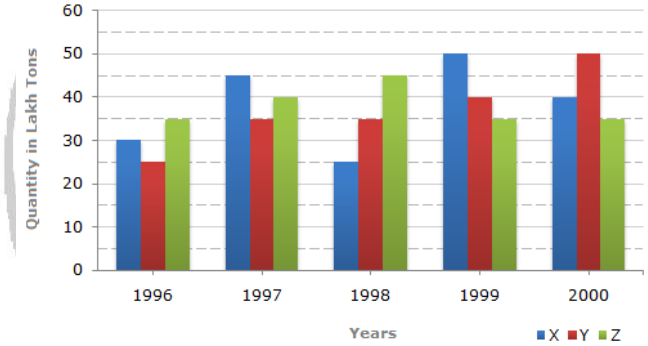
# DATA INTERPRETATION

## Chart 1

Directions to Solve: The bar graph given below shows the data of the production of paper (in lakh tonnes) by three different companies X, Y and Z over the years

Production of Paper (in lakh tonnes) by Three Companies X, Y and Z over the Years.




1. For which of the following years, the percentage rise/fall in production from the previous year is the maximum for Company Y?
(A) 1997 (B)1998 (C) 1999 (D) 2000

2. What is the ratio of the average production of Company X in the period 1998-2000 to the average production of Company Y in the same period?
(A) 1:1 (B) 15:17 (C) 23:25 (D) 27:29

3. The average production for five years was maximum for which company?
(A) X (B) Y (C) Z (D) X and Z both

4. In which year was the percentage of production of Company Z to the production of Company Y the maximum?
(A) 1996 (B) 1997 (C) 1998 (D) 1999

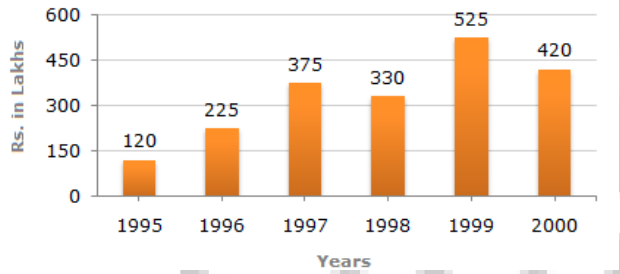
5. What is the percentage increase in the production of Company Y from 1996 to 1999?
(A) 30% (B) 45% (C) 50% (D) 60%

6. What is the difference between the production of Company Z in 1998 and Company Y in 1996?
(A) 2,00,000 tons (B) 20,00,000 tons
(C) 20,000 tons (D) 2,00,00,000 tons

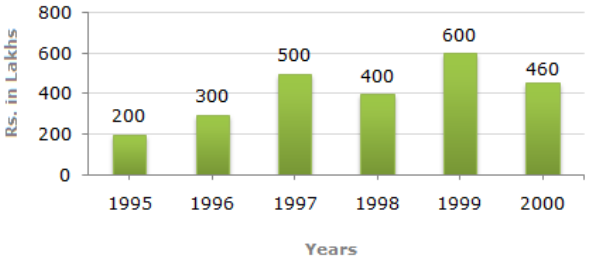
## Chart 2

Directions to Solve: Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing raw materials over the years and the other shows the values (in Lakh Rs.) of finished goods sold by the Company over the years.

Amount invested in Raw Materials (Rs. in Lakhs)




Value of Sales of Finished Goods (Rs. in Lakhs)




1. The maximum difference between the amount invested in Raw materials and value of sales of finished goods was during the year?
(A) 1995 (B) 1996 (C) 1997 (D) 1998

2. The value of sales of finished goods in 1999 was approximately what percent of the average amount invested in Raw materials in the years 1997, 1998 and 1999?
(A) 33% (B) 37% (C) 45% (D) 49%

3. What was the difference between the average amount invested in Raw materials during the given period and the average value of sales of finished goods during this period?
(A) Rs. 62.5 lakhs (B) Rs. 68.5 lakhs
(C) Rs. 71.5 lakhs (D) Rs. 77.5 lakhs

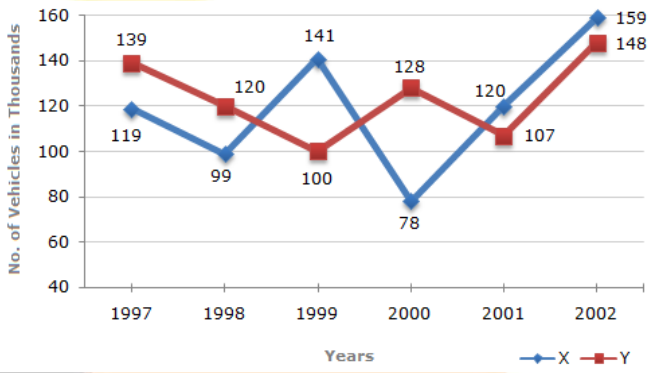
4. In which year, the percentage change (compared to the previous year) in the investment on Raw materials is same as that in the value of sales of finished goods?
(A) 1996 (B) 1997 (C) 1998 (D) 1999

