



All Basic Excel Formulas with Examples



1. SUM

Use: Numbers ka total nikalta hai.

Formula:

=SUM(A1:A5)

Example:

A

10

20

30

👉 Output:

60



2. AVERAGE

Use: Average nikalta hai.

Formula:

=AVERAGE(A1:A5)

Example:

10, 20, 30 → $(10+20+30)/3 = 20$

3. MIN

Use: Minimum (smallest) value nikalta hai.

Formula:

=MIN(A1 :A5)

Example:

| 10 | 25 | 5 | 40 | → Output: **5**

4. MAX

Use: Maximum (largest) value nikalta hai.

Formula:

=MAX(A1 :A5)

Example:

| 10 | 25 | 5 | 40 | → Output: **40**

5. COUNT

Use: Number cells count karta hai.

Formula:

=COUNT(A1 :A5)

Example:

| 10 | text | 30 | blank | → Output: **2** (sirf numbers count)

6. COUNTA

Use: Non-empty cells count karta hai (text + number).

Formula:

=COUNTA(A1 : A5)

Example:

| 10 | text | blank | 30 | → Output: **3**

7. ROUND

Use: Decimal numbers ko round karta hai.

Formula:

=ROUND(A1, 2)

Example:

| 12.3456 | → Output: **12.35**

8. SQRT

Use: Square root nikalta hai.

Formula:

=SQRT(A1)

Example:

| 25 | → Output: **5**

9. POWER

Use: Power nikalta hai (square, cube).

Formula:

=POWER(A1, 3)

Example:

| 2 | → Output: 8 (2^3)

10. MOD

Use: Division ka remainder deta hai.

Formula:

=MOD(10, 3)

Output: 1

11. IF

Use: Condition check karta hai.

Formula:

=IF(A1>50, "Pass", "Fail")

Example:

A1 = 70 → Pass

A1 = 40 → Fail

12. AND

Use: Dono condition true honi chahiye.

Formula:

=AND(A1>50, B1>50)

Example:

A1=60, B1=70 → TRUE

A1=60, B1=40 → FALSE

13. OR

Use: Koi ek condition true ho to TRUE.

Formula:

=OR(A1>50, B1>50)

Example:

A1=45, B1=70 → TRUE

14. NOT

Use: Opposite result deta hai.

Formula:

=NOT(A1>50)

Example:

A1=70 → FALSE

A1=40 → TRUE

15. CONCAT / CONCATENATE

Use: Text combine karta hai.

Formula:

=CONCAT(A1, " ", B1)

Example:

A1="Ankit", B1="Kumar" → Output: **Ankit Kumar**

16. TEXTJOIN

Use: Multiple cells ko ek sath join karta hai separator ke sath.

Formula:

=TEXTJOIN(", ", TRUE, A1:A4)

Example:

Ankit, Rahul, Neha → “Ankit, Rahul, Neha”

17. LEFT

Use: Text ke left side se characters leta hai.

Formula:

=LEFT(A1, 3)

Example:

A1="Ankit" → “**Ank**”

18. RIGHT

Use: Text ke right side se characters leta hai.

Formula:

=RIGHT(A1, 2)

Example:

A1="Ankit" → "it"

19. MID

Use: Text ke beech se characters nikalta hai.

Formula:

=MID(A1, 2, 3)

Example:

A1="Ankit" → "nki"

20. LEN

Use: Text ke letters count karta hai.

Formula:

=LEN(A1)

Example:

A1="Ankit" → 5

21. TRIM

Use: Extra spaces remove karta hai.

Formula:

=TRIM(A1)

Example:

A1=" Ankit " → “Ankit”

22. UPPER

Use: Text ko uppercase me convert karta hai.

Formula:

=UPPER(A1)

Example:

“ankit” → “ANKIT”

23. LOWER

Use: Text ko lowercase me convert karta hai.

Formula:

=LOWER(A1)

Example:

“ANKIT” → “ankit”

24. PROPER

Use: Har word ka first letter capital karta hai.

