data are all parts of structuring a project monitoring information system.    True    False |

|  |  |
| --- | --- |
| 75. | A project manager would be glad to see a TCPI of 1.07.    True    False |

|  |  |
| --- | --- |
| 76. | A negative VAC indicates that the project will be completed over budget.    True    False |

|  |  |
| --- | --- |
| 77. | Identify the steps in creating a control process that measures and evaluates project performance. |

|  |  |
| --- | --- |
| 78. | What is the difference between a baseline Gantt chart and a tracking Gantt chart? |

|  |  |
| --- | --- |
| 79. | A project manager learns that her project has an EV of 1200, AC of 1100 and PV of 1000. What can the project manager report regarding this project? |

|  |  |
| --- | --- |
| 80. | Conducting an earned value analysis requires three data elements. Identify the acronyms for each and describe what they are. |

|  |  |
| --- | --- |
| 81. | In reviewing the budget report of a project, you notice that spending on the project is running about 10 percent over plan. Is the project in trouble? Why or why not? |

|  |  |
| --- | --- |
| 82. | Schedule variance (SV) is in dollars and does not directly represent time. Why is it still useful? |

|  |  |
| --- | --- |
| 83. | All projects need some form of formal control. Agree or disagree? Support you answer. |

|  |  |
| --- | --- |
| 84. | Identify and describe two methods for tracking and trending schedule performance. |

|  |  |
| --- | --- |
| 85. | Two project complete indexes are used, depending on your judgment of which one is most representative of your project. Identify both indexes and explain when it is most appropriate to use each. |

|  |  |
| --- | --- |
| 86. | What is scope creep and how does it impact project control? |

|  |  |
| --- | --- |
| 87. | What is a "rubber baseline" and how does it undermine project control? |

|  |  |
| --- | --- |
| 88. | What is the percent complete rule and what role does it play when developing an earned value cost/schedule system? |

