

(Learning Time :-3 hours & 20 minutes)

# **Data representation and Interpretation**

27.3 Interpreting a collection of numerical data.

- A single value that is used to give an idea regarding a collection of data, as in the above examples is called a representative value.
- Mode, Median, Mean and the Range are some of the representative values.

# Mode

- In a collection of data, some of the values could be identical. The value which occurs most often is called the mode of that collection of data.
- A collection of data may have more than two modes. Such a distribution of data is known as a bimodal distribution.

# Median

• The 'number of data in a collection' is the total number of data in that collection.

- If the number of values in a collection of data is an odd number, then the value in the center, when the values are arranged in ascending order, is the median of the collection of data.
- If there is an even number of data, the median is half the sum of the values of the two data in the center, when the data are arranged in ascending order.

### Mean

• The average value of a collection of data is considered as its mean. The mean of a collection of data is the value that is obtained when the sum of all the values of the collection of data is divided by the number of values.

### Range

- The average value of a collection of data is considered as its mean. The mean of a collection of data is the value that is obtained when the sum of all the values of the collection of data is divided by the number of values.
- Complete the exercise 27.3 by studying the pages 131 137.