Excel Date and Time Functions - Notes

1. TODAY()

- Purpose: Returns the current date.
- Syntax:

=TODAY()

• Example:

If today is April 27, 2025, then =TODAY() \rightarrow 27-04-2025

Use Case: Show today's date automatically on a report.

2. NOW()

- Purpose: Returns current date and time.
- Syntax:

=NOW()

• Example:

 $=NOW() \rightarrow 27-04-2025 10:45 AM$

• Use Case: Timestamp when a document is opened.

3. DATE(year, month, day)

- Purpose: Creates a date from year, month, and day.
- Syntax:

=DATE(2025, 4, 27)

• Example:

Result → 27-04-2025

• Use Case: Combine separate year, month, and day columns into one date.

A (Year)	B (Month)	C (Day)
2025	4	27

4. TIME(hour, minute, second)

- Purpose: Creates a time from hour, minute, second.
- Syntax:

```
=TIME(10, 45, 0)
```

Example:

```
Result → 10:45 AM
```

Use Case: Combine separate time inputs into one field.

5. DAY(serial_number)

- Purpose: Extracts the day from a date.
- Syntax:

```
=DAY(DATE(2025,4,27))
```

Example:

```
Result → 27
```

• Use Case: Pull only the day value.

6. MONTH(serial_number)

- Purpose: Extracts the month from a date.
- Syntax:

```
=MONTH(TODAY())
```

• Example:

```
If today is April, result \rightarrow 4
```

Use Case: Identify month separately for reports.

7. YEAR(serial_number)

- Purpose: Extracts the year from a date.
- Syntax:

```
=YEAR(NOW())
```

• Example:

If today is April 2025, result → 2025

Use Case: Summarize year data.

8. HOUR(serial_number)

- Purpose: Extracts hour from time.
- Syntax:

```
=HOUR(NOW())
```

• Example:

Result → 10

• Use Case: Analyze work logs by hour.

9. MINUTE(serial_number)

- Purpose: Extracts minute from time.
- Syntax:

```
=MINUTE(NOW())
```

• Example:

Result → 45

Use Case: Tracking minute-accurate tasks.

10. SECOND(serial_number)

- Purpose: Extracts seconds from time.
- Syntax:

```
=SECOND(NOW())
```

• Example:

Result → 12

Use Case: Track seconds for precise operations.

11. WEEKDAY(serial_number, [return_type])

Purpose: Returns day of week (1 = Sunday by default).

Syntax:

=WEEKDAY(TODAY())

• Example:

If today is Sunday $\rightarrow 1$

• Use Case: Identify weekends/holidays.

Date	Formula	Result
27-04-2025	=WEEKDAY(A2)	1

12. WEEKNUM(serial_number, [return_type])

- Purpose: Returns week number in the year.
- Syntax:

=WEEKNUM(TODAY())

• Example:

Result \rightarrow 18 (for 27-Apr-2025)

• Use Case: Weekly report tracking.

13. EDATE(start_date, months)

- Purpose: Returns a date after a specified number of months.
- Syntax:

=EDATE(DATE(2025,4,27), 2)

• Example:

Result \rightarrow 27-06-2025

Use Case: Calculate warranty expiry dates.

14. EOMONTH(start_date, months)

- Purpose: Returns last day of month after months.
- Syntax:

=EOMONTH(TODAY(), 0)

Example:

Result → 30-04-2025

Use Case: Month-end calculations.

15. DATEDIF(start_date, end_date, unit) (Deprecated but useful!)

- Purpose: Calculates difference between two dates.
- Syntax:

```
=DATEDIF(DATE(2020,1,1), DATE(2025,4,27), "Y")
```

• Example:

Result → 5 (years)

Use Case: Calculate age, service years.

Start Date	End Date	Formula	Result
01-01-2020	27-04-2025	=DATEDIF(A2, B2, "Y")	5

Common Units

- "Y" → Years
- "M" → Months
- "D" → Days
- "MD" → Difference in days ignoring months and years
- "YM" → Difference in months ignoring years
- "YD" → Difference in days ignoring years

16. NETWORKDAYS(start_date, end_date, [holidays])

- Purpose: Counts working days between two dates.
- Syntax:

```
=NETWORKDAYS(DATE(2025,4,1), DATE(2025,4,30))
```

• Example:

Result → 22

Use Case: Calculate employee working days.

17. WORKDAY(start_date, days, [holidays])

• Purpose: Returns date after a number of workdays.

Syntax:

=WORKDAY(DATE(2025,4,1), 10)

Example:

Result → 14-04-2025

• Use Case: Delivery date calculations excluding weekends.

18. TEXT(date/time, format_text)

- Purpose: Format a date/time into a text string.
- Syntax:

=TEXT(TODAY(), "DD-MMM-YYYY")

• Example:

27-Apr-2025

• Use Case: Custom date formats.

Quick Practice Data Table:

A (Start Date)	B (End Date)
01-01-2022	27-04-2025

Try Formulas:

- =DATEDIF(A2, B2, "Y")
- =NETWORKDAYS(A2, B2)
- =WORKDAY(A2, 30)
- =EDATE(A2, 6)
- =EOMONTH(A2, 0)

Important Notes:

- DATEDIF is hidden from Excel Formula suggestions but works.
- TODAY() and NOW() are volatile functions (recalculate every time).
- Always format cells properly (Date, Time, General) to see correct outputs.