Chapter 13 Key

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | A project monitoring system involves all of the following EXCEPT      |  |  | | --- | --- | | A. | Determining what data to collect. |  |  |  | | --- | --- | | B. | Determining how, when, and who will collect the data. |  |  |  | | --- | --- | | **C.** | Adjusting the data. |  |  |  | | --- | --- | | D. | Analysis of the data. |  |  |  | | --- | --- | | E. | Reporting current progress. |   A project monitoring system involves determining what data to collect; how, when, and who will collect the data; analysis of the data; and reporting current progress. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #1 Learning Objective: Structure of a Project Monitoring Information System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. | Nancy tells her supervisor that as of right now, $1.05 worth of work has been accomplished for each $1 worth of scheduled work. Nancy got this information from viewing the      |  |  | | --- | --- | | A. | SV. |  |  |  | | --- | --- | | B. | TCPI. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | **D.** | SPI. |  |  |  | | --- | --- | | E. | PCIB. |   The SPI would tell Nancy that $1.05 worth of work has been accomplished for each $1 worth of scheduled work. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #2 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. | Jessica just received the following information on her project: PV = 200, EV = 300, AC = 250, BAC = 1500, EAC = 1208. In terms of cost at completion.      |  |  | | --- | --- | | **A.** | The project will currently finish under budget. |  |  |  | | --- | --- | | B. | The project will currently finish over budget. |  |  |  | | --- | --- | | C. | The project will currently finish on budget. |  |  |  | | --- | --- | | D. | The project will currently finish behind schedule. |  |  |  | | --- | --- | | E. | There is insufficient information to draw conclusions. |   Since the estimated cost at completion is less than the budgeted cost at completion, at this time, the project is expected to finish under budget. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Apply Larson - Chapter 13 #3 Learning Objective: Forecasting Final Project Cost Level of Difficulty: 1 Easy* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. | The first step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | **A.** | Set a baseline plan. |  |  |  | | --- | --- | | B. | Determine the project objectives. |  |  |  | | --- | --- | | C. | Determine the project deliverables. |  |  |  | | --- | --- | | D. | Analyze the project budget. |  |  |  | | --- | --- | | E. | Review the project priority matrix. |   The project control steps for measuring and evaluating project performance are first to set a baseline plan, then to measure progress and performance, next to compare plan against actual and finally to take action. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #4 Learning Objective: The Project Control Process Level of Difficulty: 1 Easy* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. | The second step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Review the baseline plan with top management. |  |  |  | | --- | --- | | B. | Analyze inputs to control system. |  |  |  | | --- | --- | | C. | Compare plan against actual. |  |  |  | | --- | --- | | **D.** | Measure progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. |   The project control steps for measuring and evaluating project performance are first to set a baseline plan, then to measure progress and performance, next to compare plan against actual and finally to take action. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #5 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. | The third step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | A. | Review the baseline plan with top management. |  |  |  | | --- | --- | | B. | Analyze inputs to the control system. |  |  |  | | --- | --- | | **C.** | Compare the plan against actual performance. |  |  |  | | --- | --- | | D. | Measure both progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. |   The project control steps for measuring and evaluating project performance are first to set a baseline plan, then to measure progress and performance, next to compare plan against actual and finally to take action. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #6 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. | The final step in the project control process for measuring and evaluating project performance is to      |  |  | | --- | --- | | **A.** | Take appropriate action. |  |  |  | | --- | --- | | B. | Prepare a report to top management. |  |  |  | | --- | --- | | C. | Follow up on corrective action. |  |  |  | | --- | --- | | D. | Measure progress and performance. |  |  |  | | --- | --- | | E. | Review spending with team members. |   The project control steps for measuring and evaluating project performance are first to set a baseline plan, then to measure progress and performance, next to compare plan against actual and finally to take action. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #7 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. | In monitoring project time (schedule) performance, actual performance should be compared to      |  |  | | --- | --- | | A. | Budgets for the current year. |  |  |  | | --- | --- | | B. | Top management's targets. |  |  |  | | --- | --- | | **C.** | Project network schedule derived from the WBS/OBS. |  |  |  | | --- | --- | | D. | Progress on similar past projects. |  |  |  | | --- | --- | | E. | Previous status reports. |   A major goal of progress reporting is to catch any negative variances from plan as early as possible to determine if corrective action is necessary. Fortunately, monitoring schedule performance is relatively easy. The project network schedule, derived from the WBS/OBS, serves as the baseline to compare against actual performance. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #8 Learning Objective: Monitoring Time Performance Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. | A \_\_\_\_\_\_\_\_\_\_\_ Gantt chart is a simple and effective way to depict progress on a project.      |  |  | | --- | --- | | A. | Baseline |  |  |  | | --- | --- | | B. | Control |  |  |  | | --- | --- | | C. | Variance |  |  |  | | --- | --- | | **D.** | Tracking |  |  |  | | --- | --- | | E. | Simple |   Gantt charts (bar charts) and control charts are the typical tools used for communicating project schedule status. The Gantt chart is the most favored, used and understandable. This kind of chart is commonly referred to as a tracking Gantt chart. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #9 Learning Objective: Monitoring Time Performance Level of Difficulty: 1 Easy* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10. | A tool used to monitor past project schedule performance and current performance, and to estimate future schedule trends is a simple line chart known as a      |  |  | | --- | --- | | **A.** | Project control chart. |  |  |  | | --- | --- | | B. | Gantt chart. |  |  |  | | --- | --- | | C. | PERT chart. |  |  |  | | --- | --- | | D. | Network diagram. |  |  |  | | --- | --- | | E. | Milestone chart. |   The control chart is another tool used to monitor past project schedule performance and current performance and to estimate future schedule trends. