Data Interpretation

Data Interpretation is one of the easy sections of one day competitive Examinations. It is an extension of Mathematical skill and accuracy. Data interpretation is nothing but drawing conclusions and inferences from a comprehensive data presented numerically in tabular form by means of an illustration, viz. Graphs, Pie Chart etc. Thus the act of organising and interpreting data to get meaningful information is Data Interpretation.

A good grasp of basic geometric as well as arithmetic formulae is must to score high in this section. Familiarity with graphical representation of data like Venn diagrams, graphs, pie charts, histogram, polygon etc. should be thought. Once the data are grasped well, questions based on tables and graphs take little time.

In some competitive examinations data are presented in more than one table or graphs. The aim is to test not only quantitative skill but also relative, comparative and analytical ability. The crux of the matter is to find a relationship between the two tables or graphs before attempting the questions.

Some Useful tips:

1. Data Interpretation questions are based on information given in tables and graphs. These questions test your ability to interpret the information presented and to select the appropriate data for answering a question.

2. Get a general picture of the information before reading the question. Read the given titles carefully and try to understand its nature.

3. Avoid lengthy calculations generally, data interpretation questions do not require to do extensive calculations and computations. Most questions simply require reading the data correctly and carefully and putting them to use directly with common sense.

4. Breakdown lengthy questions into smaller parts and eliminate impossible choices.

5. Use only the information given and your knowledge of everyday facts, such as the number of hours in a day, to answer the questions based on tables and graphs.

6. Answer the questions asked and not what you think the questions should be.

7. Be careful while dealing with units.

8. To make reading easier and to avoid errors observe graphs keeping them straight.

9. Be prepared to apply basic mathematical rules, principles and formulae.

10. Since one of the major benefits of graphs and tables is that they present data in a form that enables you to readily make comparisons, use this visual attribute of graphs and tables to help you answer the questions. Where possible, use your eyes instead of your computational skills.

Tables

Tables are often used in reports, magazines and newspaper to present a set of numerical facts. They enable the reader to make comparisons and to draw quick conclusions. It is one of the easiest and most accurate ways of presenting data. They require much closer reading than graphs of charts and hence are difficult and time consuming to interpret.

One of the main purposes of tables is to make complicated information easier to understand. The advantage of presenting data in a table is that one can see the information at a glance.

While answering questions based on
Quantitative Aptitude

Tables, carefully read the table title and the column headings. The title of the table gives you a general idea of the type and often the purpose of the information presented. The column headings tell you the specific kind of information given in that column. Both the table title and the column headings are usually very straightforward.

Graphs

There may be four types of graphs.

1) **Circle Graphs**: Circle graphs are used to show how various sectors are in the whole. Circle graphs are sometimes called Pie Charts. Circle graphs usually give the percent that each sector receives. In such representation the total quantity in question is distributed over a total angle of 360°.

While using circle graphs to find ratios of various sectors, don't find the amounts each sector received and then the ratio of the amounts. Find the ratio of the percents, which is much quicker.

2) **Line Graphs**: Line graphs are used to show how a quantity changes continuously. If the line goes up, the quantity is increasing; if the line goes down, the quantity is decreasing; if the line is horizontal, the quantity is not changing.

3) **Bar Graphs**: Given quantities can be compared by the height or length of a bar graph. A bar graph can have either vertical or horizontal bars. You can compare different quantities or the same quantity at different times. In bar graph the data is discrete. Presentation of data in this form makes evaluation of parameters comparatively very easy.

4) **Cumulative Graphs**: You can compare several categories by a graph of the cumulative type. These are usually bar or line graphs where the height of the bar or line is divided up proportionally among different quantities.