5. In which year, there has been a maximum percentage increase in the amount invested in Raw materials as compared to the year?
(A) 1996 (B) 1997 (C) 1998 (D) 1999

## Chart 3

Directions to Solve: Study the following line graph and answer the questions based on it.

Number of Vehicles Manufactured by Two companies ove the Years (Number in Thousands)




1. What is the difference between the number of vehicles manufactured by Company Y in 2000 and 2001 ?
(A) 50000 (B) 42000 (C) 33000 (D) 21000

2. What is the difference between the total productions of the two Companies in the given years ?
(A) 19000 (B) 22000 (C) 26000 (D) 28000

3. What is the average numbers of vehicles manufactured by Company X over the given period ? (rounded off to nearest integer)
(A) 119333 (B) 113666 (C) 112778 (D) 111223

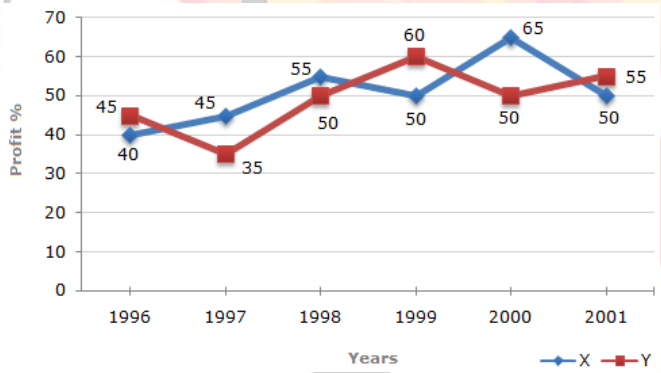
4. In which of the following years, the difference between the productions of Companies X and Y was the maximum among the given years ?
(A) 1997 (B) 1998 (C) 1999 (D) 2000

5. The production of Company Y in 2000 was approximately what percent of the production of Company X in the same year ?
(A) 173 (B) 164 (C) 132 (D) 97

## Chart 4

Directions to Solve - The following line graph gives the percent profit earned by two Companies X and Y during the period 1996 - 2001.
Percentage profit earned by Two Companies X and Y over the Given Years

$$\%\text{Profit} = \frac{\text{Income}-\text{Expenditure}}{\text{Expenditure}} \times 100$$




1. The incomes of two Companies X and Y in 2000 were in the ratio of 3:4 respectively. What was the respective ratio of their expenditures in 2000 ?
(A) 7:22 (B) 14:19 (C) 15:22 (D) 27:35

2. If the expenditure of Company Y in 1997 was Rs. 220 crores, what was its income in 1997 ?
(A) Rs. 312 crores (B) Rs. 297 crores
(C) Rs. 283 crores (D) Rs. 275 crores

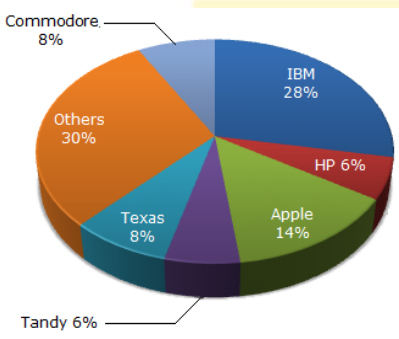
3. If the expenditures of Company X and Y in 1996 were equal and the total income of the two Companies in 1996 was Rs. 342 crores, what was the total profit of the two Companies together in 1996 ? (Profit = Income - Expenditure)
(A) Rs. 240 crores (B) Rs. 171 crores
(C) Rs. 120 crores (D) Rs. 102 crores

4. The expenditure of Company X in the year 1998 was Rs. 200 crores and the income of company X in 1998 was the same as its expenditure in 2001. The income of Company X in 2001 was ?
(A) Rs. 465 crores (B) Rs. 385 crores
(C) Rs. 335 crores (D) Rs. 295 crores

5. If the incomes of two Companies were equal in 1999, then what was the ratio of expenditure of Company X to that of Company Y in 1999 ?
(A) 6:5 (B) 5:6 (C) 11:6 (D) 16:15

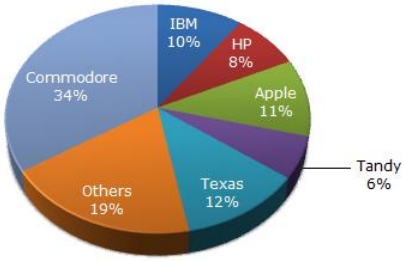
## Chart 5

Directions to Solve- The pie chart shows the distribution of New York market share by **value** of different computer companies in 2005.




