

BIT 1103: COMPUTER APPLICATIONS **MICROSOFT EXCEL PRACTICAL EXERCISES** **PRACTICAL EXERCISE 1**

A Payroll consists of Basic Pay, Allowances, Gross Salary, Deductions and Net Salary. The Allowances are 23% of the Basic Pay while the Deductions are 12% of the Gross Salary.

In the given worksheet, indicate in each cell what will be inserted, that is – a value or a formula. In the case of a formula, write down the formula in the cell.

	A	B	C	D	E	F
1	Stationery Supplies Ltd					
2						
3	Name	Basic Pay	Allowances	Gross Salary	Deductions	Net Salary
4	Lewis					
5	Francis					
6	Edwin					
.						.
.						.
.						.
13	Totals					

PRACTICAL EXERCISE 2

	A	B	C	D	E	F	G	H	I
1	XYZ COMPANY SALES PERFORMANCE								
2									
3									
4	SALESPERSON	ANNUAL TARGET	QTR1	QTR2	QTR3	QTR4	TOTAL SALES	AVERAGE SALES	COMMISSION
5									
6	ALBERT	750	148	256	133	154	X		
7	MICHAEL	650	187	143	258	143	X		
8	CARL	800	233	200	216	152	X		
9	GEORGE	700	256	145	136	259	X		
10	LUCY	1,000	249	212	215	124	X		
11									
12	TOTAL	X	X	X	X	X	X		
13									
14	COMMISSION	6%							
15									

- Given the table above, write formulas or describe how you would calculate the Total Sales in column G and Row 12.
- How would you calculate the Average Sales? Write the formula as it should appear in Excel and show the method of duplicating it to the other cells.
- How would you calculate the Commission? Write the formula as it would appear in Excel and explain the method of duplicating it to the other cells.
- Explain how you can insert two rows above Row 10.
- What does this sign (#####) mean when seen in cell(s)? What should you do when you see this sign?
- How does one delete an entire row or column and all its cells?
- You are asked to compare QTR1 and QTR3 sales for all salespersons in the above table using a chart:

- (a). What range of cells do you need to select and how would you select it?
 (b). What type of graph would you use?
- (viii). How can you edit a chart once it is created, let's say, to change the series from columns to rows, to change the legend, etc?

PRACTICAL EXERCISE 3

Use the worksheet given to answer the questions that follow:

Expenses for the Month of January vs. Budget		
	Budget	Savings
Salaries and Wages	156675.00	
Rent	4300.00	
Electricity	1000.00	
Telephone	200.00	
Advertisements	20000.00	
Freight and clearing	15650.00	
Security	3800.00	

Questions

- (i). Insert a new column between Budget and Savings column.
 (ii). Enter the title 'Actual' in cell C3.
 (iii). Enter the following figures in the new column.

	Actual
Salaries and Wages	145200
Rent	4300
Electricity	1207
Telephone	142
Advertisements	18550
Freight and clearing	13400
Security	3800

- (iv). Calculate the savings in cells D4:D10.
 (v). Format the sheet title to Arial Black, size 14, and Bold.
 (vi). Save the file as **Audit 1**.
 (vii). Format the range B4:D10 to two decimal places.
 (viii). Adjust column C such that all the values are displayed.
 (ix). Add the title **Savings %** in cell E3 and calculate the savings as a percentage of the budget.
 (x). Format the range E4:E10 as a percentage.
 (xi). Enter the row title **Total** in cell A12 and obtain totals for Budget, Actual, and Savings columns.
 (xii). Copy the formula in E10 to E12.
 (xiii). Format the new heading to match the existing headings and Align the heading to **Right**.
 (xiv). Save and Close the worksheet.