Solved Examples

I. Directions (Qs. 1-5) study the following table and answer the questions given below it.

**Production of sugar by six major production units of India in Million Tonnes**

<table>
<thead>
<tr>
<th>PRODUCTION UNITS</th>
<th>Month</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>310</td>
<td>180</td>
<td>169</td>
<td>137</td>
<td>140</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>318</td>
<td>179</td>
<td>177</td>
<td>162</td>
<td>140</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>320</td>
<td>160</td>
<td>188</td>
<td>173</td>
<td>135</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>326</td>
<td>167</td>
<td>187</td>
<td>180</td>
<td>146</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>327</td>
<td>150</td>
<td>185</td>
<td>178</td>
<td>145</td>
<td>128</td>
<td></td>
</tr>
</tbody>
</table>

1. In which month the unit B has a contribution of approximately 15% in the total sugar production?
   a) August b) June c) July d) April

2. Which of the following units shows continuous increase in production of sugar over months?
   a) A b) B c) C d) D

3. In the case of Unit E, in which of the following pairs of months the production of sugar was equal?
   a) April & June b) June & July c) July & August d) April & May

4. In the month of June, how many units have a share of more than 25% of the total production of sugar?
   a) one b) Three c) Two d) Four

5. What was approximate percentage decrease in sugar production of unit B in June as compared to April?
   a) 8% b) 10% c) 15% d) 18%
Ans:
1. (c) Total production in April
   \[= 310+180+169+137+140+120=1056\]
   \[15\% \text{ of } 1056 = \frac{15}{100} \times 1056 = 158.4\]
   Total Production in June
   \[= 320+160+188+173+135+130 = 1106\]
   \[15\% \text{ of } 1106 = \frac{15}{100} \times 1106 = 165.9\]
   Total production in July
   \[= 326+167+187+146+130+130 = 1136\]
   \[15\% \text{ of } 1136 = \frac{15}{100} \times 1136 = 170.4\]
   Total Production in August
   \[= 327+150+185+178+145+128 = 1113\]
   \[15\% \text{ of } 1113 = \frac{15}{100} \times 1113 = 166.95 \approx 167\]
   ie, in Month July, the Unit B has a contribution of approximately 15% in the total sugar production.
2. a) Unit A shows continuous increase in production of sugar over months.
3. d) In Unit E, the pair of months that shows equal sugar production is April and May.
4. a) Total Production in June
   \[= 320+160+188+173+135+130 = 1106\]
   \[25\% \text{ of } 1106 = \frac{25}{100} \times 1106 = 276.5 \text{ units}\]
   ie, Unit A shows more than 25% of the total production of sugar in the month June.
5. 6) In unit B, the production in June = 160 the production in April = 180 units
   Decrease in percentage
   \[= \left(\frac{180-160}{180}\right) \times 100 = \frac{20}{180} \times 100\]
   \[= 11.11\% \approx 10\%\]

II. Directions (Qs. 6-10): Study the following graph carefully and answer the questions given below it:

6) What was the price difference between commodity A and B in the month of April?
   a) 250  b) 150  c) 100  d) 90
7. What was the difference in average price between commodity A and B from April to August?
   a) 86  b) 75  c) 95  d) 85
8. In which of the following pairs of months was the price of commodity A same?
   a) January - March b) May-June  
   c) April- August  d) July-August
9. What was the approximate percentage decrease in the price of commodity A from March to April?
   a) 1  b) 9  c) 14  d) 12
10. What was the percentage increase in price of commodity B from January to April?
    a) 15  b) 20  d) 17  d) 10
**Quantitative Aptitude**

**Ans 6 (b).** The price of commodity A in April = 1000

The price of commodity B in April = 1150

Difference = 1150 - 1000 = 150

7) (b). Average price of commodity A from April to August

\[
\text{Average price} = \frac{1000 + 1050 + 975 + 900 + 1000}{5}
\]

\[
= \frac{4925}{5} = 985
\]

Average price of commodity B from April to August

\[
\text{Average price} = \frac{1150 + 1100 + 1100 + 1000 + 950}{5}
\]

\[
= \frac{5300}{5} = 1060
\]

Difference = 1060 - 985 = 75

8)(c) Price of commodity A in April = 1000

Price of commodity A in August = 1000

Therefore, in April - August the price of commodity A was same.