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #10 Learning Objective: Monitoring Time Performance Level of Difficulty: 1 Easy* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11. | The earned value system starts with the time-phased costs that provide the project baseline, which is called the      |  |  | | --- | --- | | **A.** | Planned budgeted value of work scheduled. |  |  |  | | --- | --- | | B. | Planned budgeted value of work completed. |  |  |  | | --- | --- | | C. | Earned value of work scheduled. |  |  |  | | --- | --- | | D. | Scheduled value of work scheduled. |  |  |  | | --- | --- | | E. | Scheduled value of work completed. |   The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #11 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12. | The earned value of a project is the      |  |  | | --- | --- | | A. | Project cost to date adjusted for project scope changes. |  |  |  | | --- | --- | | B. | Total project cost to date. |  |  |  | | --- | --- | | C. | Cost incurred minus the planned cost. |  |  |  | | --- | --- | | **D.** | Percent of the original budget that has been earned by actual work. |  |  |  | | --- | --- | | E. | The planned time-phased baseline of the value of work scheduled. |   Earned value for a task is simply the percent complete times its original budget. Stated differently, EV is the percent of the original budget that has been earned by actual work completed. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #12 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. | The cost variance for a project is calculated by      |  |  | | --- | --- | | **A.** | EV - AC. |  |  |  | | --- | --- | | B. | AC - SV. |  |  |  | | --- | --- | | C. | PV - EV. |  |  |  | | --- | --- | | D. | CV - EV. |  |  |  | | --- | --- | | E. | EV - PV. |   The cost variance is the difference between the planned value of work actually done (EV) and the actual cost of work actually done (AC). The cost variance for a project is calculated EV - AC. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #13 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14. | The schedule variance for a project is calculated by:      |  |  | | --- | --- | | A. | EV - AC |  |  |  | | --- | --- | | B. | AC - SV |  |  |  | | --- | --- | | C. | PV - EV |  |  |  | | --- | --- | | D. | CV - EV |  |  |  | | --- | --- | | **E.** | EV - PV |   The schedule variance is the difference between the planned value of work actually done (EV) and the planned value of work that was planned to be done (PV). The schedule variance for a project is calculated EV - PV. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #14 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15. | Baseline project budgets are derived from      |  |  | | --- | --- | | A. | The organization's overall budget. |  |  |  | | --- | --- | | **B.** | Time-phasing the work packages. |  |  |  | | --- | --- | | C. | Top management directions. |  |  |  | | --- | --- | | D. | The total direct, direct project overhead and G&A overhead costs. |  |  |  | | --- | --- | | E. | The earned value system. |   The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #15 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16. | Of the following costs, which are NOT included in baseline?      |  |  | | --- | --- | | A. | Suppliers |  |  |  | | --- | --- | | B. | Equipment |  |  |  | | --- | --- | | C. | Labor |  |  |  | | --- | --- | | **D.** | Budget reserves |  |  |  | | --- | --- | | E. | Contractors |   The baseline (PV) is the sum of the cost accounts, and each cost account is the sum of the work packages in the cost account. Three direct costs are typically included in baselines—labor (contractors), equipment, and materials (suppliers). |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #16 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17. | When someone familiar with each task estimates what percent of the task has been completed or how much of the task remains, they are creating a method for assigning costs to the baseline called the      |  |  | | --- | --- | | A. | 0/100 percent rule. |  |  |  | | --- | --- | | B. | Task complete rule. |  |  |  | | --- | --- | | C. | Degree complete rule. |  |  |  | | --- | --- | | D. | Work complete rule. |  |  |  | | --- | --- | | **E.** | Percent complete rule. |   The percent complete rule is the heart of any earned value system. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #17 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18. | Which performance index is the most potentially misleading?      |  |  | | --- | --- | | A. | CPI |  |  |  | | --- | --- | | B. | EV |  |  |  | | --- | --- | | C. | CV |  |  |  | | --- | --- | | **D.** | SV |  |  |  | | --- | --- | | E. | EAC |   Many times it is determined that a positive SV indicates the project is ahead of schedule and a negative SV indicates that a project is behind schedule. This is not always the case. Schedule variance does indicate whether or not the work that was planned to be completed has been completed, but it doesn't tell you if that work is critical or not. If more work than what was planned was completed, but this work was noncritical, it is possible to have a positive SV and still be behind schedule. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #18 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 3 Hard* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19. | Which of the following are required to assess the current status of a project using the earned-value cost/schedule system?      |  |  | | --- | --- | | A. | BAC, EAC, and ETC |  |  |  | | --- | --- | | B. | VAC, EAC, and BAC |  |  |  | | --- | --- | | C. | CV, SV, and BAC |  |  |  | | --- | --- | | **D.** | PV, EV, and AC |  |  |  | | --- | --- | | E. | TCPI, EV, and PV |   Assessing the current status of a project using the earned value cost/schedule system requires three data elements—planned cost of the work scheduled (PV), budgeted cost of the work completed (EV), and actual cost of the work completed (AC). |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #19 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 3 Hard* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. | Which of the following methods of variance analysis is the best indicator of how far off the budget a project will be at completion?      |  |  | | --- | --- | | A. | BAC |  |  |  | | --- | --- | | B. | EAC |  |  |  | | --- | --- | | C. | ETC |  |  |  | | --- | --- | | **D.** | VAC |  |  |  | | --- | --- | | E. | TCPI |   The cost variance at completion (VAC) indicates expected actual over- or under-run cost at completion. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Larson - Chapter 13 #20 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21. | Which of the following methods will measure the cost efficiency of the work accomplished to date?      |  |  | | --- | --- | | A. | SV/CV |  |  |  | | --- | --- | | B. | EV/PV |  |  |  | | --- | --- | | **C.** | EV/AC |  |  |  | | --- | --- | | D. | AC/SV |  |  |  | | --- | --- | | E. | AC/CV |   The CPI is the cost performance index that measures the cost efficiency of the project. Cost performance index (CPI) = EV/AC. