

# **EXCEL & SPREADSHEETS**

## **Fundamental Operations**

1. What are the different data types in Excel? (Text, Number, Date, Boolean)
2. What is the difference between relative reference and absolute reference?
3. How do you use the \$ sign in cell references?
4. What is mixed cell reference? Give an example.
5. What are named ranges? Why are they useful?
6. How do you freeze panes in Excel? When is it useful?
7. What is the difference between COPY and CUT operations?
8. How do you use AutoFill? What patterns does it recognize?
9. What are Excel shortcuts you use most frequently?
10. How do you format cells based on data type?

## **Basic Functions**

11. What is the syntax of the SUM function? How do you sum a range?
12. What is the difference between AVERAGE, AVERAGEA, and AVERAGEIF?
13. How does the COUNT function work? COUNT vs COUNTA vs COUNTBLANK?
14. What is the MAX and MIN function? How do you find the largest/smallest value?
15. What is the CONCATENATE function? How is it different from the & operator?
16. How do you use the TEXT function to format numbers?
17. What is the LEN function? How do you count characters?
18. How do you use UPPER, LOWER, and PROPER functions?
19. What is the TRIM function? When do you use it?
20. How do you extract text using LEFT, RIGHT, and MID functions?

## **Logical Functions**

21. How does the IF function work? Give an example with nested IF.
22. What is the difference between AND, OR, and NOT functions?
23. How do you combine IF with AND/OR functions?
24. What is the IFS function? How is it better than nested IF?
25. What is the IFERROR function? Why is it important for error handling?
26. How does the IFNA function work?

27. What is the SWITCH function? When do you use it instead of multiple IFs?

### **Lookup Functions**

28. What is VLOOKUP? Explain the syntax with all parameters.

29. What are the limitations of VLOOKUP?

30. What is HLOOKUP? How is it different from VLOOKUP?

31. What is INDEX function? How does it work?

32. What is MATCH function? What are its match types (0, 1, -1)?

33. How do you combine INDEX and MATCH? Why is it better than VLOOKUP?

34. What is XLOOKUP? What are its advantages over VLOOKUP?

35. How do you perform a two-way lookup using INDEX MATCH?

36. What is the CHOOSE function? Give a practical example.

37. How do you handle errors in VLOOKUP?

### **Date and Time Functions**

38. What are the common date functions? (TODAY, NOW, DATE)

39. How do you extract year, month, and day from a date? (YEAR, MONTH, DAY)

40. What is the difference between TODAY() and NOW()?

41. How do you calculate the difference between two dates? (DATEDIF)

42. What is the NETWORKDAYS function? When do you use it?

43. How do you use EOMONTH to find the end of month?

44. What is the WEEKDAY function? How do you determine if a date is weekend?

45. How do you convert text to date? (DATEVALUE, TEXT function)

### **Array Formulas**

46. What are array formulas? How do you enter them? (Ctrl+Shift+Enter)

47. What is the difference between CSE array formulas and dynamic arrays?

48. What are dynamic array functions in Excel 365? (FILTER, SORT, UNIQUE)

49. How does the FILTER function work? Give an example.

50. What is the SORT and SORTBY function?

51. How does the UNIQUE function work?

52. What is the SEQUENCE function? How do you create number sequences?

53. What is the RANDARRAY function?

### **Statistical Functions**

54. What is SUMIF? How is it different from SUM?
55. How does SUMIFS work? How do you apply multiple criteria?
56. What is COUNTIF? Give an example with wildcards.
57. How does COUNTIFS work with multiple conditions?
58. What is AVERAGEIF and AVERAGEIFS?
59. What is the MEDIAN function? When is it more useful than AVERAGE?
60. What is the MODE function? What does it tell you?
61. How do you calculate standard deviation? (STDEV.S vs STDEV.P)
62. What is the PERCENTILE function? How do you find quartiles?

### **Advanced Analysis Functions**

63. What is the SUMPRODUCT function? Give a practical use case.
64. How do you use OFFSET function? What are its parameters?
65. What is INDIRECT function? When is it useful?
66. How does the RANK function work? RANK.EQ vs RANK.AVG?
67. What is the LARGE and SMALL function?
68. How do you remove duplicates using formulas?

### **Pivot Tables**

69. What is a Pivot Table? How do you create one?
70. What are the four areas of a Pivot Table? (Rows, Columns, Values, Filters)
71. How do you add calculated fields in Pivot Tables?
72. What is the difference between calculated field and calculated item?
73. How do you group dates in Pivot Tables? (by month, quarter, year)
74. How do you create a Pivot Chart?
75. What is slicing in Pivot Tables? How do you add slicers?
76. How do you refresh Pivot Table data?
77. What are Pivot Table styles and formatting options?

### **Data Tools**

78. What is conditional formatting? Give 3 practical examples.
79. How do you use data validation? What are validation types?
80. What is the difference between sorting and filtering?
81. How do you use advanced filters in Excel?

82. What is Text-to-Columns feature? When do you use it?
83. How do you remove duplicates in Excel?
84. What is Flash Fill? How does it work?
85. What is Power Query? How is it used for data transformation?
86. What is the difference between Excel Tables and normal ranges?
87. How do you create dropdown lists using data validation?