9)(d) Price of commodity A in March = 1125

Price of commodity A in April = 1000

Decrease

\[
\text{Decrease} = \left( \frac{1125 - 1000}{1125} \right) \times 100 = \frac{125}{1125} \times 100
\]

\[
= 11.11\% \approx 12\%
\]

10)(a) Price of commodity B in January = 1000

Price of commodity B in April = 1150

Increase

\[
\text{Increase} = \left( \frac{1150 - 1000}{1000} \right) \times 100
\]

\[
= \frac{150 \times 100}{1000} = 15\%
\]

**III** Directions (11-15): Study the following graph carefully and answer the questions given below it.

**Production of Foodgrain Over the Years (1000 Tonnes)**

11) In the case of how many years was the production below the average production of the given years?

a) one  

b) two  

c) three  

d) four

12) What was the percentage drop in production from 1996 to 1997?

a) 100  

b) 50  

c) 65  

d) 40

13) In which year was the production 50% of the total production in 1993 and 1998 together?

a) 1994  

b) 1995  

c) 1996  

d) 1997

14. If the production in 1999 will be above the average production of the given years, which of the following could be the minimum production for 1999?

a) 105000  

b) 120000  

c) 100900  

d) 130000

15. What was the approximate percentage increase in production from 1993 to 1994?

a) 60  

b) 40  

c) 110  

d) 30
**Quantitative Aptitude**

**Ans:-**

11. (c) Average production

\[
\frac{80 + 110 + 100 + 130 + 65 + 120}{6} = \frac{605}{6} = 100.833 \text{ thousand tonnes}
\]

ie. production in 1993, 1995 and 1997 was below the average.

12. (b) Production in 1996 = 130 thousand tonnes.

Production in 1997 = 65 thousand tonnes

\[
\therefore \text{ decrease} = \frac{130 - 65}{130} \times 100 = \frac{65}{130} \times 100 = 50\%
\]


\[
= 80 + 120 = 200
\]

50% of 200 = \( \frac{50}{100} \times 200 = 100 \)

ie. the production in 1995 was 50% of the total production in 1993 and 1998.

14. (c). Average production = 100900 tonnes.

Therefore the minimum production in 1999 will be 100900 tonnes

15. (b). Production in 1993 = 80 thousand tonnes.

Production in 1994 = 110 thousand tonnes

\[
\text{Increase} = \left( \frac{110 - 80}{80} \right) \times 100 = \frac{30}{80} \times 100 \approx 40\%
\]

**IV. Directions (Qs. 16-20):-** Study the following graph carefully and answer the questions given below it:

**INCOME AND EXPENDITURE OF A COMPANY OVER THE YEARS**

(In lakhs Rupees)

<table>
<thead>
<tr>
<th>Years</th>
<th>Income</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1995</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>1996</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>1997</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>1998</td>
<td>60</td>
<td>35</td>
</tr>
</tbody>
</table>

16. What was the difference in profit between 1995 and 1996?

a) Rs. 10 lakhs  
b) Rs. 5 lakhs  
c) Rs. 15 lakhs  
d) No profit

17. In the case of how many years was the income more than the average income of the given years?

a) one  
b) two  
c) three  
d) four

18. What was the percentage increase in expenditure from 1996 to 1997?

a) 10  
b) \( 33 \frac{1}{3} \)  
c) 66 \( \frac{2}{3} \)  
d) 20

19. The income in 1996 was equal to the expenditure of which of the following years?

a) 1994  
b) 1995  
c) 1997  
d) 1998
20. In which of the following years was the profit the maximum?
   Ans:-
   a) Rs. 2500000   b) Rs. 3750000
   c) Rs. 5000000   d) Rs. 6000000

21. If the total amount spent on sports during the year was Rs. 15000000, the amount spent on cricket and hockey together was
   a) Rs. 25000000
   b) Rs. 37500000
   c) Rs. 50000000
   d) Rs. 60000000
   22. Out of the following, the country spent the same amount on
   a) Hockey and Tennis
   b) Golf and football
   c) Cricket and Football
   d) Football and Hockey