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #21 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. | Which of the following methods will measure the scheduling efficiency of the work accomplished to date?      |  |  | | --- | --- | | A. | SV/CV |  |  |  | | --- | --- | | **B.** | EV/PV |  |  |  | | --- | --- | | C. | EV/AC |  |  |  | | --- | --- | | D. | AC/SV |  |  |  | | --- | --- | | E. | AC/CV |   The SPI is the schedule performance index that measures scheduling efficiency. Scheduling performance index (SPI) = EV/PV. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #22 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23. | A CPI or SPI value less than one indicates that the project is      |  |  | | --- | --- | | A. | Under cost or behind schedule. |  |  |  | | --- | --- | | B. | Over cost or ahead of schedule. |  |  |  | | --- | --- | | C. | Under cost or ahead of schedule. |  |  |  | | --- | --- | | **D.** | Over cost or behind schedule. |  |  |  | | --- | --- | | E. | On cost or on schedule. |   An index of 1 indicates progress as planned. An index greater than 1 shows progress is better than expected. An index less than 1 suggests progress is poorer than planned and deserves attention. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #23 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24. | The value that tells you the planned value of work that has actually been completed is the      |  |  | | --- | --- | | A. | SV. |  |  |  | | --- | --- | | B. | PV. |  |  |  | | --- | --- | | **C.** | EV. |  |  |  | | --- | --- | | D. | AC. |  |  |  | | --- | --- | | E. | CV. |   The value that tells you the planned value of work that has actually been completed is the earned value. It is the percent complete multiplied by the original budget. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #24 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25. | The indicator that tells you the amount each remaining dollar must earn in order for the project to stay within budget is the      |  |  | | --- | --- | | A. | PCIC. |  |  |  | | --- | --- | | B. | VAC. |  |  |  | | --- | --- | | C. | CPI. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | **E.** | TCPI. |   The indicator that tells you the amount each remaining dollar must earn in order for the project to stay within budget is the TCPI. A number greater than 1 means there is more work than there is budget left. A number less than 1 means there is less work than there is budget left. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #25 Learning Objective: Forecasting Final Project Cost Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26. | A project manager learns that the project is only earning $.90 of planned work for each dollar spent by looking at the      |  |  | | --- | --- | | A. | EV. |  |  |  | | --- | --- | | B. | BAC. |  |  |  | | --- | --- | | C. | SV. |  |  |  | | --- | --- | | D. | SPI. |  |  |  | | --- | --- | | **E.** | CPI. |   A CPI of .90 would indicate that the project is earning $.90 of planned work for each dollar spent. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #26 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27. | A project manager notices that $1,000 worth of work that was scheduled to be completed at this time has not been accomplished. They know this by looking at the      |  |  | | --- | --- | | A. | EV. |  |  |  | | --- | --- | | B. | TCPI. |  |  |  | | --- | --- | | **C.** | SV. |  |  |  | | --- | --- | | D. | PCIB. |  |  |  | | --- | --- | | E. | EAC. |   A SV of -1000 would indicate that $1,000 worth of work that was scheduled to be completed at this time has not been accomplished. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #27 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28. | Sally receives the following information on her project: PV = 100, AC = 75, EV = 100. How well is the project doing in terms of budget?      |  |  | | --- | --- | | A. | Right on budget |  |  |  | | --- | --- | | **B.** | 25 under budget |  |  |  | | --- | --- | | C. | 25 over budget |  |  |  | | --- | --- | | D. | 50 under budget |  |  |  | | --- | --- | | E. | 50 over budget |   To find out how well this project is doing in terms of budget, the CV will need to be calculated by subtracting AC from EV. The result is a positive 25, which indicates that this project has spent $25 less than planned on actual work completed. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Apply Larson - Chapter 13 #28 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29. | Jim receives the following information on his project: PV = 1000, EV = 1200, AC = 800, BAC = 2000, EAC = 1333. How is the project doing in terms of schedule?      |  |  | | --- | --- | | **A.** | More work has been done than planned |  |  |  | | --- | --- | | B. | Less work has been done than planned |  |  |  | | --- | --- | | C. | The same amount of work has been done than planned |  |  |  | | --- | --- | | D. | The project has cost less than planned |  |  |  | | --- | --- | | E. | There is not enough information to draw a conclusion |   To find out how well this project is doing in terms of schedule, the SV will need to be calculated by subtracting PV from EV. The result is a positive 200, which indicates that $200 more worth of work has been completed than planned. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Apply Larson - Chapter 13 #29 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30. | Which of the following is NOT true regarding scope creep?      |  |  | | --- | --- | | **A.** | It commonly occurs late in projects |  |  |  | | --- | --- | | B. | It is frequently unnoticed until time delays or cost overruns are observed |  |  |  | | --- | --- | | C. | It wears down team motivation and cohesiveness |  |  |  | | --- | --- | | D. | Project suppliers resent frequent changes |  |  |  | | --- | --- | | E. | Scope changes can represent significant opportunity |   Scope creep is common early in projects—especially in new-product development projects. Customer requirements for additional features, new technology, poor design assumptions, etc., all manifest pressures for scope changes. Frequently these changes are small and go unnoticed until time delays or cost overruns are observed. Scope creep affects the organization, project team, and project suppliers. Scope changes alter the organization's cash flow requirements in the form of fewer or additional resources, which may also affect other projects. Frequent changes eventually wear down team motivation and cohesiveness. Clear team goals are altered, become less focused, and cease being the focal point for team action. Starting over again is annoying and demoralizing to the project team because it disrupts project rhythm and lowers productivity. Project suppliers resent frequent changes because they represent higher costs and have the same effect on their team as on the project team. Although scope changes are usually viewed negatively, there are situations when they result in positive rewards and can represent significant opportunities. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #30 Learning Objective: Other Control Issues Level of Difficulty: 3 Hard* |

