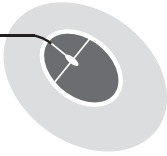# 3 Creating Charts in MS Excel 2013

LEARNING OUTCOMES

After the lesson, students will be able to:

» Define charts in MS Excel.

» List the types of charts in Excel.

» Label the components of charts.

» Create a chart.

» Choose a recommended chart.

» Move and resize a chart.

» Choose and change the layout of a chart.

» Add title to a chart.

» Insert SmartArt in a chart.

WARM UP

Can you think of some examples of data that can be best represented on a chart?

Ans. Marks of students in a class test, number of boys and girls in a class, sales of a company in a particular month, year, etc. Students can discuss and give more examples with help of the teacher, if required.

CHAPTER NOTES

» Data can be represented in a pictorial format using charts.

» Microsoft Excel has various charts which help you to represent data in a pictorial format.

- » There are over 12 types of charts available in Excel along with their subtypes.
- » It is easy to compare numbers in a chart and make instant decisions.
- » Charts help us analyse and evaluate the worksheets.
- » Charts also provide an attractive and appealing way to represent data.
- » Excel has many options like pie chart, bar chart, etc., which are available in the Insert tab.
- » Data series is also known as the foundation of a chart. In the sheet, it is the content of a group of related cells.
- » Data object is a variety of elements of which the charts are made of.
- » You can make various changes to a chart in Excel from formatting the text to typing, which collectively come under customisation.
- » Charts are easy to understand.
- » A chart is an effective way of comparing data.
- » Column Charts: The data in these charts is represented in the form of vertical bars.
- » Bar Charts: These charts are represented in a tabular format as well as in the form of columns.
- » Line Charts: These are used to display continuous data over any time.
- » Area Charts: Used for showing the magnitude of change over time.
- » Pie Charts: Data in a pie chart is represented in form of a pie.
- » Doughnut Charts: These charts consist of more than one data series, each represented by a ring.
- » Scatter Charts: These charts are similar to the line chart, the only difference being that instead of connecting lines, the scatter chart uses a scribble line to display data.
- » Radar Charts: The data in a radar chart is placed in the form of irregular concentric circles.
- » 3D Surface Charts: The data in these charts is represented in three-dimensional form.
- » Stock Charts: These charts are generally used for tracking stock market activity.

- » X Axis: This is the horizontal axis of the chart and is also known as category axis.
- » Y Axis: This is the vertical axis and is known as value axis.
- » Data series: The group of data from which a chart is derived is known as data series.
- » Chart Area: It is the area where the components of a chart are enclosed.
- » Plot Area: This is the area where the chart is plotted.
- » Chart Title: The chart title is mentioned at the top of the chart in text form and tells us what the chart is about.
- » Axes Titles: These are the titles given to the two axes of a chart.
- » Gridlines: The horizontal and vertical lines on the plot area are defined as gridlines.
- » Legend: Mentioned to the right of a chart, the legend denotes each data series with a unique colour.
- » Data Label: This text label is used to provide additional information on the data points.
- » It is possible to create a recommended chart in Excel by selecting one of the chart configurations suggested by the software.
- » Excel studies your data and provides the option which will suit the data representation, thus saving your time.

DEMONSTRATION

- » Create a chart
- » Choose a recommended chart
- » Move and resize a chart
- » Choose and change the layout of a chart
- » Add title to a chart
- » Insert SmartArt in a chart

LAB ACTIVITIES

The table below shows the sales figures of a certain company in the years 2014, 2015 and 2016, achieved by certain salespersons whose IDs have been given:

SALES ANALYSIS

SALESPERSON ID	2014	2015	2016
321	23,110	24460	25220
322	22340	23450	24650
323	24630	25780	26580
324	26580	27640	28430

Study the table and do the following:

1. Show the sales for the three years by creating a chart.
2. Show the sales for the three years by creating a column chart.
3. Show the performance of salesperson 323 for the three years by creating a pie chart.

ASSESSMENT

Teacher can assess students by quizzing them on different aspects of the charts available in Excel.

SUGGESTED CLASS ACTIVITIES

Find six types of chart found in Excel from the following grid:

Q	R	Z	O	Y	U	B	F	D	D	D
C	O	M	B	I	N	A	T	I	O	N
J	C	Y	U	T	I	R	E	Z	Z	Z
L	O	R	B	N	O	A	L	S	Z	Y
I	R	A	B	R	C	O	L	U	M	N
N	D	A	L	A	P	A	D	Q	Q	Q
E	Z	Y	E	T	P	I	E	O	O	O