

## Excel

### Data Validation, Security and Password Subtotal

Q1) How do you create a drop-down list using Data Validation in excel?

A) Select the cell where you want the list, go to the Data tab, and click Data validation. In the "Allow" box, select List, then type your items in the "source" box separated by commas or select a range of cells containing your items and click OK.

Q2) What steps would you take to ensure data validation rules are applied correctly?

A) Ensuring Correct Application

To verify rules, use the circle Invalid Data tool (found under the Data Validation menu) to highlight existing entries that break the rules. Additionally, test the cells by intentionally entering incorrect data to ensure the error alert pops up as expected.

Q3) Explain the process of protecting a worksheet with a password

A) Protecting a worksheet with a password

Go to the Review tab and select protect sheet. type your password, choose the actions you want to allow users to perform (like selecting cells), and click OK. Reenter the password to confirm.

Q4) How do you protect specific cell while allowing others to be edited?

A) Protecting Specific Cells

By default, all cells are "Locked". To allow editing in specific cells:

- 1) Select the cells you want to say editable
- 2) Right-click > Format Cells > protection tab > uncheck Locked
- 3) Apply protect sheet (as described in step 3) for the locking to take effect

Q5) What is the purpose of the SUBTOTAL function, and how is it different from SUM?

### A) SUBTOTAL VS SUM

The sum function adds up every value in a range regardless of whether they are hidden or filtered. SUBTOTAL is more versatile; it can perform various operations (like sum, average or count) and, crucially, it can ignore rows hidden by a filter.

Q6) How do you apply data validation to prevent duplicate entries?

### A) Preventing Duplicate Entries

- 1) Select your range
- 2) Open Data Validation
- 3) Choose custom from the "Allow" box.
- 4) Enter a formula like:  $=COUNTIF($A$1:$A$100,A1)=1$
- 5) This rule ensures the value can only appear once in that range.

Q7) How would you restrict data entry to a specific range of values?

### A) Restricting Data to a Range of Values:

In the Data Validation settings, choose Whole Number or Decimal in the "Allow" box. Set the "Data" dropdown to Between, then enter your minimum and maximum values.

Q8) What are the security options available in Excel for Protecting workbooks?

- A) Workbook security options
- \* Encrypted with Password: Requires a password just to open the file
  - \* Protect workbook structure: Prevents users from adding, deleting, or renaming worksheets
  - \* Read-only Recommended: Prompts users to open the file as read-only to prevent accidental changes

Q9) How do you hide formulas in a worksheet while still allowing data entry?

- A) Hiding Formulas
- 1) Select the cells with formulas
  - 2) Right-click > Format Cells > Protection tab > check Hidden
  - 3) Go to the Review tab and click protect sheet. The formulas will now be invisible in the formula bar, but the result remains visible in the cells
- Q10) Explain how to use SUBTOTAL function to perform calculations on filtered data!

### A) SUBTOTAL on Filtered Data

Use the syntax  $=\text{SUBTOTAL}(\text{function\_num}, \text{range})$

To sum filtered data, use 9 or 109 as the function\_num  
e.g.  $=\text{SUBTOTAL}(109, A1:A10)$ . When you apply a filter to your data, SUBTOTAL result will automatically update to reflect only the values currently visible on your screen.

(A)   
 ~~patterned knowledge~~   
 ~~subset of data, some rows hidden~~   
 ~~not affected by filters, other rows will still be included~~   
 ~~subset of data, only visible rows are included~~

Subset rows and keep them as individual rows total less than 1000 in size, with rows containing zero value and null values removed from the calculation.

(B)   
 ~~all rows displayed and hidden in the sheet~~   
 ~~sum of all the numbers visible after applying a filter~~   
 ~~sum of all the numbers visible after applying a filter~~   
 ~~subset of data < patterned knowledge~~   
 ~~subset of data < patterned knowledge~~

(C) ~~filter of data & subset very slow~~

Use to ignore sub total