

Question 1 : Explain the difference between Absolute, Relative, and Mixed Cell Referencing in Excel with examples.

### =Relative Cell Referencing (A1)

The reference changes automatically when a formula is copied to another cell.

#### **Example:**

Formula in C1 = $A1+B1$

Copied to C2 = $A2+B2$

### Absolute Cell Referencing (\$A\$1)

The reference remains fixed, even when the formula is copied.

#### **Example:**

Formula = $A1*\$D\$1$

When copied,  $\$D\$1$  does not change.

### Mixed Cell Referencing (\$A1 or A\$1)

Either the row or the column is fixed, while the other changes.

#### **Example:**

= $\$A1*B1$  : Column A is fixed, row changes

= $A\$1*B1$  : Row 1 is fixed, column changes

Question 2 : What is a Macro in Excel? How does it help in automation?

=A **Macro in Excel** is a recorded set of actions or VBA code that automates repetitive task  
**Automation benefit:** It saves time, reduces errors, and performs tasks with a single click

Question 3 : What are Text Functions in Excel? Mention any five with examples.

**=LEFT()** – Extracts text from the left

*Example: =LEFT( "Excel" , 2 )*

**RIGHT()** – Extracts text from the right

*Example: =RIGHT( "Excel" , 2 )*

**MID()** – Extracts text from the middle

*Example: =MID( "Excel" , 2 , 3 )*

**LEN()** – Counts number of characters

*Example: =LEN( "Excel" )*

**UPPER()** – Converts text to uppercase

*Example: =UPPER( "excel" )*

Question 4 : What is the use of Scenario Manager in decision making?

**=Scenario Manager** in Excel is used to analyze **different possible outcomes** by changing input values.

It helps compare best-case, worst-case, and most-likely scenarios to make better, data-driven decisions.

Question 5 : Define the purpose of VLOOKUP and HLOOKUP. How are they different from XLOOKUP? Which among XLOOKUP and INDEX-MATCH is best while usage?

**=VLOOKUP:** Searches for a value vertically in the first column and returns a matching value from another column.

**HLOOKUP:** Searches horizontally in the first row and returns a value from another row.

**Difference from XLOOKUP:**

**XLOOKUP** works both vertically and horizontally, does not require the lookup column to be first, and is more flexible and accurate.

**Best to use:**

**XLOOKUP** is generally best due to simplicity and flexibility; **INDEX-MATCH** is preferred in older Excel versions or complex models.