Unit 4: Electronic Spreadsheet

1. The intersection of a row and column is called:

A) Worksheet
B) Cell
C) Workbook
D) Table

2. Which symbol is used to start a formula in Calc?

A) +
B) =
C) *
D) #

3. A collection of worksheets is called a:

A) Cell
B) Workbook
C) Range
D) Chart

4. Which function is used to add numbers?

A) COUNT()
B) SUM()
C) MAX()
D) MIN()

5. Which function is used to calculate the average?

A) SUM()
B) AVERAGE()
C) COUNT()
D) MAX()

6. Which symbol is used for absolute cell referencing?

A) #
B) @
C) $
D) &

7. Which is an example of an absolute cell reference?

A) A1
B) A1
C) A$1
D) $A1

8. Which is an example of a relative cell reference?

A) A1
B) A$1
C) A1
D) $A1

9. Which feature automatically fills a series of values?

A) AutoFill
B) AutoCorrect
C) AutoSave
D) Sort

10. Which shortcut opens the Format Cells dialog box?

A) Ctrl + 1
B) Ctrl + 2
C) Ctrl + 3
D) Ctrl + 4

11. Which function counts cells containing numbers?

A) SUM()
B) AVERAGE()
C) COUNT()
D) MAX()

12. Which chart is best for showing parts of a whole?

A) Line Chart
B) Bar Chart
C) Pie Chart
D) Column Chart

13. Which chart is commonly used to show trends over time?

A) Pie Chart
B) Line Chart
C) Bar Chart
D) Scatter Chart

14. Which menu is used to insert a chart in Calc?

A) File
B) Edit
C) Insert
D) Tools

15. Which of the following is a mixed cell reference?

A) A1 B) A1

C) A$1 D) A1:B5

Short Questions

Q1. What is an electronic spreadsheet?

Answer: An electronic spreadsheet is a software application used to store, organise, calculate and analyse data in rows and columns. Example: LibreOffice Calc.

Q2. What is the difference between a workbook and a worksheet?

Answer:

- **Workbook:** A spreadsheet file containing one or more worksheets.
- **Worksheet:** A single sheet consisting of rows and columns.

Q3. Write the steps to save a workbook in LibreOffice Calc.

Answer:

1. Click File → Save or press Ctrl + S.
2. Enter the file name, choose a location and click Save.

Q4. What is a function in LibreOffice Calc?

Answer: A function is a predefined formula used to perform calculations quickly and easily. Examples: `SUM()`, `AVERAGE()`, `MAX()`.

Q5. What is the difference between a formula and a function?

Answer:

- Formula: An expression created by the user, such as `=A1+B1`.
- Function: A predefined formula, such as `=SUM(A1:A5)`.

Q6. What is AutoFill in LibreOffice Calc?

Answer: AutoFill is a feature used to automatically fill cells with a series of numbers, dates or other data by dragging the fill handle.

Q7. Write the uses of SUM() and AVERAGE() functions.

Answer:

- **SUM():** Adds numbers. Example: `=SUM(A1:A5)`.
- **AVERAGE():** Calculates the average. Example: `=AVERAGE(A1:A5)`.

Q8. What are MAX() and MIN() functions?

Answer:

- MAX(): Finds the largest value in a range.
- MIN(): Finds the smallest value in a range.

Q9. What is formatting in LibreOffice Calc?

Answer: Formatting means changing the appearance of data in a spreadsheet to make it attractive and easy to read.
Examples: Bold, Italic, Font Colour and Alignment.

Q10. Write any four text formatting options in Calc.

Answer:

1. Bold
2. Italic
3. Underline

4. Font Colour

Q11. What is a chart in LibreOffice Calc?

Answer: A chart is a graphical representation of spreadsheet data. It helps users understand and compare information easily.

Q12. Write any four types of charts in LibreOffice Calc.

Answer:

1. Bar Chart
2. Pie Chart
3. Line Chart
4. Column Chart

Q13. What is the difference between a pie chart and a line chart?

Answer:

- Pie Chart: Shows the different parts of a whole.
- Line Chart: Shows changes or trends in data over time.

Q14. Write any three differences between a workbook and a worksheet.

Workbook	Worksheet
It is a spreadsheet file.	It is a single sheet.
It contains one or more worksheets.	It contains rows and columns.
It is saved as a file, such as `.ods`.	It is stored inside a workbook.

Q15. Write the steps to create a chart in LibreOffice Calc.

Answer:

1. Select the data range.
2. Click Insert → Chart.
3. Choose a chart type, set the required options and click Finish.

Q16. Write any three advantages of electronic spreadsheets.

Answer:

1. They perform calculations quickly and accurately.
2. They make storing and organising data easy.
3. They help analyse data using charts and functions.

Long Questions

Q1. Explain the five main features of LibreOffice Calc.

Answer:

1. **Data Storage:** Stores data in rows and columns.
2. **Calculations:** Performs calculations using formulas.
3. **Functions:** Provides predefined functions like SUM() and AVERAGE().
4. **Formatting:** Changes the appearance of cells and data.
5. **Charts:** Represents data graphically.

Q2. Explain any five functions used in LibreOffice Calc with examples. (5 Marks)

Answer:

Function	Use	Example
SUM()	Adds numbers	`=SUM(A1:A5)`
AVERAGE()	Calculates average	`=AVERAGE(A1:A5)`
MAX()	Finds largest value	`=MAX(A1:A5)`
MIN()	Finds smallest value	`=MIN(A1:A5)`

COUNT()	Counts numeric cells	`=COUNT(A1:A5)`

Q3. Explain the steps to create and save a workbook in LibreOffice Calc. (5 Marks)

Answer:

1. Open LibreOffice Calc.
2. Click File → New → Spreadsheet or press Ctrl + N.
3. Enter the required data into cells.
4. Click File → Save or press Ctrl + S.
5. Choose the location, enter the file name and click Save.

Q4. Explain five types of charts used in LibreOffice Calc. (5 Marks)

Answer:

1. **Bar Chart:** Compares values using horizontal bars.
2. **Column Chart:** Compares values using vertical bars.
3. **Pie Chart:** Displays parts of a whole.
4. **Line Chart:** Shows changes over time.
5. **Area Chart:** Shows trends with filled areas under lines.

Q5. Explain the five main components of a chart. Answer:

1. **Chart Title:** Displays the name of the chart.
2. **X-Axis:** Usually represents categories.
3. **Y-Axis:** Usually represents numerical values.
4. **Legend:** Identifies different data series.
5. **Data Series:** Represents the values shown in the chart.