The pie chart shows the distribution of New York market share by **volume** of different computer companies in 2005.

Number of units sold in 2005 in New York = 1,500
Value of units sold in 2005 in New York = US $1,650,000.




1. For the year 2005, which company has realised the lowest average unit sales price for a PC ?
(A) Commodore (B) IBM
(C) Tandy (D) Cannot be determined

2. Over the period 2005-2006, if sales (value-wise) of IBM PC's increased by 50% and of Apple by 15% assuming that PC sales of all other computer companies remained the same, by what percentage (approximately) would the PC sales in New York (value-wise) increase over the same period ?
(A) 16.1 % (B) 18 % (C) 14 % (D) None of these

3. In 2005, the average unit sale price of an IBM PC was approximately (in US$)
(A) 3180 (B) 2800 (C) 393 (D) 3080

## Chart - 6

Study the following table and answer the questions.
Number of Candidates Appeared and Qualified in a Competitive Examination from Different States Over the Years.

| STATE | YEAR | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1997 | | 1998 | | 1999 | | 2000 | | 2001 | |
| | App. | Qual. | App. | Qual. | App. | Qual. | App. | Qual. | App. | Qual. |
| M | 5200 | 720 | 8500 | 980 | 7400 | 850 | 6800 | 775 | 9500 | 1125 |
| N | 7500 | 840 | 9200 | 1050 | 8450 | 920 | 9200 | 980 | 8800 | 1020 |
| P | 6400 | 780 | 8800 | 1020 | 7800 | 890 | 8750 | 1010 | 9750 | 1250 |
| Q | 8100 | 950 | 9500 | 1240 | 8700 | 980 | 9700 | 1200 | 8950 | 995 |
| R | 7800 | 870 | 7600 | 940 | 9800 | 1350 | 7600 | 945 | 7990 | 885 |

1. Total number of candidates qualified from all the states together in 1997 is approximately what percentage of the total number of candidates qualified from all the states together in 1998?
(A) 72% (B) 77% (C) 80% (D) 83%

2. What is the average candidates who appeared from State Q during the given years?
(A) 8700 (B) 8760 (C) 8990 (D) 8920

3. In which of the given years the number of candidates appeared from State P has maximum percentage of qualified candidates?
(A) 1997 (B) 1998 (C) 1999 (D) 2001

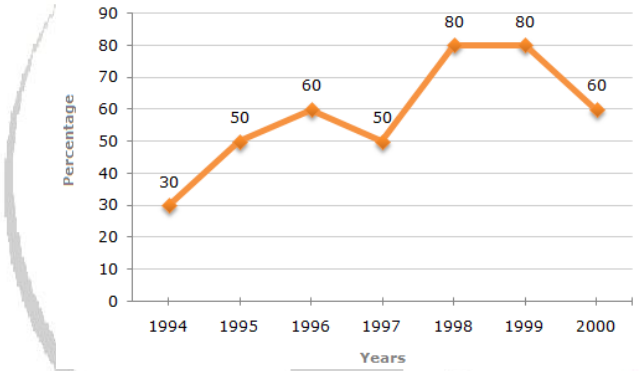
4. What is the percentage of candidates qualified from State N for all the years together, over the candidates appeared from State N during all the years together?
(A) 12.36% (B) 12.16% (C) 11.47% (D) 11.15%

5. The percentage of total number of qualified candidates to the total number of appeared candidates among all the five states in 1999 is?
(A) 11.49% (B) 11.84% (C) 12.21% (D) 12.57%

## Chart 7

Directions to Solve- The following line graph gives the percentage of the number of candidates who qualified an examination out of the total number of candidates who appeared for the examination over a period of seven years from 1994 to 2000.