PRACTICAL EXERCISE 4

Use the worksheet given below to answer the questions that follow:

Employee Details						
Emp No	Name	Category	Basic Pay	Allowances	Gross Pay	Tax Deductions
E8	Cornell	Assistant	4,600	300		
E9	John	Assistant	3,500	450		
E2	Francis	Supervisor	6,508	500		
E3	Edwin	Management	8,006	1,801		
E10	Carl	Assistant	4,200	100		
E4	Bernard	Management	7,917	1,775		
E5	George	Supervisor	5,500	850		
E1	Lewis	Management	8,291	2,500		
E6	Albert	Supervisor	5,700	760		
E7	Edward	Supervisor	7,151	1,545		
Tax Rate						
12%						

Questions

- Make all the column titles bold, and size 12. Center the title , across columns A1:H1 and make it size 16, and Bold.
- Calculate the gross pay in cell **F4**.
- Calculate the amount of tax deducted from each employee, given that the tax rate is 12% of the gross pay. Tax rate is found in cell A16 of the worksheet.
- Format the text orientation in the range **A4:G4** to 0 degrees.
- Adjust the column width such that all the headings are visible.
- In cell **H4**, enter the title **Net Pay** and calculate the Net pay for all employees.
- Format the range **G4:H13** to **zero** (0) decimal places.
- Format the title **Net Pay** to match the other titles.
- Set the range A1 to H16 as **Print Area**.
- Using the Names in column B, Basic Pay in column D, and Allowances in column E, insert a **Clustered Column Pie Chart** on the same sheet to show comparison of the salaries for the employees. The Chart Title should be **Employee Details**, the Y-axis should be **Employee Names** and the X-axis should be **Thousands (Kshs)**.
- Move the chart so that the top left corner is on cell A18.
- Change the Chart Title to **Employees' Salary Details**.
- Change the Chart Type to **Clustered bar with a 3-D visual effect**.
- Increase the Chart Title **Font size to 14**.
- Change the text direction for the title of the X-axis to 0 degrees, and for the Y-axis to -90 degrees.

- (xvi). Resize the chart such that the bottom left corner is on cell A55, while the bottom right corner is on cell I55 so that all the details are clearly visible.
- (xvii). Save the worksheet as **Salary Details (Reviewed Copy)**.

PRACTICAL EXERCISE 5

The following is a simple payroll:

	A	B	C	D	E	F	G	H	I
1	Name	Hours Worked	Hourly Rate	Basic Pay	Gross Pay	Tax Deductions	NSSF Contributions	Allowances	Net Pay
2	John	8	200						
3	Peter	12	450						
4	Sam	22	300						
5	Njogu	30	286						
6	Mary	16	220						
7	Sally	45	468						
8	Jane	15	150						
9	Tina	3	280						
10									
11									

Required:

Write formulae using cell names for the following expressions. State where the formula is placed.

- Basic Pay = Hours Worked * Hourly Rate.
- Allowances are allocated at 10% of the Basic Pay.
- Gross Pay = Basic Pay + Allowances.
- Tax Deduction is calculated at 20% of the Gross Pay.
- Net Pay = Gross Pay – Tax Deductions.

PRACTICAL EXERCISE 6

You have been asked to analyse the rainfall pattern of a city called Mooncity. The following data, which shows the average weekly and monthly rainfall, has been provided.

Table 1.

Weekly Rainfall of Mooncity in mm.

MON	TUE	WED	THUR	FRI	SAT	SUN
10	5	30	20	15	0	50

Table 2.

Monthly Rainfall of Mooncity in mm.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
30	25	55	100	60	40	35	60	35	25	20	10

- (a). Enter Table 1 and Table 2 into Microsoft Excel and Save as **Mooncity**

- (b). Using the most appropriate formulas and functions,
 - (i). Calculate the total rainfall for the week and the year respectively.
 - (ii). Find the lowest rainfall for the week and the year respectively.
 - (iii). Find the highest rainfall for the week and the year respectively.
 - (iv). Find the mean rainfall for the week and the year respectively.
- (c). Save the changes made to the worksheet.
- (d). Create a 3-D column chart for Table 1. The title for the graph should be **AVERAGE DAILY RAINFALL**. The title for the X-axis should be **DAY** while that of the Z-axis should be labeled as **RAINFALL (mm)**. The chart should be inserted as an object within the worksheet. Format the chart appropriately