Formula:

=PROPER(A1)

Example:

“ankit kumar” → “Ankit Kumar”

25. TODAY

Use: Aaj ki date show karta hai.

Formula:

=TODAY()

Output: 03-Nov-2025

26. NOW

Use: Date + Time show karta hai.

Formula:

=NOW()

Output: 03-Nov-2025 13:25

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27. DAY / MONTH / YEAR

Use: Date ke parts nikalta hai.

Formula:

=DAY(A1)

=MONTH(A1)

=YEAR(A1)

Example:

A1 = 05/11/2025 → Day = 5, Month = 11, Year = 2025

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28. DATEDIF

Use: Do dates ke beech difference.

Formula:

=DATEDIF(A1, B1, "d")

Example:

01-Nov-2025 & 10-Nov-2025 → **9 days**

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29. VLOOKUP

Use: Data lookup (vertically).

Formula:

=VLOOKUP(A2, B2:D10, 3, FALSE)

Example:

A2 = “Ankit”, table me Ankit ka Marks milega.



30. HLOOKUP

Use: Data lookup (horizontally).

Formula:

=HLOOKUP(A2, A1:H3, 2, FALSE)

Example:

Header ke basis par value return karega.



31. RANDBETWEEN

Use: Random number generate karta hai.

Formula:

=RANDBETWEEN(1, 100)

Output: 1 se 100 ke beech random number.



32. ABS

Use: Negative value ko positive me badlta hai.

Formula:

=ABS(A1)

Example:

A1=-15 → Output = 15



33. TRANSPOSE

Use: Row ko column aur column ko row me badlta hai.

Formula:

=TRANSPOSE(A1:A3)



Summary Table

Category	Important Formulas
Maths	SUM, AVERAGE, MIN, MAX, COUNT, ROUND
Text	CONCAT, LEFT, RIGHT, MID, LEN, TRIM, UPPER, LOWER, PROPER
Logic	IF, AND, OR, NOT
Date	TODAY, NOW, DATEDIF, DAY, MONTH, YEAR
Lookup	VLOOKUP, HLOOKUP
Others	ABS, MOD, TRANPOSE, RANDBETWEEN



ALL 80+ ADVANCED EXCEL FORMULAS (With Examples & Descriptions)



1

Lookup & Reference Formulas

Formula	Description	Example
=VLOOKUP(A2, B2:D10, 3, FALSE)	Vertical lookup	Name ke basis par marks laata hai

=HLOOKUP(A2, A1:H3, 2, FALSE)	Horizontal lookup	Header ke basis par data
=XLOOKUP(A2, B2:B10, C2:C10, "Not Found")	Left-right dono side lookup	"Ankit" → result from C2:C10
=INDEX(C2:C10, MATCH(A2, A2:A10, 0))	Row-column intersection value	"Rahul" ke marks laata hai
=MATCH("Ankit", A2:A10, 0)	Position number return karta hai	"Ankit" agar 3rd row me → 3
=CHOOSE(2, "Excel", "Power BI", "Python")	Index ke hisab se value	Output = "Power BI"
=OFFSET(A1, 2, 1)	2 row niche aur 1 column right ka data	Shifting reference
=INDIRECT("B"&A2)	Dynamic cell reference	A2=5 → B5
=ADDRESS(2, 3)	Cell address return karta hai	Output = \$C\$2
=ROW(A5)	Row number	Output = 5
=COLUMN(B3)	Column number	Output = 2



2 Conditional & Logical Formulas

Formula	Description	Example
=IF(A2>70, "Pass", "Fail")	Simple condition	80 → "Pass"
=IF(AND(A2>60, B2>60), "Good", "Average")	Dono condition true	Math=70, Eng=75 → "Good"
=IF(OR(A2>60, B2>60), "Pass", "Fail")	Koi ek true	50,75 → "Pass"
=IFS(A2>90, "Excellent", A2>70, "Good", A2>50, "Average", TRUE, "Poor")	Multiple IF alternative	85 → "Good"