|  |  |
| --- | --- |
| 31. | \_\_\_\_\_\_\_\_ holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus.    **Control**  Control holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus. Except for accounting controls, project control is not performed well in most organizations. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #31 Learning Objective: Structure of a Project Monitoring Information System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 32. | The first step in creating a project control system for measuring and evaluating project performance is to set a \_\_\_\_\_\_\_\_.    **baseline plan**  The project control steps for measuring and evaluating project performance are first to set a baseline plan, then to measure progress and performance, next to compare plan against actual and finally to take action. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #32 Learning Objective: The Project Control Process Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 33. | The value that tells you the planned value of the actual work completed is \_\_\_\_\_\_\_\_\_\_\_.    **earned value**  Earned value is necessary to provide a realistic estimate of performance against a time-phased budget. Earned value (EV) is defined as the budgeted cost of the work performed. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #33 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 34. | When someone familiar with each task estimates what percent of the task has been completed or how much of the task remains, they are creating a method for assigning costs to the baseline called the \_\_\_\_\_\_\_\_\_\_\_\_ rule.    **percent complete**  The percent complete rule is the heart of any earned value system. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #34 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 35. | Because of their easy-to-understand visual format, \_\_\_\_\_\_\_\_ charts are the most favored, used, and understandable tool used to report project schedule status.    **Gantt**  Gantt and control charts serve well as a means for tracking and trending schedule performance. Their easy-to-understand visual formats make them favorite tools for communicating project schedule status—especially to top management, who do not usually have time for details. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #35 Learning Objective: Monitoring Time Performance Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 36. | The indicator that tells you the planned time-phased value of the work that is scheduled is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.    **planned value (PV)**  The planned value (PV) is the budgeted cost of the work scheduled. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #36 Learning Objective: The Project Control Process Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 37. | Baseline project budgets are derived from time-phasing the work \_\_\_\_\_\_\_\_.    **packages**  The earned value system starts with the time-phased costs (found in the work packages) that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #37 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 38. | The \_\_\_\_\_\_\_\_ variance is the difference between the earned value and the actual costs for the work completed to date.    **cost**  Cost variance is the difference between the earned value and the actual costs for the work completed to date where CV = EV - AC. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #38 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 39. | The \_\_\_\_\_\_\_\_ variance is the difference between the earned value to date and the baseline schedule.    **schedule**  Schedule variance is the difference between the earned value and the baseline line to date where SV = EV - PV. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #39 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 40. | \_\_\_\_\_\_\_\_ is simply the percent complete times the original budget.    **Earned value**  The earned value for a task is simply the percent complete times its original budget. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #40 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 41. | Conditions or scope can change, which, in turn, will require a change to the \_\_\_\_\_\_\_\_\_\_ plan to recognize the new information.    **baseline**  If deviations from plans are found and are significant, corrective action will be needed to bring the project back in line with the original revised plan. In some cases, conditions or scope can change, which, in turn, will require a change to the baseline plan to recognize the new information. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #41 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 42. | The project network schedule is derived from the \_\_\_\_\_\_\_ and it serves as the baseline to compare against actual performance.    **WBS**  Monitoring schedule performance is relatively easy. The project network schedule is derived from the WBS and it serves as the baseline to compare against actual performance. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #42 Learning Objective: Monitoring Time Performance Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 43. | A negative CV indicates the project is \_\_\_\_\_\_\_\_ budget.    **over**  A negative cost variance indicates that more money has been spent on actual work completed than was planned. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #43 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 44. | The \_\_\_\_\_\_\_\_ rule assumes credit is earned for having performed the work once it is completed. This rule is usually used for work packages having very short durations.    **0/100**  The 0/100 rule assumes credit is earned for having performed the work once it is completed. Hence, 100 percent of the budget is earned when the work package is completed. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #44 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 45. | The ratio that measures the amount of value each remaining dollar in the budget must earn to stay within the budget is the \_\_\_\_\_\_\_\_\_.    **TCPI**  The ratio that measures the amount of value each remaining dollar in the budget must earn to stay within the budget is the TCPI. A number greater than 1 means there is more work than there is budget left. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #45 Learning Objective: Forecasting Final Project Cost Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 46. | The \_\_\_\_\_\_\_\_\_ index measures the project percent complete in relation to the resources that were budgeted.    **PCIB**  The PCIB indicates what percentage of work has been completed to date based on planned budget. It is a good indicator of how much of the project has been completed. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #46 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 47. | Given that the AC = 300, PV = 400 and EV = 500, this project is \_\_\_\_\_\_\_\_\_ budget.    **under**  The cost variance is determined by subtracting the AC from the EV. This results in a positive $200. At this point $200 less has been spent on work completed than what was planned. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Apply Larson - Chapter 13 #47 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 48. | Given a BAC of 5,500 and an EAC of 6,000, the project is expected to be completed \_\_\_\_\_\_\_\_\_ budget.    **over**  The BAC indicates the budgeted project cost at completion. The EAC indicates the new estimated cost at completion. The difference between BAC and EAC (BAC - EAC) gives the variance at completion (VAC). In this example the VAC = -$500. The project is estimated to be completed $500 over budget. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Apply Larson - Chapter 13 #48 Learning Objective: Forecasting Final Project Cost Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 49. | An SPI index of 1.22 indicates that the project is \_\_\_\_\_\_\_\_ of schedule.    **ahead**  An SPI of 1.22 means that $1.22 worth of work has been accomplished for each $1 worth of work scheduled. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #49 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 50. | Although it is very difficult to measure, measuring \_\_\_\_\_\_\_\_ performance is as important as measuring schedule and cost performance.    **technical**  It is very difficult to specify how to measure technical performance because it depends on the nature of the project. Suffice it to say, measuring technical performance must be done. Technical performance is frequently where quality control processes are needed and used. Project managers must be creative in finding ways to control this very important area. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #50 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 51. | The final step in the project control process for measuring and evaluating project performance is to take appropriate \_\_\_\_\_\_\_\_.    **action**  The final step in the project control process for measuring and evaluating project performance is to take appropriate action. If deviations from plans are significant, corrective action will be needed to bring the project back in line with the original or revised plan. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #51 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 52. | In some cases, conditions or scope can change, which, in turn, will require a change in the baseline plan to recognize new information.    **TRUE**  If deviations from plans are found and are significant, corrective action will be needed to bring the project back in line with the original revised plan. In some cases, conditions or scope can change, which, in turn, will require a change to the baseline plan to recognize the new information. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #52 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 53. | The PCIC index measures the project percent complete in relation to the resources that have actually been used so far on the project.    **TRUE**  The PCIC index assumes the actual costs-to-date and expected cost at completion are the most reliable for measuring project percent complete. These indexes compare the to-date progress to the end of the project. The PCIC index views percent complete in terms of actual dollars spent to accomplish the work to date and the actual expected dollars for the completed project (EAC). |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #53 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 54. | The only accurate method for determining the true time progress of the project is to compare the project network schedule against the actual network schedule to measure if the project is on time.    **TRUE**  Schedule variance measures progress in dollars rather than time units. Therefore, it is unlikely that any translation of dollars to time will yield accurate information telling if any milestone or critical path is early, on-time, or late. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #54 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 55. | Schedule variance measures progress in time units.    **FALSE**  Schedule variance measures progress in dollars rather than time units. Therefore, it is unlikely that any translation of dollars to time will yield accurate information telling if any milestone or critical path is early, on-time, or late. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #55 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 56. | Earned value is defined as the budgeted cost of the actual work performed.    **TRUE**  Earned value (EV) is defined as the budgeted cost of the work performed. Earned value is the percentage complete times the budgeted cost of an activity or activities. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #56 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 57. | The baseline is derived from merging information from the work packages with the project network.    **TRUE**  The baseline is derived from the cost and duration information found in the work breakdown structure (WBS) database and time-sequence data from the network and resource scheduling decisions. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #57 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 58. | Because of their easy-to-understand visual format, tracking Gantt charts are the most favored, used, and understandable option for reporting project status.    **TRUE**  The Gantt chart is the most favored, used, and understandable. This kind of chart is commonly referred to as a tracking Gantt chart. Gantt and control charts serve well as a means for tracking and trending schedule performance. Their easy-to-understand visual formats make them favorite tools for communicating project schedule status—especially to top management, who do not usually have time for details. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #58 Learning Objective: Monitoring Time Performance Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 59. | The PV, AC and CV are all required to assess the current status of the project.    **FALSE**  PV, EV and AC are all required to assess the current status of the project. From these values project variances and efficiency ratios can be calculated. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #59 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 60. | When revising the estimated cost at completion, there are two approaches. The EACre is determined by experts in the field and the EACf is a mathematical approach which assumes the CPI as the basis for forecasting cost at completion.    **TRUE**  The EACre and the EACf both determine the estimated cost at completion. They are simply different approaches. The EACre is determined by experts in the field and the EACf is a mathematical approach which assumes the CPI as the basis for forecasting cost at completion. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #60 Learning Objective: Forecasting Final Project Cost Level of Difficulty: 3 Hard* |

