## BAR GRAPH. . . . .

A bar graph is a pictorial rendition of statistical data in which the independent variable can attain only certain discrete values. The dependent variable may be discrete or continuous. The most common form of bar graph is the vertical bar graph, also called a column graph.

In a vertical bar graph, values of the independent variable are plotted along a horizontal axis from left to right. Function values are shown as shaded or colored vertical bars of equal thickness extending upward from the horizontal axis to various heights. In a horizontal bar graph, the independent variable is plotted along a vertical axis from the bottom up. Values of the function are shown as shaded or colored horizontal bars of equal thickness extending toward the right, with their left ends vertically aligned.

Bar Graphs are most commonly used for data interpretation as they can be easily analysed vertical (or) Horizontal bars are given to interpret the data to deduce the required information.

Ex Study the following bar graph carefully and answer the questions given below
Imports and exports of a country from 2000 - 2001 to 2004 -2005
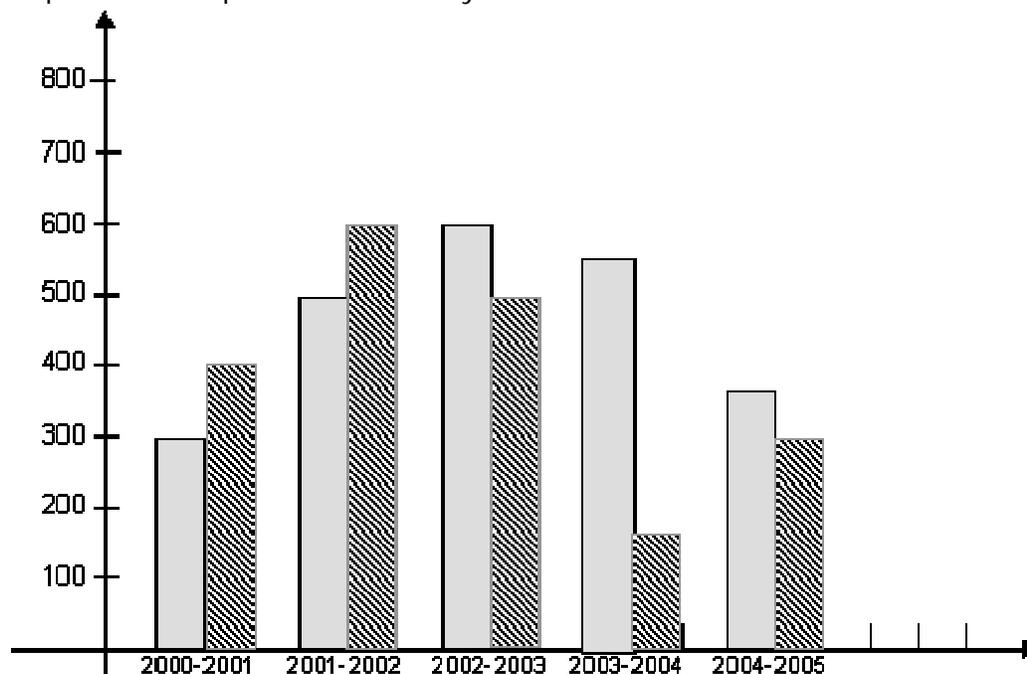
Exports

Imports

1. In which of the following year the gap between the import and export was maximum.
1. 2001-2002 2. 2002-2003 3. 2003-2004 4. 2004-2005

2. In which of the following year the gap between the imports and exports was minimum
1. 2002 - 2003 2. 2003 - 2004 3. 2004 - 2005 4. None of these

3. The exports in 2001 - 2002 was approximately how many times that of the year 2003 - 2004.
1. 2 2. 3 3. 4 4. 5

4. Give the ratio between the number of years in which export is greater than imports and import is greater than exports.
1. 3 : 2 2. 2 : 3 3. 3 : 1 4. 1 : 3

5. Give the difference between the average of imports and exports
1. 100 2. 90 3. 80 4. 70

Solutions

1. It is very clear from the graph that the gap between import and export was maximum in 2003-2004
∴ Correct option is '3'

2. From the graph we can say that the gap between imports and exports
is minimum in 2004-2005
i.e. 400 - 350 = 50 core
∴ Correct option is '3'

3. The exports of the year 2001 - 2002 = 600
The exports of the year 2003 - 2004 = 150
∴ Exports of 2001 - 2002 is 4 times greater than the exports of 2003 - 2004
∴ Correct option is '3'

4. In 2 years i.e. 2000 - 2001 and 2001 -2002 exports are greater than imports In 3 years i.e. 2002 - 2003, 2003 - 2004 and 2004 - 2005 imports are greater than exports.
∴ Correct option is '2'

5. Average of imports in the span of 2000 - 2005
$$= \frac{300+500+600+550+400}{5} = \frac{2350}{5} = 470$$
Average of exports in the span of 2000 - 2005

$$= \frac{400+600+500+150=350}{5} = \frac{2000}{5} = 400$$

∴ Difference = 470 - 400 = 70

∴ Correct option is '4'