

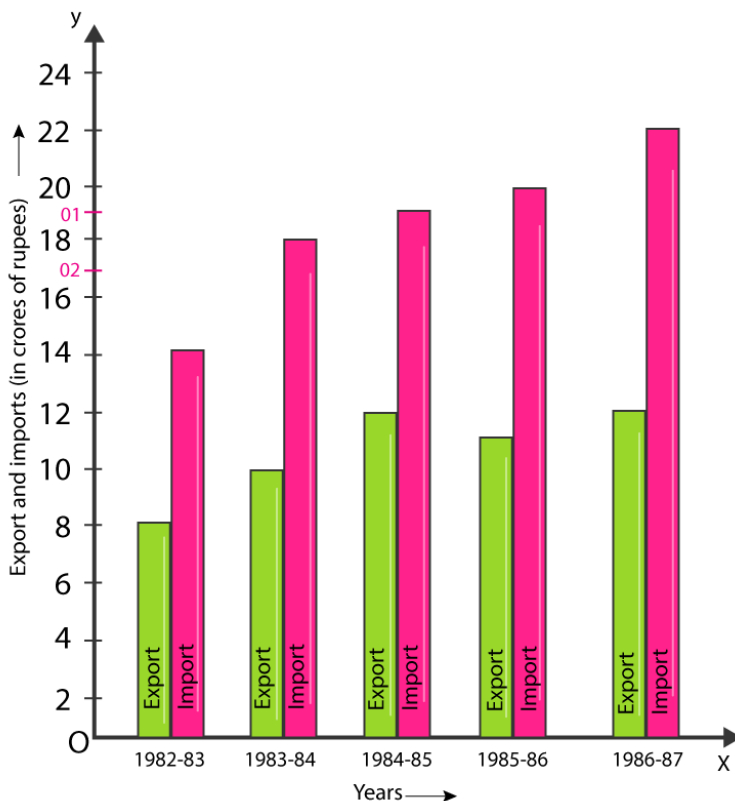
Exercise 23.2

**Question 1:** Explain the reading and interpretation of bar graphs.

**Solution:** A bar graph consists a sequence of vertical or horizontal bar lines or rectangles. Bar lines may be either horizontal or vertical. We can easily collect the information and conclude various observations from a given bar graph which is referred as the interpretation of the bar graph.

**Question 2:** Read the following bar graph and answer the following questions:

- (i) What information is given by the bar graph?
- (ii) In which year the export is minimum?
- (iii) In which year the import is maximum?
- (iv) In which year the difference of the values of export and import is maximum?



**Solution:**

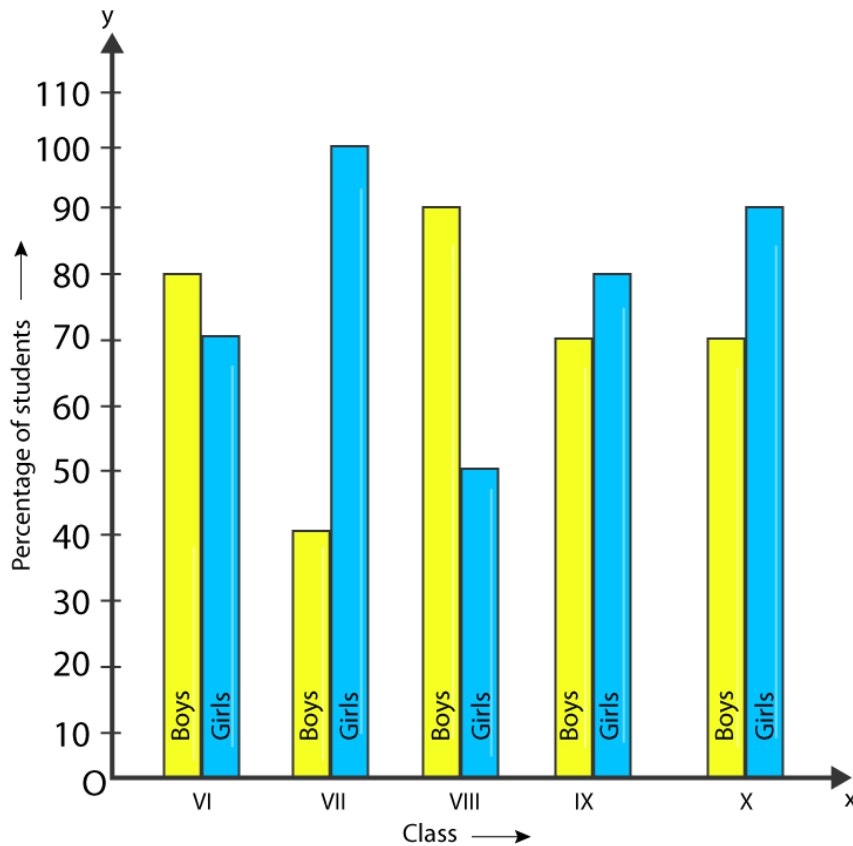
(i) The bar graph represents the import and export (in 100 Crores of rupees) from 1982-83 to 1986-87.

