

KENYA NATIONAL EXAMINATION COUNCIL KCSE, 2014

COMPUTER STUDIES PAPER 2 ANALYSIS

Osiligi House, Opposite KCB, Ground Floor
Off Magadi Road, Ongata Rongai | Tel: 0711 88 22 27
E-mail: infosnkenya@gmail.com | Website: www.schoolsnetkenya.com

3.9.3 Computer Studies Paper 2 (451/2)

This paper consists of **two questions** both of which the candidates are required to answer. However, question two challenged most of the candidates.

Question 2

The figure below shows an extract of a worksheet showing sales and expenses for Amani Company for the months of January to June. Use it to answer the questions that follow.

	A	B	C	D	E	F	G	H
1								
2	SALES AND EXPENSES							
3								
4		Jan	Feb	Mar	Apr	May	Jun	Total
5	Sales	150000	125000	180000	130000	98000	165000	
6	Expenses							
7	Rent	10000	10000	10000	10000	10000	10000	
8	Utilities	5000	3000	5000	8000	4000	5000	
9	Salaries	40000	40000	42000	40000	40000	40000	
10	Suppliers	30000		39000	50000		50000	
11	Consultants			9000		45000		
12								
13								
14								
15	Profit or loss							
16								
17	% tax on sales	15%						

- (a) Create the worksheet as it appears in the figure in a spreadsheet package and save it as **Incomestatement**. (9 marks)
- (b) Use a function that references only to cells to calculate:
- (i) Total sales from January to June. (1 mark)

- (ii) Total for rent expenses and apply the formula to obtain the total for other expenses. (2 marks)
- (iii) The profit or loss for each month. (2 marks)
- (c) Format the worksheet as follows:
- (i) Merge the cells from A₂ to H₂. (1 mark)
- (ii) Resize the title to fontsize 16 and apply bold. (2 marks)
- (iii) Apply a single line border to all the cells containing data. (1 mark)
- (iv) Align to the right all the column headings in the worksheet. (1 mark)
- (v) Apply a grey background colour to all column headings. (1 mark)
- (d) (i) Rename the current worksheet as **Profit**. (1 mark)
- (ii) Copy the content of the worksheet named Profit to a new worksheet and rename the new worksheet **Modified**. (1 mark)
- (e) The company is expected to remit 15% of their sales as sales tax to a revenue authority.
- (i) Insert a blank row below the sales row and label it as "Sales Tax". (1 mark)
- (ii) Compute the sales tax for January using absolute cell referencing to obtain the tax for the other months. (3 marks)
- (iii) Calculate profit or loss for each month after taxation. (2 marks)
- (f) (i) Insert a blank row below the profit or loss row and label it as "Comment". (1 mark)
- (ii) Use the "IF" function to display comments for the profit or loss as follows:
- | Profit or loss | Comment |
|---------------------------------------|----------------|
| More than 60,000 | Ok |
| More than 30,000 and less than 60,000 | Break even |
| Less than 30,000 | Check |
- (4 marks)
- (g) Create a bar chart to compare the sales and the total expenses for each of the six months and:
- (i) Insert the chart title: "Sales Expenses Analysis";

- (ii) Insert the x-axis label: "Month";
- (iii) Insert the y-axis label: "Amount";
- (iv) Insert data labels for the sales series;
- (v) Save it as a new worksheet named **Comparison**. (11 marks)
- (h) Set page orientation of the worksheet named Modified to landscape. (1 mark)
- (i) Print the following worksheets:
 - (i) Profit;
 - (ii) Modified;
 - (iii) Modified showing the formula;
 - (iv) Comparison. (5 marks)

Candidates were required to:

- a) Create a worksheet as it appears;
- b) Enter data into a worksheet and save the work book;
- c) Calculate values using formulars ;
- d) Apply different formatting features to the worksheet;
- e) Rename the worksheet;
- f) Copy the worksheet into a new worksheet;
- g) Insert and label blank rows;
- h) Use absolute cell referencing;
- i) Calculate values based on the other values on a cell;
- j) Use nested "IF" function to compute values;
- k) Select data to plot a bar chart;
- l) Change page orientation;
- m) Display and print formulars;

Weaknesses

Inability to:

- a) To enter data into the worksheet accurately;
- b) Compute values using formulars.Learners used calculators to compute values;
- c) Demonstrate the ability to format the worksheet ;
- d) Rename the worksheet;
- e) To copy a worksheet onto another worksheet and rename it;
- f) Insert and label a row in the appropriate location;
- g) To use absolute cell referencing;
- h) Understand the IF syntax;
- i) Select data and insert /plot the correct type of chart;
- j) Change the page orientation;
- k) Display formulars in a worksheet;

QUESTION	MARKING POINTS	MARKS
2. (a)	- Saving "Incomestatement"	1
	- 7 columns @ 1 mark each	7
	- Header text (exists and complete)	1
	- All other text	1
		9
(b)	(i) Total sales formula = sum (B5:G5)	1
	(ii) Total rent (Jan - June) = sum (B8:G8)	1
	Copying formula to other cells	1
	(iii) Profit or loss formula = B5 - Sum (B8:B12)	2
		5
(c)	(i) Merging cells A2 - H2	1
	(ii) Title font 16	1
	Bold	1
	(iii) Single line border	1
	(iv) Right aligning months labels	1
	(v) Applying grey background	1
		6
(d)	(i) Renaming sheet to 'Profit'	1
	(ii) Copying worksheet	$\frac{1}{2}$
	Renaming as Modified	$\frac{1}{2}$
		2
(e)	(i) Inserting a blank row and naming	1
	(ii) Absolute formula = B4 * \$B17	2
	(iii) Profit or loss formula = B5 - Sum (B6:B12)	2
	Copying to other cells	1
		6
(f)	(i) Inserting blank row and naming	1
	(ii) = IF((B15 > 60,000), "OK", IF(B15 >=30,000 "Break even", check"))	
	Correct function	1
	First selection condition	$\frac{1}{2}$
	Correct output	$\frac{1}{2}$
	Last selection condition	$\frac{1}{2}$
	Correct output	$\frac{1}{2}$
	Copying to other cells	1
		5

QUESTION	MARKING POINTS	MARKS
(g)	Choosing correct chart type (Bar)	1
	- Summing expenses	1
	- Choosing correct series	
	- Month	1
	- Sales	1
	- Total expenses	1
	- Chart title	1
	- Labels	
	- X - axis - Month	1
	- Y - axis - Amount	1
	- Moving chart to new worksheet	1
	- Renaming worksheet - Comparison	1
	- Data labels	1
		11
(h)	Changing orientation - Landscape	1
		1
(i)	(i) Profit printing	1
	(ii) Modified printing	1
	(iii) Modified with formulas printing	2
	(iv) Comparison printing	1
		5

Advice to teachers

Teachers should expose the learners to more practice in the concepts learned in class by giving them many exercises testing the different concepts taught in class. They should also put emphasis on the most difficult concepts. They also need to employ hands on activities when teaching almost all the content in the syllabus. Teachers will need to encourage the learners to practice these concepts during their own time.