**TOPIC 9: ELECTRONIC SPREAD SHEETS**

**Describe the term spread sheet software.**

*Spread sheet software is used to organize data in rows and columns and performs calculation on the data.*

**What is Microsoft Excel?**

*This is a full-featured spreadsheet program that allows you to organize data, complete calculations, make decisions, graph data, and develop professional looking reports.*

**Briefly write short notes on the following words in spread sheet.**

* ***The worksheet is*** *a grid of columns (indicated by letters) and rows (indicated by numbers).*
* ***A workbook****- is a collection of worksheets***.**
* *The letters and numbers of the columns and rows (called labels) are displayed in gray buttons across the top and left side of the worksheet.*
* **A row-** *is the horizontal arrangement of cells from the left to the right of the worksheet.*
* ***A column*** *–is the vertical arrangement of cells from top to bottom***.**
* ***A cell*** *is an intersection of a column and a row***.**

**Describe the steps one would follow to open a Microsoft Excel program.**

1. *Start button, All Programs, Microsoft office, Ms Excel.*
2. *Microsoft Excel (using a short cut on the desktop).*
3. *Start, run, type excel, ok.*

**List the examples of popular spreadsheet software programs**

* *Microsoft Office Excel*
* *Lotus 1-2-3*
* *Lotus Symphony*
* *OpenOffice*
* *VisiCalc*
* *OpenOffice.*
* *Ability Office*
* *Apple works*
* *EasyOffice*
* *WordPerfect Office Quattro Pro*
* *Framework*
* *Kinggsoft Office*
* *Lotus SmartSuite Lotus 123*
* *MarinerPak Mariner Calc*
* *Star office*
* *PlanMaker*

**Briefly explain the following as used in spreadsheets**

***Labels*** *are text that identify the data and help organize the worksheet.*

***Values*** *are numbers to be used for calculations.*

***Relative referencing****-This changes when a formula is copied to another cell.*

*Absolute referencing-The values/formulae remain constant no matter where they are copied.* **Mention advantages of using an electronic spread sheet program over a manually generated spread sheet.**

* *It has a bigger workspace compared to manual spread sheets.*
* *It enables for auto update whenever data is entered and corrections made.*
* *It has provides the ability to work with in depth analysis through use of charts and multiple colours.*
* *Produces accurate results since it uses embedded formulae that simplify work.*
* *Enables users to work on the same worksheet from remote computers.*
* *Work produced is clean and pleasant to look at.*
* *It requires a small space to store an electronic spread sheet.*
* *Information on charts can be updated automatically it is entered and modified.*

**Give the disadvantages of using spread sheet software**

* *They are susceptible to trivial human errors.*
* *Data accuracy is difficult*
* *Consumes a lot of time in validating and tracking data*
* *It can be extremely challenging to spot and correct errors especially with larger volumes of data.*
* *Keeping your spread sheet updated is also a hassle*
* *Limited user access*
* *It is ugly and boring*

1. **(a). Write any two ways you can express =MAX(B4:B20)** (02 marks)

*=MAXA(B4:B20)*

*=LARGE(B4:B20,1)*

**(b). Describe how a shop keeper can use a spreadsheet program.** (03 marks)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **A** | **B** | **C** |
| 1 | Item | Quantity | Unit price |
| 2 | Sugar | 20 | 3,500 |
| 3 | Salt | 36 | 500 |
| 4 | Soda | 65 | 800 |
| 5 | Rwenzori | 98 | 2,000 |
| 6 | Yoghurt | 56 | 3,000 |
| 7 | Toilet paper | 23 | 1,000 |

***Note****: Accept any description in statement form*

1. **(a). Briefly, explain when the following functions can be used:**

**(i). IF.**  (01 mark)

*The***IF** function*in*Excel*returns one value*if*a condition is true and another value*if it's false*.*

**(ii). COUNTIF** (01 mark)

*The***COUNTIF** *function in Excel counts the number of cells that meet criteria you specify.*

**(b) How many cells are in the range** **B10:G14**? (01 mark)

*30 cells*

**(c). State any two qualities of a good graph.** (02 marks)

* *It should have a good descriptive title.*
* *Should have right data selection.*
* *Should be the right chart type.*
* **18. (a). Give the difference between a workbook and a worksheet. (01 mark)**
* *A work book is a collection of work sheet in a spreadsheet application program, while;*
* *a worksheet is a single work space in a spreadsheet.*
* **(b). State any two data types stored in a spread sheet**
*  *Labels.*
*  *Numbers.*
*  *Formulae.*