23. Pie-chart shows that the most popular game of the country is (on the basis of money spent)
   a) Cricket
   b) Football
   c) Basketball
   d) Hockey

24. The ratio of the total amount spent on football to that spent on hockey is
   a) 1:15
   b) 1:1
   c) 15:1
   d) 3:20

25. If the total amount spent on sports during the year was Rs. 12000000, how much was spent on basket ball?
   a) Rs. 9500000
   b) Rs. 1000000
   c) Rs. 1200000
   d) Rs. 1500000
   Ans:-
   21.(d) The amount spent on Cricket and Hockey
   = \frac{15000000 \times 40}{100} = Rs. 6000000
   22.(d) The country spent the same amount on football and hockey
   23.(a) The most popular game is cricket
   24.(b) The required ratio = 15:15 = 1:1
   25.(d) The amount spent on basket ball
   = \frac{12000000 \times 12.5}{100}
   = Rs. 1500000
Directions (Qs. 6-10): Study the following table carefully and answer the questions given below it.

NUMBER OF STUDENTS WHO GO ABROAD FOR STUDY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>732</td>
<td>840</td>
<td>900</td>
<td>920</td>
<td>925</td>
</tr>
<tr>
<td>Kerala</td>
<td>1035</td>
<td>940</td>
<td>1200</td>
<td>1400</td>
<td>1500</td>
</tr>
<tr>
<td>Karnataka</td>
<td>750</td>
<td>600</td>
<td>830</td>
<td>575</td>
<td>900</td>
</tr>
<tr>
<td>West Bengal</td>
<td>500</td>
<td>550</td>
<td>450</td>
<td>600</td>
<td>525</td>
</tr>
<tr>
<td>Delhi</td>
<td>1500</td>
<td>1625</td>
<td>1700</td>
<td>1475</td>
<td>1800</td>
</tr>
<tr>
<td>Andhra pradesh</td>
<td>800</td>
<td>840</td>
<td>875</td>
<td>925</td>
<td>785</td>
</tr>
<tr>
<td>Total</td>
<td>5308</td>
<td>5395</td>
<td>5955</td>
<td>5895</td>
<td>6434</td>
</tr>
</tbody>
</table>

6. From which State/U.T. did the least number of students go abroad over the years among the given States / U.T.s?
   a) Karnataka  
   b) Kerala  
   c) West Bengal  
   d) Maharashtra

7. What was the percent increase in number of students from West Bengal from 1992 to 1993?
   a) 25  
   b) \(33\frac{1}{3}\)  
   c) 50  
   d) 66\(\frac{2}{3}\)

8. In the case of which State/U.T. was there an increase and decrease respectively in the number of students in alternate years?
   a) Andhra Pradesh  
   b) Delhi  
   c) Karnataka  
   d) West Bengal

9. In the case of which State/U.T. was there a continuous increase in the number of students over the given years?
   a) Delhi  
   b) Maharashtra  
   c) Andhra Pradesh  
   d) Karnataka
10. In which year did Kerala contribute approximately one-fifth of the total number of students in that year?

