

1. What is data cleaning, and why is it important in data analysis?	
	<p>* What are the potential consequences of analyzing unclean or messy data?</p> <p>* Explain the common steps involved in cleaning and organizing data.</p>
ANSWER	<p>Identifying and correcting errors in data tp making accurate, consistance to ready for analysis .</p> <p>Data cleaning is the process of identifying and removing unclean data .</p>
	<p>* Consequences of Unclean Data:-data or messy data</p> <p>unclean data create will many problem in a analysis</p>
	<p>1) wasted resources</p> <p>2) incorrect conc conclusions</p> <p>3)poor decision making</p>
	<p><u>common steps</u></p>
	<p>A) Remove duplicate data</p> <p>B) Handles missing value</p> <p>c) Correct data type</p> <p>d) Remove irrelevant data</p>

2. How would you sort the following dataset first by "Department" (A-Z) and then by "Salary" (Largest to Smallest)? Write a step-by-step approach.

Employee	Department	Salary
Sonu	IT	4000
Pranav	HR	5000
Rahul	IT	2500

<u>ANSWER</u>	<u>STEPS</u>
	1) Select the entire dataset including the header
	2) Go to data tab and click on sort
	3) in a sort dialog
	a) first sort by department A to Z
	b) then click add level
	C) Sort by salary order to largest to smallest

Employee	Department	Salary
Pranav	HR	5000
Sonu	IT	4000
Rahul	IT	2500

3. Explain the use of text functions such as TRIM, LEFT, RIGHT, MID, and CONCAT in data cleaning.							
ANSWER	* TRIM:-	Removes extra spaces from text.					
	* LEFT:-	Extracts character from the start.					
	* RIGHT:-	Extracts characters from the end.					
	* MID:-	Extracts characters from the middle.					
	* CONCAT:-	Joins multiple text					

5. Apply Data Validation to restrict Quantity values to only whole numbers between 1 and 10.

a- Configure an input message that appears when a user selects a cell in the "Quantity" column explaining:
"Please enter a whole number between 1 and 10."

b- Set up an error alert message that triggers if the user enters a number less than 1 or greater than 10, showing:
"Invalid input! The quantity must be a whole number between 1 and 10."

Write a step-by-step approach for this question:-

Customer Name	Product Name	Category	Quantity	Unit Price(\$)	ANSWER	STEP BY STEPS
Jane Smith	Shoes	Electronics		81		
Isabella Moore	Laptop	Electronics		121	1)	Select the cell under the quantity column .
Daniel Davis	Sofa	Clothing		239	2)	Go to Data Tab and click on the data validation
Alex Moore	Shoes	Electronics		500	3)	in the setting tab
Michael Johnson	Table Lamp	Home Décor		423		
Daniel Johnson	Backpack	Electronics		160		* Allow whole number
Isabella Davis	Headphones	Electronics		348		*Data between
Jane Davis	Headphones	Electronics		152		* minimum 1 to maximum 10
Alex Wilson	T - shirt	Home Décor		369		

4) Input message tab :-
a) title quantity entry
b) enter the whole number between 1 to 10

5) error alert tab :- A) style - stop
b) Title - invalid input
6) click ok

6. Understand and apply fundamental text function like LEFT, RIGHT, MID, and LEN.

* Extract the first 5 character from the string "ExcelTipsAreGreat" using the LEFT function

Text - ExcelTipsAreGreat

ANSWER= EXCEI

* Extract the last 4 characters from "DataAnalysis.xlsx" using the RIGHT function.

Text - DataAnalysis.xlsx

Ans. xlsx

* Extract the substring "Tips" from "ExcelTipsAreGreat" using the MID function.

Ans. Tips

* Count the total number of characters in the string "Hello World!" using the LEN function.

Ans. 12

* Create a formula to extract the middle 6 characters from "12345-67890-ABCDE".

Ans. 67890

7. Understand how to combine text using CONCAT, TEXTJOIN, and the & operator.

a) Use CONCAT to combine "Hello" and "World" with a space in between.

Ans. HELLOW,WORD

b) Combine "Apple", "Banana", and "Cherry" into a single string separated by commas using TEXTJOIN.

Ans. Apple,Banana,cherry

c) Use the & operator to create the string "2025: Excel Function" by combining "2025",": ", and "Excel Function".

Ans. 2025:Excel functions

d) Create a comma-separated list from the range A1:A5 using TEXTJOIN

Let's assume:-	R
	O
	H
	I
	T

Ans. R,O,H,I,T

e) Combine first names in column A with last names in column B to create full names in column C.

Let's assume :-

Column A

Column B

Column C

mohit shimpi

kumar mayur

mohit mayur

ANSWER

mohit mayur

8. Understanding TODAY() and NOW()

a) What is the difference between TODAY() and NOW() in excel? Provide an example of when you would use each function.

Ans. **Difference:-** TODAY() - Returns only the date

NOW() - Returns date and time

Use:- TODAY() for deadlines

NOW() for timestamps

b) If cell A1 contains the date 2025-06-10, write a formula using TODAY() to determine how many days are left until that date

IF cintains A1= 06-10-2025

ANS -43

c) Write an Excel formula using NOW() to display the current date and time in the format MM/DD/YYYY HH:MM AM/PM.

ANS 11/18/2025 06:29 pm

d) if the cell contains =TODAY(), what will happen when the worksheet is responde the next day? explain

ANS Update automatically daily

e) you want to store a static date (today's date) in a cell without it changing every day . what kyeboard shortcut should you use ?

ANS To inseart a static date -: press: ctrl + ;