

Subject Name: Excel for Managers
Subject Code: 25MBA112

Max. Marks: 25
Time: 1 Hr. 30Min

Instructions

- Instructions 1: All questions are compulsory.
- Instructions 2: Use of simple calculator is allowed.

CO #	Cognitive Ability	Course Outcome
CO1	Remember	Recall and recognize fundamental Excel interface elements, basic functions, data types, and commonly used formulas.
CO2	Understand	Explain the purpose and application of various Excel features including formatting, sorting/filtering, conditional formatting, and basic data functions.
CO3	Apply	Apply Excel tools such as logical and lookup functions, pivot tables, charts, and what-if analysis to solve structured data problems.
CO4	Analyse	Analyze datasets using sorting, filtering, advanced functions.
CO5	Evaluate	Evaluate data models and dashboards by validating data, interpreting results from functions and pivot tables, and assessing effectiveness of visualization.
CO6	Create	Design and create dynamic, professional spreadsheets incorporating multiple Excel tools (functions, pivot tables, conditional formatting, charts, goal seek) to solve managerial problems or create dashboards.

Q1.	Attempt all the questions: a. Name the two types of data that Excel accepts as input apart from formulas. (2 M) b. Describe the process of "Protecting worksheet" & "Protecting Workbook" in excel. (3 M)	(5 Marks) CO1 CO2																								
Q2.	Solve any 1 out of 2 Questions: a. You are given the following dataset of product prices and sales. First Table-name is "Product" and is in sheet named "Product" <table><tr><td></td><td>A</td><td>B</td><td>C</td></tr><tr><td>1</td><td>Product ID</td><td>Product Name</td><td>Unit Price</td></tr><tr><td>2</td><td>P101</td><td>Laptop</td><td>55000</td></tr><tr><td>3</td><td>P102</td><td>Mouse</td><td>800</td></tr><tr><td>4</td><td>P103</td><td>Keyboard</td><td>1200</td></tr><tr><td>5</td><td>P104</td><td>Monitor</td><td>7500</td></tr></table> and Second Table name is "Sales" and is in the sheet "Sales".		A	B	C	1	Product ID	Product Name	Unit Price	2	P101	Laptop	55000	3	P102	Mouse	800	4	P103	Keyboard	1200	5	P104	Monitor	7500	(5 Marks) CO3
	A	B	C																							
1	Product ID	Product Name	Unit Price																							
2	P101	Laptop	55000																							
3	P102	Mouse	800																							
4	P103	Keyboard	1200																							
5	P104	Monitor	7500																							

	A	B	C
1	Sales ID	Product ID	Units Sold
2	S01	P101	5
3	S02	P102	20
4	S03	P104	8
5	S04	P103	10

Apply Vlookup functions to find the Unit Price for each Product ID from the “Product” table, and calculate Total Sales value for each product sold.

Total Sales = Units Sold × Unit Price

OR

b. Below is a list of monthly expenses of a family.

	A	B	C	D	E
1	Month	Food (₹)	Rent (₹)	Utilities (₹)	Total (₹)
2	Jan	5000	8000	1500	
3	Feb	5500	8000	1200	
4	Mar	6000	8200	1600	

Using Excel functions — SUM, AVERAGE, MIN, and MAX:

1. Calculate the total expense for each month.
2. Find the average, minimum, and maximum total expenses.
3. Identify which month had the highest total expense.

Answer Should be in Below Format

Function	Formula	Result
SUM		
AVERAGE		
MIN		
MAX		

Q3.

Solve any 1 out of 2 Questions:

(5 Marks)

CO4

a. A dataset in Range A1:C6 shows the following information about product sales:

	A	B	C
1	Product	Selling Price (₹)	Units Sold
2	P1	500	200
3	P2	700	150
4	P3	600	180
5	P4	800	120
6	P5	1000	90

The manager wants to study how changes in Selling Price affect Total Revenue. Analyze how you would use Scenario Manager in Excel to compare the total revenue under three different situations:

1. Current Price (as shown above)
2. Increased Price by 10%

3. Decreased Price by 10%

Write the steps conceptually, and then interpret what kind of insight such comparison provides for decision-making.
(Explain process and interpretation.)

OR

- b. Below is the data showing the performance of sales team. Sales Target is 1400 for all employees

	A	B	C	D
1	Name	Zone	Designation	Total Sales
2	Julia	East	Manager	1530
3	Mathew	West	Representative	1311
4	Vikas	South	Representative	1565
5	Shailesh	East	Manager	5000
6	Ram	West	Representative	1556
7	Amruta	North	Representative	2000

Analyze the data and

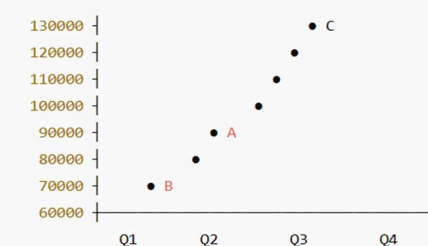
- Find which all employees achieved sales target using if function.
Write formula for one row.
- If we were to give an award to all representatives who have achieved sales target, Apply AND function and find out representatives who qualified for this award. Write formula for one row.
- Group East and west zone employees in "Team terrific" by using OR function. Write formula for one row.
- Give answer in following format:

	A	B	C	D	E	F	G
	Name	Zone	Designation	Total Sales	Target Achieved / Not Achieved	Award/ No Award	Team Terrific Yes/No
1							
2	Julia	East	Manager	1530			
3	Mathew	West	Representative	1311			
4	Vikas	South	Representative	1565			
5	Shailesh	East	Manager	5000			
6	Ram	West	Representative	1556			
7	Amruta	North	Representative	2000			

Q4. a. A manager has created the following sales summary using Excel charts: (5 Marks) CO5

	A	B	C	D	E
1	Product	Quarter 1 (₹)	Quarter 2 (₹)	Quarter 3 (₹)	Quarter 4 (₹)
2	A	80,000	85,000	90,000	95,000
3	B	70,000	75,000	73,000	78,000
4	C	1,00,000	1,05,000	1,10,000	1,20,000

Sales Trend (Line Chart)



Green conditional formatting is applied to cells above ₹1,00,000 in the data table.