   a) 1990  b) 1991  
   c) 1992  d) 1993

**Direction (Qs. 11-15):** Study the following table carefully and answer the questions given below it.

**NUMBER OF CANDIDATES APPEARED AND QUALIFIED UNDER VARIOUS DISCIPLINES IN AN EXAMINATION OVER THE YEARS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>850</td>
<td>200</td>
<td>1614</td>
<td>402</td>
<td>750</td>
<td>212</td>
<td>614</td>
<td>170</td>
<td>801</td>
<td>270</td>
<td>4629</td>
<td>1254</td>
</tr>
<tr>
<td>1993</td>
<td>1214</td>
<td>315</td>
<td>1826</td>
<td>420</td>
<td>800</td>
<td>220</td>
<td>580</td>
<td>150</td>
<td>934</td>
<td>350</td>
<td>5354</td>
<td>1455</td>
</tr>
<tr>
<td>1994</td>
<td>975</td>
<td>250</td>
<td>1970</td>
<td>500</td>
<td>860</td>
<td>260</td>
<td>624</td>
<td>160</td>
<td>742</td>
<td>300</td>
<td>5171</td>
<td>1470</td>
</tr>
<tr>
<td>1995</td>
<td>820</td>
<td>196</td>
<td>1560</td>
<td>450</td>
<td>842</td>
<td>300</td>
<td>490</td>
<td>160</td>
<td>850</td>
<td>312</td>
<td>4562</td>
<td>1418</td>
</tr>
<tr>
<td>1996</td>
<td>1412</td>
<td>378</td>
<td>2120</td>
<td>625</td>
<td>1105</td>
<td>320</td>
<td>760</td>
<td>200</td>
<td>642</td>
<td>301</td>
<td>6039</td>
<td>1824</td>
</tr>
<tr>
<td>1997</td>
<td>738</td>
<td>359</td>
<td>3506</td>
<td>880</td>
<td>1240</td>
<td>308</td>
<td>640</td>
<td>210</td>
<td>962</td>
<td>400</td>
<td>7086</td>
<td>2157</td>
</tr>
</tbody>
</table>

11. In which of the following disciplines was there a continuous increase in the number of candidates appeared over the given years?

   a) Agriculture  b) Arts  
   c) Science  d) None

12. What was the percentage drop in number of candidates qualified in Science discipline from 1994 to 1995?

   a) 10  
   b) 20  
   c) 25  
   d) 50

13. The number of candidates appeared under Agriculture in 1995 was approximately what percentage of number of candidates qualified under Arts in 1994?

   a) 400  
   b) 200  
   c) 100  
   d) 20

14. In which of the following years was the percentage of total number of candidates of all the disciplines together qualified to the appeared ones, the maximum?

   a) 1993  
   b) 1994  
   c) 1995  
   d) 1996

15. In which of the following years was the percentage of qualified to the appeared ones in engineering discipline the maximum?

   a) 1994  
   b) 1995  
   c) 1997  
   d) 1996

**Direction (16-20) :** Study the following graph carefully and answer the questions given below:

**Production of three types of vehicles by a company over the years (in thousand)**

- Type A
- Type B
- Type C

![Graph of vehicle production](image)
16. What was the percentage increase in the production of C type vehicles from 1985 to 1986?
   a) 10  b) 5  c) 20  d) None of these
17. The number of A type vehicles produced in 1986 was what percent of the number of C type vehicles produced in 1988?
   a) 33 \frac{1}{3}  b) 66 \frac{2}{3}  c) 50  d) 15
18. In how many years was the production of A type vehicles less than its average production over the given years?
   a) 2  b) 4  c) 3  d) 1
19. What was average number of B type vehicles produced by the company over the years?
   a) 20,000  b) 25,000  c) 15,000  d) 30,000
20. In which of the following years was the total production of all the three types of vehicles 60,000?
   a) 1985  b) 1986  c) 1987  d) 1988

Directions (Qs. 21 - 25) : Study the following graph carefully and answer the questions given below it.

Income and Expenditure of a Company over the years (Rs. in crore)

21. In which of the following years was the difference between the income and the expenditure the maximum?
   a) 1988  b) 1991  c) 1986  d) 1987
22. The income in 1987 was equal to the expenditure in which of the following years?
   a) 1985 only  b) 1990 only  c) 1985, 1989 and 1991  d) 1988 and 1989
23. What was the approximate percentage drop in expenditure from 1988 to 1989?
   a) 35  b) 25  c) 75  d) 40
24. What was the percentage increase in income from 1987 to 1988?
   a) 175  b) 75  c) 60  d) 125
25. In how many of the given years was the expenditure more than the income?
   a) 1  b) 3  c) 4  d) 2

Directions (26-30)

The pie chart given below shows the expenditure incurred in bringing out a book, by a publisher.

