

Question 1: Pass/Fail Formula

Write a formula to check if the marks in cell B2 are greater than or equal to 40. If yes, return "Pass", otherwise "Fail".

Formula Used: =IF(D4>=40,"Pass","Fail")

Solution Screenshot:

Student Name	Marks	Answer
Riya	45	Pass
Siya	72	Pass
Raju	55	Pass
Rahul	80	Pass
Ram	30	Fail

Question 2: Bonus Calculation Formula

A company gives a bonus if sales are above 40,000 and attendance is greater than or equal to 90%. Write a formula to calculate whether the employee will get a bonus or not.

Formula Used: =IF(AND(B4>40000, C4>=90%), "Bonus", "No Bonus")

Solution Screenshot:

Employee	Sales	Attendance	Answer
Arjun	55000	95%	Bonus
Simran	65000	85%	No Bonus
Rohit	30000	90%	No Bonus
Anjali	25000	65%	No Bonus

Question 3: Nested IF Formula for Grades

Write a nested IF formula to assign grades based on marks in cell B2, where ≥ 90 = "A", ≥ 75 = "B", ≥ 50 = "C", otherwise "Fail".

Formula Used: =IF(C4>=90,"A",IF(C4>=75,"B",IF(C4>=50,"C","Fail")))

Solution Screenshot:

Student Name	Marks	Answer
Raj	85	B
Neha	96	A
Vivek	57	C
Rani	92	A
Sneha	75	B

Question 4: Find Department using LOOKUP

Find the Department of Employee ID=E103. Also explain which LOOKUP function is used and why?

Formula Used: =VLOOKUP("E103", A3:C7, 3, FALSE)

Solution Screenshot:

EmpID	Name	Department	Look up value	Department
E101	Raju	IT	E103	Finance
E102	Riya	HR		
E103	Roshni	Finance		
E104	Sejal	Sales		

Result: The Department for EmpID E103 is Finance

Function Used: VLOOKUP (Vertical Lookup).

Explanation: VLOOKUP is used because the data is organized in vertical columns. This function allows you to search for a specific value (the EmpID "E103") in the first column of a table and retrieve a corresponding value (the Department) from a different column (in this case, the 3rd column) in the same row.

Question 5: VLOOKUP for Commission Rate

A company has set the following commission structure for its sales team: If a salesperson achieves sales of ₹45,000, use the VLOOKUP function to determine the commission rate applicable.

Formula Used: =VLOOKUP(45000,B3:C7,2,TRUE)

Solution Screenshot:

Sales Amount	Commission Rate	Look up value	45000
0	5%	Commission Rate	10%
20000	10%		
50000	15%		
80000	20%		

Question 6: Check Leave Balance

The HR department maintains the following leave records of employees: Write an IF function to check whether an employee has Exceeded their allowed leave balance. If Leaves Taken > Allowed Leaves, display "Exceeded". Otherwise, display "OK".

Formula Used: =IF(C3>D3, "Exceeded", "OK")

Employee Name	Leaves Taken	Leaves Allowed	SOLUTION
Alex	10	12	OK
Bob	16	15	Exceeded
Anna	8	12	OK

Question 7: INDEX-MATCH Function for Salary

Find the salary of EmpID =E105 using INDEX-MATCH Function.

Formula Used: =INDEX(C3:C7, MATCH("E105", B3:B7, 0))

Solution Screenshot:

EmpID	Salary		
E104	55000	Salary Of E105	72000
E105	72000		
E106	62000		
E102	41000		

Answer: The INDEX-MATCH combination is used to look up a value in a column (E105) and return a value from another column (Salary) at the same position. This formula works even if the data is not sorted

Question 8: XLOOKUP Function for Department

Use the XLOOKUP function to find the Department of the employee with Emp ID \$=E303\$.

Formula Used: =XLOOKUP("E303", B3:B7, C3:C7)

Solution Screenshot:

EmpID	Department	Department of E303	IT
E101	HR		
E303	IT		
E106	Sales		
E301	Finance		