|  |  |
| --- | --- |
| 61. | The best method for assigning costs to the baseline under the 50/50 rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.    **FALSE**  The best method for assigning costs to the baseline under the percent complete rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #61 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 62. | Most changes will not result in serious scope changes and should be absorbed as positive or negative variances.    **TRUE**  Project managers should allow scope changes only if it is clear that the project will fail without the change, the project will be improved significantly with the change, or the customer wants it and will pay for it. Most changes will not result in serious scope changes and should be absorbed as positive or negative variances. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #62 Learning Objective: Other Control Issues Level of Difficulty: 3 Hard* |

|  |  |
| --- | --- |
| 63. | A "rubber baseline" occurs when, in an effort to disguise poor performance, the baseline changes to constantly match results.    **TRUE**  Care should be taken not to use baseline changes to disguise poor performance on past or current work. A common signal of this type of baseline change is a constantly revised baseline that seems to match results. Practitioners call this a "rubber baseline" because it stretches to match results. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #63 Learning Objective: Other Control Issues Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 64. | Baseline costs typically include labor, equipment, materials and direct overhead cost.    **FALSE**  The baseline (PV) is the sum of the cost accounts, and each cost account is the sum of the work packages in the cost account. Three direct costs are typically included in baselines—labor, equipment, and materials. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #64 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 65. | A project control system allows for comparing actual performance against plan to identify deviations; however, the system doesn't impact the quality of communication between stakeholders.    **FALSE**  A project control system allows for accurate information regarding the current status of a project to be communicated to stakeholders. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #65 Learning Objective: Structure of a Project Monitoring Information System Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 66. | Two major reasons for creating a baseline are to monitor and report progress and to estimate cash flow.    **TRUE**  The major reasons for creating a baseline are to monitor and report progress and to estimate cash flow. Therefore, it is crucial to integrate the baseline with the performance measurement system. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #66 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 67. | In calculating schedule variance and cost variance, a negative variance indicates a desirable condition, and a positive variance suggests problems.    **FALSE**  A positive variance indicates a desirable condition, while a negative variance suggests problems or changes that have taken place. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #67 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 68. | An undesirable schedule variance always indicates that the project is running behind schedule.    **FALSE**  A negative schedule variance suggests problems or changes that have taken place. Schedule variance measures progress in dollars rather than time units. Therefore, it is unlikely that any translation of dollars to time will yield accurate information telling if any milestone or critical path is early, on-time, or late. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #68 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 3 Hard* |