(ii) 1982-83

(iii) 1986-87

(iv) 1986-87

**Question 3:** The following bar graph shows the results of an annual examination in a secondary school. Read the bar graph given below, and choose the correct alternative in each of the following:



(i) The pair of classes in which the results of boys and girls are inversely proportional are:

(a) VI, VIII

(b) VI, IX

(c) VII, IX

(d) VIII, X

(ii) The class having the lowest failure rate of girls is:

- (a) VI                      (b) X                      (c) IX                      (d) VIII

(iii) The class having the lowest pass rate of students is:

- (a) VI                      (b) VII                      (c) VIII                      (d) IX

**Solution:**

(i) Option (b) is correct.

(ii) Option (a) is correct.

(iii) Option (b) is correct.

The sum of the heights of the bars for boys and girls in class VII =  $95 + 40 = 135$  (which is minimum)

**Question 4: The following data gives the number (in thousands) of applicants registered with an Employment Exchange during 1995-2000:**

| Year                                          | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|-----------------------------------------------|------|------|------|------|------|------|
| Number of applicants registered(in thousands) | 18   | 20   | 24   | 28   | 30   | 34   |

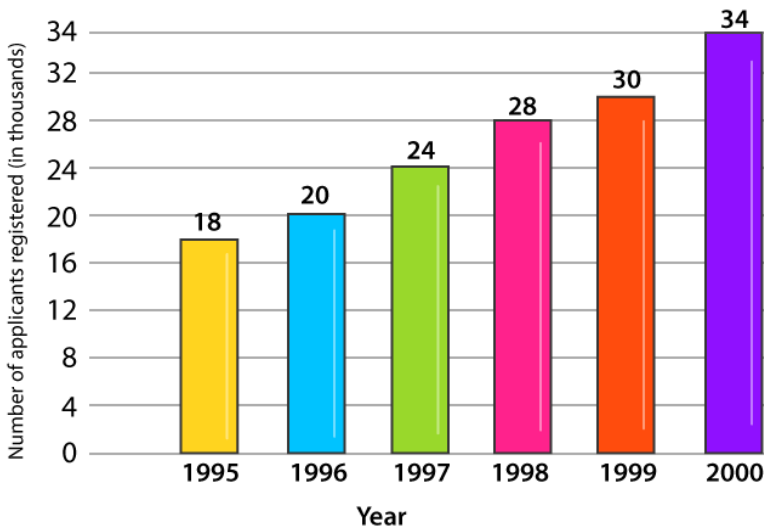
**Construct a bar graph to represent the above data.**

**Solution:**

Let us consider that the horizontal and vertical axes represent the years and the number of applicants registered in thousands respectively.

Bar Graph:

## RD Sharma Solutions for Class 9 Maths Chapter 23 Graphical Representation of Statistical Data



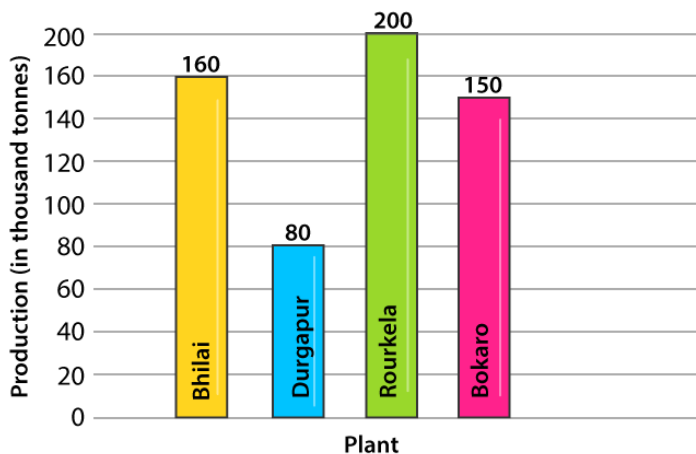
**Question 5:** The production of saleable steel in some of the steel plants of our country during 1999 is given below:

| Plant                    | Bhilai | Durgapur | Rourkela | Bokaro |
|--------------------------|--------|----------|----------|--------|
| Production(in thousands) | 160    | 80       | 200      | 150    |

Construct a bar graph to represent the above data on a graph paper by using the scale 1 big divisions = 20 thousand tonnes.

**Solution:**

Let us consider that the horizontal and vertical axes represent the plants and the production in thousand tonnes respectively.



**Question 6:** The following table gives the route length (in thousand kilometres) of the Indian Railways in some of the years:

| Year                         | 1960-61 | 1970-71 | 1980-81 | 1990-91 | 2000-2001 |
|------------------------------|---------|---------|---------|---------|-----------|
| Route length(in thousand km) | 56      | 60      | 61      | 74      | 98        |

Represent the above data with the help of a bar graph.

**Solution:**

Let us consider that the horizontal and vertical axes represent the years and the route lengths in thousand km respectively.

Bar Graph:

