Spreadsheet Management

Question 01

ABC Group of companies is involved in selling four major product categories. Following are the revenue information of the company in 2021.

Product Category	Product	Sales Revenue (Rs.)			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
Furniture	Office Chair	21,000	25,000	17,000	30,000
	Office Table	900,000	60,000	750,000	120,000
	Dining Set	60,000	80,000	120,000	120,000
	Bed	50,000	110,000	120,000	140,000
	Cupboard	45,000	75,000	60,000	50,000
Stationery	Consumables	15,000	20,000	25,000	20,000
	Durables	20,000	15,000	150,000	25,000
	Adhesive	8,000	5,000	9,000	10,000
Food & Beverages	Breads	20,000	25,000	15,000	28,000
	Dairy Products	15,000	25,000	17,000	20,000
	Cookies	18,000	20,000	25,000	20,000
	Fruit Juice	15,000	25,000	17,000	22,000
	Energy Drinks	25,000	30,000	17,000	25,000
Electronic	Refrigerator	45,000	90,000	80,000	60,000
	Fan	17,000	20,000	25,000	28,000
	Television	100,000	150,000	50,000	150,000
	Desktop Computer	100,000	150,000	150,000	120,000

You should create the above table using MS Excel. The products should be in alphabetical order.

Now find the answers for the following questions using MS Excel.

a) Find the total sales revenue of the year for each product.
b) Find the total revenue of the year for each product category.
c) Find the maximum, minimum and average sales revenue of each product.
d) Find the average annual revenue of each product category.
e) How many numbers of products in each product category?
f) Following are the cost details of each product category.

    Furniture - Rs. 2,000,000
    Stationery - Rs. 270,000
    Food & Beverages - Rs. 350,000
    Electronic - Rs. 990,000

Find the profit of each product category.

g) Find the profit percentage of each product category (Gross Profit Percentage). Display the percentage as a whole number.

h) The company rates the product categories according to the Gross Profit Percentage.

Range of Gross Profit Percentage	Sale's Grade
30 – 100	Very Good
20 – 29	Good
5 – 19	Fair
0 – 4	Poor

Find the Sales' Grade of each product category according to above rating criteria.

i) Create a 3-dimensional column chart comparing sales data for all product categories for all the quarters. The chart should be clearly labeled with the chart title, two axis names and the legend.

j) Show the trend of sales revenue for the Furniture product category using a line chart. You should clearly label the line graph. (Hint: You can use the sales revenue of all quarters to find the trend).

Question 02

Following table shows the performance of six students in a class room for their term test in English, Mathematics, Science and Music respectively.

Name	English	Mathematics	Science	Music
Amal	70	64	75	81
Geetha	56	25	49	94
Nimal	32	85	78	85
Kamal	81	59	61	73
Ranil	67	73	56	68
Sunil	92	60	42	77

a) Take the total marks of each student in the column F.

b) Calculate the average marks of the student in column G.

c) Round up the average marks of the students into integers.

d) Calculate rank of each student in column I.

e) Insert two columns between E and F to enter the marks of optional subjects Commerce and Agriculture. Marks for Commerce subject of the students Amal, Nimal, Kamal and Sunil are 58, 67, 76,81 and for Agriculture, Geetha, Nimal and Sunil have scored 76,91,68 respectively.

    i) Enter the marks in newly added columns.

    ii) Calculate number of the subjects each student has been followed.

f) Insert a column to enter the last name of the students as follows. Generate full name of students by concatenating first name and last name.

First Name	Last Name	Full Name
Amal	Perera	Amal Perera
Geetha	Kumari	Geetha Kumari
Nimal	Hettiarachchi	Nimal Hettiarachchi
Kamal	Gunathilake	Kamal Gunathilake
Ranil	De Silva	Ranil De Silva
Sunil	Bandara	Sunil Bandara