|  |  |
| --- | --- |
| 69. | Progress and performance can be measured quantitatively as well as qualitatively.    **TRUE**  Time and budgets are quantitative measures of performance that readily fit into the integrated information system. Qualitative measures such as meeting customer technical specifications and product function are most frequently determined by on-site inspection or actual use. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #69 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 70. | A CPI index of 0.97 indicates that the project has spent less money than budgeted.    **FALSE**  A CPI index of 0.97 indicates that you are only earning $.97 of planned work for each dollar spent. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #70 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 71. | Rachel notices that the current EV for her project is higher than both the PV and the AC. Rachel has reason to be concerned.    **FALSE**  When the EV is higher than the PV and the AC, this results in positive cost and schedule variances. This indicates that the project is progressing well in terms of cost. Rachel should check her tracking Gantt chart to make sure critical activities are progressing well. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Apply Larson - Chapter 13 #71 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 72. | All scope changes that result in increased costs should be avoided.    **FALSE**  Although scope changes are usually viewed negatively, there are situations when scope changes result in positive rewards. Scope changes can represent significant opportunities. In product development environments, adding a small feature to a product can result in a huge competitive advantage. A small change in the production process may get the product to market one month early or reduce product cost. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #72 Learning Objective: Other Control Issues Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 73. | Although it is very difficult to measure, measuring technical performance is as important as measuring schedule and cost performance.    **TRUE**  It is very difficult to specify how to measure technical performance because it depends on the nature of the project. Suffice it to say, measuring technical performance must be done. Technical performance is frequently where quality control processes are needed and used. Project managers must be creative in finding ways to control this very important area. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #73 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 74. | Deciding what data to collect, actually collecting the data and analyzing it, and reporting this data are all parts of structuring a project monitoring information system.    **TRUE**  The project monitoring system involves determining what data to collect; how, when, and who will collect the data; analysis of the data and reporting current progress. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #74 Learning Objective: Structure of a Project Monitoring Information System Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 75. | A project manager would be glad to see a TCPI of 1.07.    **FALSE**  A TCPI of 1.07 would indicate that each remaining $1 in the budget must earn $1.07 for the project to stay within budget. There is more work than there is budget left. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Apply Larson - Chapter 13 #75 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 76. | A negative VAC indicates that the project will be completed over budget.    **TRUE**  A positive VAC indicates that the project will be completed under budget and a negative VAC indicates that the project will be completed over budget. It is calculated by subtracting the EAC from the BAC. |

|  |
| --- |
| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Larson - Chapter 13 #76 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 1 Easy* |

|  |  |
| --- | --- |
| 77. | Identify the steps in creating a control process that measures and evaluates project performance.     Answer will vary  Feedback: (1) Set the baseline plan; (2) Measure the progress and performance; (3) Compare plan against actual; (4) Take action as indicated by the results. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Remember Larson - Chapter 13 #77 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 78. | What is the difference between a baseline Gantt chart and a tracking Gantt chart?     Answer will vary  Feedback: The baseline chart is created during the project planning phase and lays out the logic and timing for major activities. The tracking Gantt chart shows progress against that plan by using various graphical techniques to display progress. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #78 Learning Objective: Monitoring Time Performance Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 79. | A project manager learns that her project has an EV of 1200, AC of 1100 and PV of 1000. What can the project manager report regarding this project?     Answer will vary  Feedback: The project has a position CV of $100. This indicates that $100 less was spent on actual work performed than what was planned. The project has a positive SV of $200. This indicates that $200 worth of work has been completed that wasn't planned at this time. In order to be sure that this work includes critical activities, the project manager must look at the tracking Gantt chart. Efficiency indexes can also be reported and interpreted. CPI = 1.09 and the SPI is 1.2. |

