

HIGHER EDUCATION PROGRAMMES

Academic Year 2023:	July - December
Formative Assessment 2:	Computer Literacy Advanced (HCLT108-1)
NQF Level, Credits:	5, 10
Weighting:	25%
Assessment Type:	Practical Assignment
Educator:	I. Musakwa
Examiner:	I. Musakwa
Due Date:	20 October 2023
Total:	50 Marks

Instructions:

- This paper consists of four (4) questions.
- It is based on Units 6 - 8 of your Study Guide.
- All questions are compulsory.
- Submit an Excel spreadsheet and a pdf with your answers to all the questions.

Learning Outcomes

- Customise a date format
- Use data validation
- Use logical functions (IF)
- Become familiar with pivot charts
- Utilise Goal Seek, Solver, Scenario

Question 1**[10]**

You are an intern in a retail store's laptop and tablet sales department. The sales manager has complained of incorrect data recordings. The date data are recorded in different formats with poorly documented sales figures. It is difficult to read the recorded sales figures with no currency symbol. You used your Excel skills to enforce data validation in the spreadsheet to prevent such challenges in the future. Below is the table containing the recorded sales. Answer the questions below.

Date of purchase	Product name	Unit cost in Rands	Quantities sold
2022/09/08	Galaxy Book Odyssey	85000	3
2022/09/16	Galaxy Book 2	49000	4
2022/10/17	Galaxy Book 2 Pro	65000	2
2022/10/21	Galaxy Book 3	72000	5
2022/11/12	Galaxy Book3 Pro	80000	7
2022/11/22	55" Odyssey Ark	30000	3
2022/11/24	Galaxy Tab S8	6000	6
2022/11/26	Galaxy Tab A7	4000	7

Required:

- 1.1 Create a sales spreadsheet the company can use to record the sales in the correct currency values. (2 marks)
- 1.2 Calculate the total sales recorded. (2 marks)
- 1.3 Add data validation to restrict date entries and input message to the Date column to notify users to enter dates only between 2022/01/01 and 2022/12/31. (2 marks)
- 1.4 Add an alert message to the date column that notifies the user that the column only accepts dates if a text is entered. (2 marks)
- 1.5 Restrict the total sales column to accept currency without decimals and add a message that reads, "Only enter currency values without decimals." (2 marks)

Question 2**[13]**

Cape Electronics sells office furniture with five sales representatives working in their wholesale branch. Varying commission percentages are paid based on product sales and commission categories. No commission is paid for monthly product sales below R200 000. The December 2022 product sales for Tim, one of the sales representatives, are given in Table 1, and commission percentages are shown in Table 2 below. Answer the following questions.

Table 1

Product	Quantities Sold	Unit Cost in Rands	Commission Category
Printers	15	85000	A
Desktop computers	40	9000	C
Laptops	120	8000	B
Smartphones	107	6500	C
USB cables	520	160	A
Digital tablets	49	2500	B
Hard drives	180	1600	B
Digital mouse	290	180	A

Table 2

Commission Category	Commission %
A	15%
B	13%
C	11%

Required:

2.1 Create a spreadsheet for the provided data. (2 marks)

2.2 Calculate Tim's total sales. (2 marks)

2.3 Use the **VLOOKUP** function to add the commission percentage to the created table in the spreadsheet. *Add the VLOOKUP function used as your answer.* (3 marks)

2.4 Calculate the commission from each product's total sales, and where the sale is below R200 000, add the message "No commission." Add a screenshot of your table in Excel showing the formula in the formula bar. (3 marks)

2.5 Calculate the total commission paid to Tim. (3 marks)

Question 3

[18]

You have been learning to use pivot tables for summarising and analysing data in one of this module's study units. You found the topic exciting and have come across the attached Walmart stores data. Create pivot charts and graphs to show how Walmart performs in its operating regions.

Note: The file attachment is available on Col Campus under the Assignments tab. Click on Formative Assessment 2 (FA2); the file is attached with the assessment question paper.

Required:

- 3.1 Create a pivot table to show the regional shipping costs. (3 marks)
- 3.2 Create a pivot table to show the total regional sales. (3 marks)
- 3.3 Create a pivot table to show the total sales per region and customer segment. (3 marks)
- 3.4 Create a pivot table showing each region's total order priority count. (3 marks)
- 3.5 Create a pivot chart to show the total regional sales, shipping cost, and order of priority per customer segment (3 marks)
- 3.6 Create a pivot chart showing the shipping mode count used in each region. (3 marks)

Question 4**(9 marks)**

You opened a baby toy shop during the intense COVID-19 movement restriction period. You have been facing several challenges as the business is not growing. Answer the following questions.

- 4.1 You have acquired a loan to boost your toy business. You create toy combos for children below five (5) years old. The combo is composed of three (3) different toys. You cannot make any investment from your daily sales after paying the monthly loan repayment. After making some calculations, you determine you will need to make R18 000 a day to save money for investment. The unit cost of a combo is R40, and you are selling 300 combos a day. Use Goal Seek to determine how many combos you must sell to make R18 000 daily. (3 marks)
- 4.2 You decide to include the cost of making the combo as you purchase from different suppliers. The packaging costs vary between R25 and R15. Determine how many units you need to sell daily to still get a profit of R18 000 at each varying packaging cost when selling the combo at R55 each. Use the Solver function. (6 marks)

The below only applies to students enrolled in the Bachelor of Accounting program.

Aligns to SAICA competencies:

W7	Accounting information systems
b)	Use presentation software in an accounting/ business context.
c)	Use spreadsheet software in an accounting/ business context (e.g., working papers; knowledge of effective utilisation (including shortcut keys, macros, pivot tables, and other advanced Excel functions).
d)	Use accounting software to create and view financial transactions.

W3	Data Analytics
a)	Identify the practical challenges of data analytics (e.g., data volume and quality, privacy, regulatory, and ethical issues).
b)	Use processes of inspection, extraction, transformation, loading (ETL), and modelling data (as discussed below) (see (i) to (iv)) to discover information able to enhance problem-solving and decision-making.
c)	Use data analytic software tools to analyse data (e.g., ACL, IDEA, advanced Excel™ functions)
f)	<p>Data inspection:</p> <ul style="list-style-type: none"> (i) Describe the elements of a specific business process by documenting the workflow (ii) Define the problem to be solved and determine clear measurement priorities (iii) Identify data sources appropriate to solving the defined problem (iv) Evaluate the input controls responsible for ensuring that the data captured and used is valid, accurate, and complete (v) Explain the nature, distribution, and limitations of the identified data and the population to be tested.
h)	<p>Data transformation:</p> <ul style="list-style-type: none"> (i) Perform data normalisation (clean-up) (e.g. standardisation of fields and records, removal of duplicates, verification of anomalies, sorting of data) (ii) Identify anomalies in the data by applying professional skepticism
i)	<p>Data modelling</p> <ul style="list-style-type: none"> (i) Examine the key fields using descriptive statistics to determine their characteristics and statistical parameters.

