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# King Saud University

**Information Systems Department**

Project Management (IS-351)

# Class Quiz # 3 (ANSWERS)

Section-II

|  |  |
| --- | --- |
| **Student Name:-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Section:-\_\_\_\_\_\_\_** |
| **SID No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Student Class No.: \_\_\_\_\_\_\_\_** |
| **Total Marks:- 10** | **Marks Awarded:\_\_\_\_\_\_\_\_\_\_** |

=========================================================================

**Question 1:** Using the formulas given in table-1, if needed, solve the given problem (6 points)

Table-1:

|  |  |
| --- | --- |
| Planned value ( PV ) |  |
| Actual Cost ( AC ) |  |
| Earned value ( EV ) | EV = PV up to date \* percent completed |
| Cost Variance ( CV ) | CV = EV - AC |
| Schedule variance ( SV ) | SV = EV - PV |
| Cost Performance Index ( CPI ) | CPI = EV / AC |
| Schedule Performance Index ( SPI ) | SPI = EV / PV |
| Estimate at Completion (EAC)  | EAC = BAC / CPI (for cost) |
| Estimated time for project completion  | Scheduled Time of project / SPI  |

**The problem:**

**Given for a (4 months) project, the following data:**

 **PV = $ 10,000**

 **EV = $11,000**

 **AC = $12,000**

 **BAC = $22,000**

**1. a) How is this project performing? (1 point)**

 **[a]** This project is ***under budgeted*** & ***behind schedule*** .

 [b] This project is ***under budgeted*** & ***ahead of schedule***.

 [c] This project is ***over budgeted*** & ***ahead of schedule*.**

 **[d]** This project is ***over budgeted*** & ***behind schedule*.**

**Answer: Circle the correct choice**

**The Correct Choice is**

|  |  |  |  |
| --- | --- | --- | --- |
|  **[a]** |  **[b]** |  **[c]** |  **[d]** |

1. **b) Calculate the value of CV (1 point)**

 **CV = EV – AC = 11,000 – 12,000 = - $1,000**

1. **c) Calculate the value of SV (1 point)**

 **SV = EV – PV = 11,000 – 10,000 = $1,000.**

1. **d) Calculate the value of CPI (1 point)**

 **CPI = EV/AC =11,000/12,000 = (11/12) less than 1🡺overbudgeted**

1. **e) Calculate the value of SPI (1 point)**

 **SPI = EV/PV = 11,000 / 10,000 = (11/10) greater than 1 🡺ahead of schedule**

**1. f) The estimated budget to complete the project: (1 point)**

 **[a] *$22,000***  as planned ***would suffice*** .

 [b] ***$23,000***  ***is a sufficient estimate for budget***.

 [c] ***$24,000***  ***is a sufficient estimate for budget***

 **[d]** ***None of the above***

**Answer: Circle the correct choice**

**The Correct Choice is**

|  |  |  |  |
| --- | --- | --- | --- |
|  **[a]** |  **[b]** |  **[c]** |  **[d]** |

**Question 2:** Read each of the following statements, then fill in the entries of table -2 by writing (true) or (false) in the entries provided. **(2.5 points)**

**Table-2:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Statement**  | **Statement a)** | **Statement b)** | **Statement c)** | **Statement d)** | **Statement e)** |
| **ANSWER** | **TRUE** | **TRUE** | **FALSE** | **TRUE** | **FALSE** |

1. **If Schedule Variance (SV) is a negative number, it means that it took longer than planned to perform a work.**
2. **A positive Cost Variance (CV) means that performing the work cost less than planned.**
3. **The Schedule Performance Index (SPI) is the ratio of earned value to planned value and is used to estimate the projected cost of completing the project.**
4. **Cost Performance Index (CPI) is the ratio of earned value to actual cost, and is used to estimate the projected cost of completing the project.**
5. **Budget at Completion (BAC) is an estimate of what it will cost to complete the project based on performance to date.**

**Question 3:** Define, the term ***Loss*** in terms of expenditures and revenues? **(1.5 points)**

**ANSWER:** **Loss is revenues minus Expenditures on the negative side.**

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|  |  |  |
| --- | --- | --- |
| Q1/6pts | Q2/2.5pts | Q3/1.5pts |
| [ / 6 ] | [ / 2.5 ] | [ / 1.5 ] |

|  |  |
| --- | --- |
| Mark out of [10] | Mark out of [1.25] |
|  |  |

Extra Sheet for Calculations - if needed-

**Calculation for problem of Question 1:**

**EAC = BAC / CPI = 22,000 / (11/12) = 22,000 \* (12/11) = $ 24,000.**