|  |
| --- |
| *AACSB: Analytic Blooms: Apply Larson - Chapter 13 #79 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 80. | Conducting an earned value analysis requires three data elements. Identify the acronyms for each and describe what they are.     Answer will vary  Feedback: (1) PV-budgeted cost of work scheduled; (2) EV-budgeted cost of the work performed; (3) AC-actual cost of the work performed. |

|  |
| --- |
| *AACSB: Analytic Blooms: Remember Larson - Chapter 13 #80 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 81. | In reviewing the budget report of a project, you notice that spending on the project is running about 10 percent over plan. Is the project in trouble? Why or why not?     Answer will vary  Feedback: You don't know for sure. The project may be in trouble; however the cost overrun could be due to the project being ahead of schedule. You would need to have an earned value analysis run before you could tell. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #81 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 82. | Schedule variance (SV) is in dollars and does not directly represent time. Why is it still useful?     Answer will vary  Feedback: Schedule variance presents an overall assessment of all work packages in the project scheduled to date. Although it doesn't directly represent time, it is still very useful in assessing the direction all the work in the project is taking after 20 percent of the project has been completed. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #82 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 3 Hard* |

|  |  |
| --- | --- |
| 83. | All projects need some form of formal control. Agree or disagree? Support you answer.     Answer will vary  Feedback: Control by "wandering around" and/or "involvement" can overcome most problems in small projects. But large projects need some form of formal control. Control holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #83 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 84. | Identify and describe two methods for tracking and trending schedule performance.     Answer will vary  Feedback: The only accurate method for determining the true time progress of the project is to compare the project network schedule against the actual network schedule to measure if the project is on time. Tracking Gantt charts and control charts are two ways to do this. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #84 Learning Objective: The Project Control Process Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 85. | Two project complete indexes are used, depending on your judgment of which one is most representative of your project. Identify both indexes and explain when it is most appropriate to use each.     Answer will vary  Feedback: The PCIB assumes the original budget of work complete is the most reliable information to measure project percent complete. The PCIC assumes the actual costs-to-date and expected cost at completion are the most reliable for measuring project percent complete. |

|  |
| --- |
| *AACSB: Reflective Thinking Blooms: Understand Larson - Chapter 13 #85 Learning Objective: Indexes to Monitor Progress Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 86. | What is scope creep and how does it impact project control?     Answer will vary  Feedback: Scope creep is small refinements that eventually build into a major change in the scope of the project. A project manager should be concerned in that the project was put together and the resources assembled to achieve specific objectives and while the motives can be well intended the result is that sacrifices may be required to the other two key areas of schedule and/or costs. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #86 Learning Objective: Other Control Issues Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 87. | What is a "rubber baseline" and how does it undermine project control?     Answer will vary  Feedback: A rubber baseline is when the baseline is constantly revised to match results in attempt to disguise poor performance. This undermines project control by not having accurate performance measures to control variances. Problems will continue to mushroom, no one is accountable, and there is no way to use these measures to help plan and implement future projects. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #87 Learning Objective: Other Control Issues Level of Difficulty: 2 Medium* |

|  |  |
| --- | --- |
| 88. | What is the percent complete rule and what role does it play when developing an earned value cost/schedule system?     Answer will vary  Feedback: The percent complete rule is used when someone familiar with each task estimates what percent of the task has been completed or how much of the task remains. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms. Once percent complete has been established, earned value can be determined. |

|  |
| --- |
| *AACSB: Analytic Blooms: Analyze Larson - Chapter 13 #88 Learning Objective: Development of an Earned Value Cost/Schedule System Level of Difficulty: 3 Hard* |

Chapter 13 Summary

|  |  |
| --- | --- |
| *Category* | *# of Questions* |
| AACSB: Analytic | 9 |
| AACSB: Reflective Thinking | 79 |
| Accessibility: Keyboard Navigation | 55 |
| Blooms: Analyze | 7 |
| Blooms: Apply | 8 |
| Blooms: Remember | 8 |
| Blooms: Understand | 65 |
| Larson - Chapter 13 | 88 |
| Learning Objective: Development of an Earned Value Cost/Schedule System | 35 |
| Learning Objective: Forecasting Final Project Cost | 5 |
| Learning Objective: Indexes to Monitor Progress | 14 |
| Learning Objective: Monitoring Time Performance | 7 |
| Learning Objective: Other Control Issues | 6 |
| Learning Objective: Structure of a Project Monitoring Information System | 4 |
| Learning Objective: The Project Control Process | 17 |
| Level of Difficulty: 1 Easy | 12 |
| Level of Difficulty: 2 Medium | 68 |
| Level of Difficulty: 3 Hard | 8 |