=SWITCH(A2, "A", "Excellent", "B", "Good", "C", "Average", "Poor")	Multiple choice IF	A → Excellent
=IFERROR(A2/B2, 0)	Error handle	10/0 → 0
=NOT(A2>50)	Opposite return	40 → TRUE
=AND(A2>10, B2<50)	Both must be TRUE	Check logic
=OR(A2>100, B2>100)	At least one TRUE	TRUE/FALS E
=XOR(A2>50, B2>50)	Only one true	Exclusive condition

3 Text Formulas

Formula	Description	Example
=CONCAT(A2, " ", B2)	Combine 2 cells	"Ankit Kumar"
=TEXTJOIN(" ", TRUE, A2:A5)	Join multiple text	"A, B, C"
=TRIM(A2)	Remove extra spaces	" Ankit " → "Ankit"
=CLEAN(A2)	Remove hidden chars	"Cleaned Text"
=SUBSTITUTE(A2, " ", "_")	Replace space with _	"Ankit_Kumar"
=LEFT(A2, 5)	Left 5 characters	"AnkitKumar" → "Ankit"
=RIGHT(A2, 3)	Right 3 characters	"Ankit" → "kit"
=MID(A2, 3, 4)	Middle characters	"AnkitKumar" → "kitK"
=LEN(A2)	Text length	"Ankit" → 5

=FIND("k", A2)	Position of letter	"Ankit" → 3
=SEARCH("Kumar", A2)	Find word	"Ankit Kumar" → 7
=REPT("*", 5)	Repeat text	*****
=UPPER(A2)	Convert to uppercase	"ankit" → "ANKIT"
=LOWER(A2)	Convert to lowercase	"ANKIT" → "ankit"
=PROPER(A2)	Each word capital	"ankit kumar" → "Ankit Kumar"

* July 17 **4 Date & Time Formulas**

Formula	Description	Example
=TODAY()	Current date	03-Nov-2025
=NOW()	Current date + time	03-Nov-2025 14:20
=DAY(A2)	Day number	3
=MONTH(A2)	Month number	11
=YEAR(A2)	Year	2025
=TEXT(A2, "mmmm"))	Month name	"November"
=NETWORKDAYS(A2 , B2)	Working days	7 days
=WORKDAY(A2, 5)	Add 5 working days	Future date
=DATEDIF(A2, B2, "d")	Days difference	9
=EOMONTH(A2, 0)	End of month date	30-Nov-2025
=HOUR(A2)	Hour extract	14
=MINUTE(A2)	Minute extract	20

 **5 Statistical / Math Formulas**

Formula	Description	Example
<code>=SUMIFS(B2:B10, A2:A10, "Data Analyst")</code>	Conditional sum	"Data Analyst" rows total
<code>=AVERAGEIFS(B2:B10, A2:A10, "India")</code>	Conditional average	"India" average
<code>=COUNTIFS(A2:A10, "Yes", B2:B10, ">50")</code>	Multiple conditions	Count Yes + >50
<code>=RANK.EQ(A2, \$A\$2:\$A\$10, 0)</code>	Rank assign	90 → Rank 1
<code>=PERCENTILE.INC(A2:A10, 0.9)</code>	90th percentile	Top 10%
<code>=STDEV.P(A2:A10)</code>	Standard deviation	Data spread
<code>=VAR.P(A2:A10)</code>	Variance	Value variation
<code>=CORREL(A2:A10, B2:B10)</code>	Correlation	+0.89
<code>=ROUND(A2, 2)</code>	Round decimal	12.345 → 12.35
<code>=MOD(A2, 2)</code>	Remainder	11 ÷ 2 → 1
<code>=ABS(A2)</code>	Absolute value	-25 → 25
<code>=POWER(A2, 3)</code>	Power	$2^3 = 8$
<code>=SQRT(A2)</code>	Square root	$\sqrt{25} = 5$
<code>=SUMPRODUCT(A2:A5, B2:B5)</code>	Multiply & add arrays	Total sales
<code>=LARGE(A2:A10, 2)</code>	2nd largest value	
<code>=SMALL(A2:A10, 1)</code>	Smallest value	



