



INDIAN SCHOOL AL WADI AL KABIR

Class: X	Department: Computer Science
QUESTION BANK	INFORMATION TECHNOLOGY

Chapter 4: Analyse Data using Scenarios and Goal Seek

Section A: Multiple Choice Questions (MCQS)

1. Which of the following features is NOT used for data analysis in a spreadsheet?
a) Consolidating data b) Goal Seek c) Subtotal d) Page layout
2. Which office tool is primarily known for its data analysis capabilities?
a) Writer b) Calc c) Impress d) Draw
3. What is the default function applied when using the Consolidate tool?
a) Average b) Sum c) Max d) Count
4. Which analysis tool works in reverse order, finding the required input based on a specific output?
a) Consolidate b) Goal Seek c) What-if scenario d) Multiple Operations
5. What is the correct file extension for a spreadsheet file in LibreOffice Calc?
a) .odb b) .odt c) .odg d) .ods
6. "Group by" is a feature used in which tool to apply summary functions to columns?
a) Consolidate b) Goal Seek c) Subtotal tool d) What-if scenario
7. Which tool is used to predict the output while changing the input values?
a) Consolidate b) What-if scenario c) Find and Replace d) Page Layout
8. Which of the following is an example of an absolute cell reference?
a) C5 b) C5 c) \$C d) #C
9. The "Link to source data" option in Consolidation is used to:
a) Delete original data b) Update the target sheet automatically when source data changes c) Create a hyperlink d) Save the file as a PDF
10. In which menu is the Subtotals option located in Calc?
a) File b) Edit c) Data d) Tools

Section B: Short Answer Questions (2 Marks Each)

1. Define the Consolidate function.

It is used to combine information from multiple sheets into one place to summarize the information and identify trends or relationships.

2. What is a What-if scenario?

It is a set of values that can be used within calculations to explore and compare various alternatives depending on changing conditions.

3. Explain the purpose of Goal Seek.

Goal Seek helps in finding the specific input needed to achieve a desired output, often referred to as "backward calculation".

4. What is the purpose of "Group and Outline" in Calc?

It creates an outline of selected data, allowing users to collapse (-) or expand (+) rows and columns with a single click.

5. Identify one requirement for consolidating data sheets.

The data types must match across all sheets you want to consolidate, and labels should be matched correctly.

6. What is the primary benefit of data analysis tools?

They allow users to extract useful information from raw facts to make effective and informed decisions.

7. What is the "Multiple Operations" tool?

It is a planning tool for What-if questions that creates a formula array to display a list of results based on various input values.

8. What happens when the "Link to source data" checkbox is selected?

It ensures that modifications in the source data are automatically updated in the consolidated target sheet.

9. How many scenarios can be created on the same sheet in Calc?

Several scenarios can be created on the same sheet to test different variables.

10. What is the difference between data and information?

Raw facts constitute data (like student marks), while information is the processed or organized form of that data (like a report card).

Section C: Long Answer Questions (4 Marks Each)

- 1. Describe the step-by-step procedure to consolidate data from different sheets.**
Open the spreadsheet, create a new sheet for consolidation, and choose **Data > Consolidate**. Select the desired function (like Sum), choose the source data ranges, and click **Add** for each range. specify the target range under **Copy results to**, and click **OK**.
- 2. Explain how the Subtotal tool works. How can it be used for multi-level grouping?**
The Subtotal tool automatically creates groups and applies functions like sum or average to them. To perform multi-level grouping, use the **2nd Group** and **3rd Group** tabs in the Subtotals dialog to organize data by further categories, such as grouping by Class and then by Stream.
- 3. Compare and contrast "What-if Scenarios" and the "What-if Analysis (Multiple Operations)" tool.**
Scenarios are sets of values used directly in the sheet to compare alternatives, and users can switch between them using the Navigator. The Multiple Operations tool uses two arrays (input and output) to display a range of results based on a formula without changing the original cells.
- 4. Define Goal Seek and provide a practical example of its use.**
Goal Seek is an analysis tool used to find an input value for a specific output. For example, a student who has marks for 4 subjects can use Goal Seek to calculate exactly what marks they need in a 5th subject to reach a target aggregate score, like 70%.
- 5. What are the advantages of relating tables in a database for analysis?**
Relating tables (covered as a prerequisite for advanced analysis) helps control redundancy and inconsistency by ensuring that data for a single entity is not repeated unnecessarily. It also improves accuracy, efficiency, and validity of the information retrieved.

Answer Key

Section A: MCQs

1. d | 2. b | 3. b | 4. b | 5. d | 6. c | 7. b | 8. b | 9. b | 10. c