	1. Evaluate whether the dashboard effectively communicates the sales trends. 2. Identify one strength and one limitation of this dashboard. 3. Suggest one improvement to make the dashboard more informative. 4. Conclude which product shows the best overall performance and justify your answer. OR b. You are provided with the following dataset showing sales made by four sales executives during the first quarter of 2024. Evaluate the data and answer below questions. <table><tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th></tr><tr><td>1</td><td>Date</td><td>Sales Executive</td><td>Region</td><td>Sales Amount (₹)</td><td></td></tr><tr><td>2</td><td>02-Jan-24</td><td>Ananya</td><td>East</td><td>45,000</td><td></td></tr><tr><td>3</td><td>06-Jan-24</td><td>Rahul</td><td>North</td><td>55,500</td><td></td></tr><tr><td>4</td><td>18-Jan-24</td><td>Priya</td><td>South</td><td>72,000</td><td></td></tr><tr><td>5</td><td>25-Jan-24</td><td>Karan</td><td>West</td><td>64,000</td><td></td></tr><tr><td>6</td><td>05-Feb-24</td><td>Ananya</td><td>East</td><td>52,500</td><td></td></tr><tr><td>7</td><td>14-Feb-24</td><td>Rahul</td><td>North</td><td>60,000</td><td></td></tr><tr><td>8</td><td>20-Feb-24</td><td>Priya</td><td>South</td><td>80,000</td><td></td></tr><tr><td>9</td><td>26-Feb-24</td><td>Karan</td><td>West</td><td>68,000</td><td></td></tr><tr><td>10</td><td>03-Mar-24</td><td>Ananya</td><td>East</td><td>49,000</td><td></td></tr><tr><td>11</td><td>11-Mar-24</td><td>Rahul</td><td>North</td><td>75,000</td><td></td></tr><tr><td>12</td><td>16-Mar-24</td><td>Priya</td><td>South</td><td>92,000</td><td></td></tr><tr><td>13</td><td>23-Mar-24</td><td>Karan</td><td>West</td><td>70,500</td><td></td></tr><tr><td>14</td><td></td><td></td><td></td><td></td><td></td></tr></table> 1. Create a column to find the month name for each sales using an Excel date function. (Hint: Use the TEXT() function.) 2. Evaluate using different Excel tools. In which month did the company record the highest total sales? 3. Write steps to use any Excel tool which shows sales executive who has the maximum growth from January to March. 4. Write steps to use any Excel tool which shows Region-wise Sales amount		A	B	C	D	E	1	Date	Sales Executive	Region	Sales Amount (₹)		2	02-Jan-24	Ananya	East	45,000		3	06-Jan-24	Rahul	North	55,500		4	18-Jan-24	Priya	South	72,000		5	25-Jan-24	Karan	West	64,000		6	05-Feb-24	Ananya	East	52,500		7	14-Feb-24	Rahul	North	60,000		8	20-Feb-24	Priya	South	80,000		9	26-Feb-24	Karan	West	68,000		10	03-Mar-24	Ananya	East	49,000		11	11-Mar-24	Rahul	North	75,000		12	16-Mar-24	Priya	South	92,000		13	23-Mar-24	Karan	West	70,500		14						
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Q5.	a. A company tracks monthly expenses under three categories — Marketing, Operations, and HR. (5 Marks) The data for the first three months is shown below: <table><tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>1</td><td>Month</td><td>Marketing (₹)</td><td>Operations (₹)</td><td>HR (₹)</td></tr><tr><td>2</td><td>January</td><td>40,000</td><td>50,000</td><td>30,000</td></tr><tr><td>3</td><td>February</td><td>45,000</td><td>48,000</td><td>32,000</td></tr><tr><td>4</td><td>March</td><td>50,000</td><td>55,000</td><td>35,000</td></tr><tr><td>5</td><td></td><td></td><td></td><td></td></tr></table> 1. Describe how you would create an Excel report that shows the monthly total expenses and overall department-wise totals. Mention any two Excel functions/ tools you would use while creating this report. 2. Explain how you would apply conditional formatting to highlight the highest expense in each month. Write steps for Conditional Formatting. 3. Write a short conclusion on how such a report helps management. OR b. You are given two datasets showing the sales performance of four employees for three products during Quarter 1 (Q1) and Quarter 2 (Q2).		A	B	C	D	1	Month	Marketing (₹)	Operations (₹)	HR (₹)	2	January	40,000	50,000	30,000	3	February	45,000	48,000	32,000	4	March	50,000	55,000	35,000	5					CO6																																																												
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	A	B	C	D
1	Table 1: Q1 Sales Data			
2	Employee	Product A	Product B	Product C
3	Rahul	25000	18000	20000
4	Meena	30000	15000	22000
5	Arjun	27000	29000	21000
6	Kavita	32000	27000	23000
7				
8	Table 2: Q2 Sales Data			
9	Employee	Product A	Product B	Product C
10	Rahul	28000	20000	25000
11	Meena	35000	17000	24000
12	Arjun	30000	21000	26000
13	Kavita	31000	18000	26000

Instructions:

1. Create report having Q1 and Q2 tables into a single summary table using Data Tools (Consolidate) in Excel using SUM.
2. Considering both the quarters which employee had highest sales in product A. Specify Excel tool to be used and write steps.
3. Interpret your results in 2–3 sentences.