Percentage of Candidates Qualified to Appeared in an Examination Over the Years




1. The difference between the percentage of candidates qualified to appeared was maximum in which of the following pairs of years?
(A) 1994 and 1995 (B) 1997 and 1998
(C) 1998 and 1999 (D) 1999 and 2000

2. In which pair of years was the number of candidates qualified, the same?
(A) 1995 and 1997 (B) 1995 and 2000
(C) 1998 and 1999 (D) Data inadequate

3. If the number of candidates qualified in 1998 was 21200, what was the number of candidates appeared in 1998?
(A) 32000(B) 28500 (C) 26500 (D) 25000

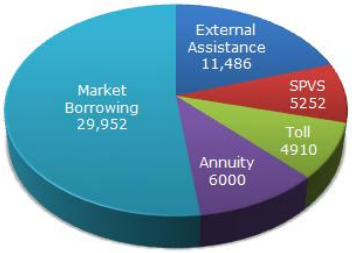
4. If the total number of candidates appeared in 1996 and 1997 together was 47400, then the total number of candidates qualified in these two years together was?
(A) 34700 (B) 32100 (C) 31500 (D) Data inadequate

5. The total number of candidates qualified in 1999 and 2000 together was 33500 and the number of candidates appeared in 1999 was 26500. What was the number of candidates in 2000?
(A) 24500 (B) 22000 (C) 20500 (D) 19000

## Charts 8

Directions to Solve- The following pie-chart shows the sources of funds to be collected by the National Highways Authority of India (NHAI) for its Phase II projects. Study the pie-chart and answers the question that follow.

Sources of funds to be arranged by NHAI for Phase II projects (in crores Rs.)




1. Near about 20% of the funds are to be arranged through:
(A) SPVS (B) External Assistance
(C) Annuity (D) Market Borrowing

2. If NHAI could receive a total of Rs. 9695 crores as External Assistance, by what percent (approximately) should it increase the Market Borrowing to arrange for the shortage of funds?
(A) 4.5% (B) 7.5% (C) 6% (D) 8%

3. If the toll is to be collected through an outsourced agency by allowing a maximum 10% commission, how much amount should be permitted to be collected by the outsourced agency, so that the project is supported with Rs. 4910 crores?
(A) Rs. 6213 crores (B) Rs. 5827 crores
(C) Rs. 5401 crores (D) Rs. 5316 crores

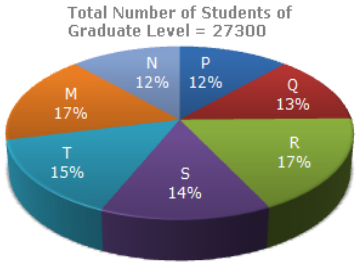
4. The central angle corresponding to Market Borrowing is
(A) 52º (B) 137.8º (C) 187.2º (D) 192.4º

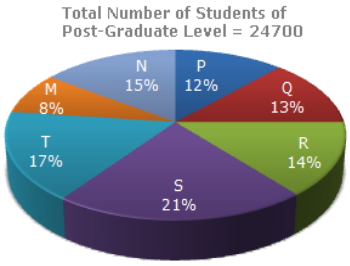
5. The approximate ratio of the funds to be arranged through Toll and that through Market Borrowing is
(A) 2 : 9 (B) 1 : 6 (C) 3 : 11 (D) 2 : 5

## Chart 9

Directions to Solve - The following pie-charts show the distribution of students of graduate and post-graduate levels in seven different institutes in a town.

Distribution of students at graduate and post-graduate levels in seven institutes:




1. What is the total number of graduate and post-graduate level students is institute R?
(A) 8320 (B) 7916 (C) 9116 (D) 8099

2. What is the ratio between the number of students studying at post-graduate and graduate levels respectively from institute S?
(A) 14:19 (B) 19:21 (C) 17:21 (D) 19:14

3. How many students of institutes of M and S are studying at graduate level?
(A) 7516 (B) 8463 (C) 9127 (D) 9404

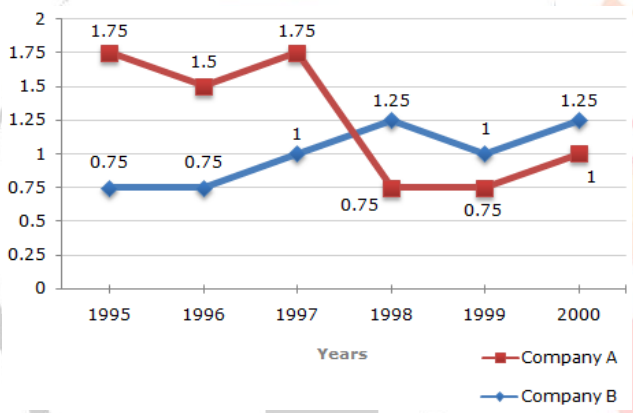
4. What is the ratio between the number of students studying at post-graduate level from institutes S and the number of students studying at graduate level from institute Q?
(A) 13:19 (B) 21:13 (C) 13:8 (D) 19:13

5. Total number of students studying at post-graduate level from institutes N and P is
(A) 5601 (B) 5944 (C) 6669 (D) 8372

## CHART 10

Directions to Solve- Answer the questions based on the given line graph.

