

CHAPTER 4

ANALYSE DATA USING SCENARIO AND GOAL SEEK

A. Multiple Choice Questions

1. Which of the following feature is not used for data analysis in spreadsheet?
Answer: (e) Page layout
2. Which of the following office tool is known for data analysis?
Answer: (b) Calc
3. Which of the following operations cannot be performed using LibreOffice Calc?
Answer: (d) Mail merge
4. What is the extension of spreadsheet file in Calc?
Answer: (d) .ods
5. The default function while using Consolidate is _____.
Answer: (b) Sum
6. Group by is used in _____ tool to apply summary functions on columns.
Answer: (d) Subtotal tool
7. Which tool is used to predict the output while changing the input?
Answer: (b) What-if scenario
8. Which of the following is an example for absolute cell referencing?
Answer: (b) \\$(C)\\$5
9. _____ analysis tool works in reverse order, finding input based on the output.
Answer: (b) Goal seek

B. State whether the following statements are True or False

1. Consolidate function is used to combine information from two or more sheets into one. **True**
2. Consolidate function cannot be used to view and compare data. **False**
3. Link to source data is checked updates the target sheet if any changes made in the source data. **True**
4. Using subtotal in Calc needs to use filter data for sorting. **False**
5. Subtotal tool can use only one type of summary function for all columns. **False**
6. Only one scenario can be created for one sheet. **False**
7. What-if analysis tool uses one array of cells. **False**
8. Goal seek analysis tool is used while calculating the output depending on the input. **False**
9. The output of What-if tool is displayed in the same cell. **False**

C. Fill in the Blanks

1. Consolidate function is used to combine information from multiple sheets to **summarize** the information.
2. Data can be viewed and compared in a single sheet for identifying trends and relationships using **Consolidate** function.
3. **Consolidate** under Data menu can be used to combine information from multiple sheets into one sheet to compare data.
4. The **Subtotal** tool in Calc creates the group automatically and applies functions on the grouped data.
5. **What-if** scenario is used to explore and compare various alternatives depending on changing conditions.
6. **Multiple Operations** (or **What-if tool**) is a planning tool for what-if questions.
7. What-if analysis tool uses **two** array of cells, one array contains input values and the second uses the **formula**.

8. **Goal seek** helps in finding out the input for the specific output.
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D. Answer the Following Questions

1. **Define the terms:**

- **(a) Consolidate function:** A feature used to combine data from multiple sheets into a single sheet to summarize, view, and compare information to identify trends and relationships.
- **(b) What-if analysis:** A planning feature (Data > Multiple Operations) that uses formula arrays to calculate and display a list of outcomes based on alternative input values.
- **(c) Goal seek:** A tool that performs backward calculations to determine the exact input value required to achieve a specific target output.

2. **Give one point of difference between:**

- **(a) Subtotal and What-if:** The **Subtotal tool** automatically groups data by category and applies summary functions (such as SUM or AVERAGE) directly on column data, whereas **What-if analysis** uses formula arrays to test alternative input values and evaluate potential output results.
- **(b) What-if scenario and What-if tool:** A **What-if scenario** allows saving multiple sets of input values directly on the same sheet to switch between alternatives, while the **What-if tool (Multiple Operations)** outputs results into a separate array without changing the original input cells.

3. **Give any two advantages of data analysis tools:**

- They allow users to retrieve, correlate, explore, and visualize data easily to spot trends and relationships.
- They automate calculations and enable predictive testing (such as evaluating alternative plans or calculating required inputs) for effective decision-making.

4. **Name any two tools for data analysis:**

- **Consolidate function**
- **Goal Seek** (or *Subtotal tool / What-if scenarios*).

5. **What are the criteria for consolidating sheets?**

- Data types across all sheets to be consolidated must match.
- Labels from all sheets used for consolidating must match.
- The first column must be entered as the primary column on the basis of which the data is consolidated.

6. **Which tool is used to create an outline for the selected data?**

- **Group and Outline** (or **Data > Group and Outline**).
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