Earned Value Professional (EVP)
Sample Examination

Section I and II – Multiple Choice

1. In scheduling, "vertical traceability" means:

a. Organizational breakdown structure is used to roll up within the organization all the activities of a department or manger
b. Eliminate out of sequential logic
c. Hierarchical code structure that forces detail to summary rollups
d. Subordinate schedules fit within the requirements of the integrated master schedule

2. Which of the following steps would be considered the least desirable corrective action for a project that has an unfavorable SPI?

a. Revise activities on the critical path
b. Rebaseline to eliminate schedule variance
c. Crash the schedule
d. Review activities with positive float

3. The Performance Measurement Baseline includes the following:

a. Summary level planning packages, control account budgets, and undistributed budget
b. Indirect costs, control account budgets and management reserve
c. Direct costs, control account budgets and management reserve
d. Direct costs, indirect costs and management reserve

4. The _____is the point at which work is planned, progress is measured, and earned value is computed

a. Work package
b. Control account
c. Activity/Task
d. WBS element

5. Which method should be used to calculate earned value for tasks that are related in direct allocation to a base work package?

a. Level of effort
b. Allocated effort
c. Percent Complete
d. Apportioned effort

6. Which method can be used to calculate BCWP?

a. ACWP/EAC
b. ACWP/BCWS
c. % Complete * BAC
d. % Complee * EAC

7. Given the following information, calculate the cost and schedule variances:

BAC = $50,000
EAC = $55,000
BCWS = $15,000
BCWP = $20,000
ACWP = $25,000

a. CV = ($5,000); SV = $5,000
b. CV = $5,000; SV = ($5,000)
c. CV = ($10,000); SV = $10,000
d. CV = $10,000; SV = ($10,000)

8. What is the primary benefit of the To Complete Performance Index (TCPI)?

a. Projects final cost
b. When compared to the other performance indices it provides a forecast of how much of a productivity improvement is required to finish the project on budget
c. Shows the required efficiency to complete the project as forecasted by the EAC
d. Provides a historical perspective of the project

9. Which of the following provides a statistical forecast of the final EAC assuming that all remaining work will be done at the budgeted rate?

a. [(BAC - EV) / (CPI x SPI)] + actual to date = EAC
b. [(BAC + EV) / (CPI x SPI)] + actual to date = EAC
c. [(ETC) / (CPI x SPI)] + actual to date = EAC
d. (BAC - EV) + actual to date = EAC

10. Which of the following is not required for a critical path schedule:

a. Resources
b. Milestones and key contractual events
c. Subcontractor schedules
d. Logical relationships between activities (tasks)

Section III - Earned Value Application

At a meeting, the control account manager hands you the following performance information on an unfamiliar project.

	BCWS ($)	**BCWP ($)**	**ACWP ($)**	**SV ($)**	**SV (%)**	**CV ($)**	**CV (%)**	**SPI**	**CPI**
Cumulative	5,000	5,100	5,400	100	2	(300)	-6	1.02	0.94

	BAC ($)	**EAC ($)**	**VAC ($)**	**VAC (%)**	**$TCPI_{BAC}$**	**$TCPI_{EAC}$**
At Complete	10,000	9,000	1,000	10%	1.07	1.36

Based on this information, you are asked the following questions:

2.1 Which one of the following conditions is most likely to apply?

a. The project is ahead of schedule and overrun
b. The cumulative cost is underrun
c. The EAC is calculated from the cumulative SPI and CPI
d. None of the above

2.2 Which one of the following conditions is most likely to apply?

a. If the cost performance trend continues, the project will finish ahead of schedule and underrun budget
b. The EAC is statistically not probable based on the variance between CPI and $TCPI_{EAC}$
c. Based on the cumulative actuals, the EAC should be adjusted to $10,400
d. None of the above

2.3 Which one of the following conditions is most likely to apply?

a. Because the project is ahead of schedule, the EAC will be less than the BAC
b. The EAC is statistically not probable based on the variance between CPI and $TCPI_{BAC}$
c. There is a labor shortage
d. None of the above

2.4 The calculated EAC based on the cumulative cost and schedule performance is?

a. $10,612
b. $10,510
c. $9,467
d. $9,803

Answers

Section I and II : 1-d, 2-b, 3-a,4-a, 5-d, 6-c, 7-a, 8-c, 9-d, 10-a
Section III : 2.1-a, 2.2-b, 2.3-d, 2.4-b