Ratio of Exports to Imports (in terms of money in Rs. crores) of Two Companies Over the Years




1. In how many of the given years were the exports more than the imports for Company A?
(A) 2 (B) 3 (C) 4 (D) 5

2. If the imports of Company A in 1997 were incresed by 40 percent, what would be the ratio of exports to the incresed imports?
(A) 1.20 (B) 1.25 (C) 1.30 (D) cannot be determined

3. If the exports of Company A in 1998 were Rs. 237 crores, what was the amount of imports in that year?
(A) Rs. 189.6 crores (B) Rs. 243 crores
(C) Rs. 281 crores (D) Rs. 316 crores

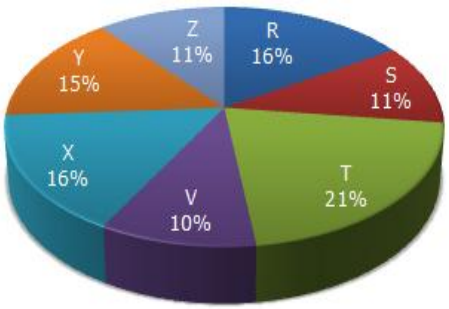
4. In 1995, the export of Company A was double that of Company B. If the imports of Company A during the year was Rs. 180 crores, what was the approximate amount of imports pf Company B during that year?
(A) Rs. 190 crores (B) Rs. 210 crores
(C) Rs. 225 crores (D) Cannot be determined

5. In which year(s) was the difference between impors and exports of Company B the maximum?
(A) 2000 (B) 1996
(C) 1998 and 2000 (D) Cannot be determined

## MIXED DI - 11

Directions to Solve

Study the following pie-chart and the table and answer the questions based on them.




Proportion of Population of Seven Villages in 1997

| Village | % Population Below Poverty Line |
|---|---|
| X | 38 |
| Y | 52 |
| Z | 42 |
| R | 51 |
| S | 49 |
| T | 46 |
| V | 58 |

1. If the population of village R in 1997 is 32000, then what will be the population of village Y below poverty line in that year?
(A) 14100 (B) 15600 (C) 16500 (D) 17000

2. The ratio of population of village T below poverty line to that of village Z below poverty line in 1997 is:
(A) 11:23 (B) 13:11 (C) 23:11 (D) 11:13

3. Find the population of village S if the population of village X below poverty line in 1997 is 12160.
(A) 18500 (B) 20500 (C) 22000 (D) 26000

4. If in 1998, the population of villages Y and V increase by 10% each and the percentage of population below poverty line remains unchanged for all the villages, then find the population of village V below poverty line in 1998, given that the population of village in 1997 was 30000.
(A) 11250 (B) 12760( C) 13140 (D) 13780

## Chart -12

**Directions (1—5) :** Study the following information carefully and answer the questions that follow:

An Organisation consists of 2400 employees working in different departments, via; HA, Marketing, IT,Production and Accounts.The ratio of male to female employees in the Organisation is 5:3 respectively. Twelve per cent of the males work in the HR department.Twenty four per cent of the females work in the Accounts department. The ratio of males to females working in the HR department is 6:11 respectively. One- ninth of the females work in the IT department. Forty two percent of the males work in the Production department. Number of females working in the Production department is ten per cent of the males working in the same. The remaining females work in the Marketing department. The total number of employees working in the IT department is 285.Twenty two percent of the males work in the Marketing department and the remaining work in the Accounts department.

**1**. The number of males working in the IT department forms **approximately** what per cent of the total: number of males in the Organisation?
(1)5 (2) 12 (3) 21 (4) 8 (5) 18

**2.** How many males work in the Accounts department?
(1) 170 (2) 165 (3) 185 (4) 160 (5) None of these

**3.** The total number of employees working in the Accounts department forms what per cent of the total number of employees in the organisation ? (Rounded off to two digits after decimal)
(1) 19.34 (2) 16.29 (3) 11.47 (4) 23.15 (5) None of these

**4.** The number of females working in the Production department forms what per cent of the total number of females in the Organisation?
(1)7 (2)12 (3) 4 (4) 15 (5) None of these

**5.** What is the total number of females , working in the HR and Marketing department together?
(1)363 (2) 433 (3) 545 (4) 521 (5) None of these