6 Dynamic Array Formulas (Excel 365 / 2021)

Formula	Description	Example
=UNIQUE(A2:A50)	Remove duplicates	Unique list
=SORT(A2:A50)	Sort ascending	A–Z
=SORTBY(A2:B10, B2:B10, -1)	Sort by column descending	High → Low
=FILTER(A2:C50, B2:B50="Delhi")	Filter with condition	Only Delhi rows
=SEQUENCE(10)	Number series	1–10
=RANDARRAY(5, 1, 1, 100, TRUE)	Random list	Random 5 numbers
=TRANSPOSE(A1:A3)	Rows ↔ Columns	Flip data
=CHOOSECOLS(A2:D10, 1, 3)	Pick selected columns	1st & 3rd
=WRAPROWS(A1:A6, 3)	Wrap 6 cells into 2 rows	



7 Financial Formulas

Formula	Description	Example
=PMT(10%/12, 12*5, -500000)	Loan EMI	₹10,624
=FV(10%/12, 12*5, -10000)	Future value	Investment growth
=NPV(10%, A2:A10)	Net Present Value	₹ profit
=IRR(A2:A10)	Internal Rate of Return	IRR %
=RATE(60, -10624, 500000)	Interest rate	10%
=CUMIPMT(10%/12, 60, 500000, 1 , 12, 0)	Cumulative interest	₹ amount

=CUMPRINC(10%/12, 60, 500000, Cumulative principal ₹ amount
1, 12, 0)



8 Data Validation / Cleaning Formulas

Formula	Description	Example
=ISNUMBER(A2)	Check number	TRUE
=ISTEXT(A2)	Check text	TRUE
=ISBLANK(A2)	Check empty	TRUE
=EXACT(A2, B2)	Exact match	TRUE/FALSE
=ERROR.TYPE(A2)	Identify error	#DIV/0!
=ISERROR(A2)	Check any error	TRUE
=NA()	Return #N/A	For testing
=REMOVE.DUPLICATES()	Remove duplicate rows	Feature
=TYPE(A2)	Return data type	Number=1, Text=2



9 Dashboard & Formatting Formulas

Formula	Description	Example
=TEXT(A2, "₹#,##0")	Currency format	₹10,000
=TEXT(A2, "0.00%")	Percentage format	0.25 → 25.00%
=CELL("address", A2)	Address of cell	\$A\$2
=INFO("directory")	Current directory	Path
=FORMULATEXT(A2)	Show formula text	Display formula

=HYPERLINK("https://linkedin.com", "L inkedIn")	Clickable link	Hyperlink
=IMAGE("URL")	Insert image	Show image
=SPARKLINE(A2:A10)	Inline mini chart	Line chart
=TEXTSPLIT(A2, ", ")	Split text	Separate by comma



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Power Formulas for Data Analysts

Formula	Description	Example
=GETPIVOTDATA("Sales", PivotTable!\$A\$3, "Region", "North")	Pivot set data extract	North ka Sales
=CUBEVALUE("ThisWorkbookDataModel", "[Measures].[Total Sales]")	Power Pivot measure	Data model
=LAMBDA(x, x*2)(5)	Custom formula	Output=10
=LET(x, A2*10, x+5)	Variable inside formula	Cleaner logic
=QUERY(A1:D10, "SELECT A,B WHERE C>10000")	SQL-style query (Google Sheets)	Filtered data
=IMPORTRANGE("sheet_url", "Sheet1!A1:B10")	Import other sheet data	Cross-sheet
=IMPORTHTML("URL", "table", 1)	Import webpage table	Website data
=GOOGLEFINANCE("NSE:TCS")	Real-time stock data	TCS price
=ARRAYFORMULA(A2:A10*B2:B10)	Apply formula to range	Auto-calulation