26. What is the central angle showing the cost of paper?
   a) 16°  b) 32°  c) 28.8°  d) 57.6°
27. If the cost of printing is Rs. 23400, the royalty is:
   a) Rs. 6500  b) Rs. 2340  c) Rs. 4680  d) Rs. 7840
28. If miscellaneous expenditures amount to Rs. 18000, the expenditure on canvassing will be:
   a) Rs. 8000  b) Rs. 14400  c) Rs. 46800  d) Rs. 40500

29. Royalty on the book is less than canvassing expenditure by:
   a) 8 %  b) 80 %  c) 44 \text{\frac{4}{9}} %  d) None

30. If 5500 copies are published and miscellaneous expenditures amount to Rs. 36960 and the marked price is 40% above cost price, then the marked price of each copy is:
   a) Rs. 122.50  b) Rs. 117.60  c) Rs. 126.40  d) Rs. 92.40

Directions (31-35)
Study the following graphs carefully and answer the questions that follow:

Graph - I
Distribution of proteins in human body.

Graph - II
Distribution of Elements in the human body.

31. What is the ratio of distribution of proteins in the muscles to the distribution of proteins in bones?
   a) 1:2  b) 2:1  c) 18:1  d) 1:18

32. What percent to the total weight of the human body is equivalent of the weight of the skin in the human body?
   a) 0.016  b) 1.6  c) 0.16  d) Insufficient information

33. To show the distribution of proteins and other dry elements in the human body, the arc of the circle should subtend at the centre an angle of
   a) 126°  b) 54°  c) 108°  d) 252°

34. What will be the quantity of water in the body of a person weighing 50 kg?
   a) 35 kg  b) 120 kg  c) 71.42 kg  d) 20 kg

35. What part of the human body is made of neither bones nor skin?
   a) \frac{2}{5}  b) \frac{11}{15}  c) \frac{1}{40}  d) \frac{3}{80}

Directions (36-40) Study the following graph carefully and answer the questions given below

India's Export of rice over the years (in lakh tonnes)

36. What was the percentage increase in export of rice from 1991 to 1992?
   a) 30  b) 20  c) 15  d) 25
37. The total export of rice in 1994 was what percent of the total export in the year 1991 and 1993?
   a) 60  b) 50  c) 30  d) 40

38. What was the percentage drop in the export of rice in the year 1994 as compared to the year 1993?
   a) 25  b) 30  c) 35  d) 20

39. In how many years the export of rice were less than the average export in the given years?
   a) 3  b) 2  c) 4  d) 5

40. In which of the following pair of years the difference in export is maximum?

Directions (41-45) Study the following graph carefully and answer the questions given below it.

India's garment exports
(Quantity in lakh pieces)
(Value in Rs. Crores.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>220</td>
<td>400</td>
</tr>
<tr>
<td>1984</td>
<td>180</td>
<td>390</td>
</tr>
<tr>
<td>1985</td>
<td>260</td>
<td>450</td>
</tr>
<tr>
<td>1986</td>
<td>210</td>
<td>550</td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td>590</td>
</tr>
</tbody>
</table>

41. What was the percent increase in export value from 1983 to 1986?
   a) 100  b) 25.9  c) 37.5  d) 135

42. What was the difference between the pieces of garments exported in 1984 and 1985?
   a) 80,00,000  b) 8,00,000  c) 8,00,00,000  d) None

43. What was the approximate percentage drop in export quantity from 1983 to 1984?
   a) 22  b) 18  c) 40  d) 82

44. If in 1987 the garments were exported at the same rate per piece as that in 1985, what could be the approximate value in crores of rupees of exports in 1987?
   a) 1040  b) 726  c) 934  d) 732

45. In which of the given years the value per piece was minimum?
   a) 1987  b) 1984  c) 1985  d) 1986

Directions (46-50) Study the following graph carefully and answer the following questions.

Demand and Production of Colour T.V.s of Five Companies for October 1988

<table>
<thead>
<tr>
<th>Companies</th>
<th>Demand</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1500</td>
<td>600</td>
</tr>
<tr>
<td>B</td>
<td>1800</td>
<td>1000</td>
</tr>
<tr>
<td>C</td>
<td>2500</td>
<td>1200</td>
</tr>
<tr>
<td>D</td>
<td>2700</td>
<td>2200</td>
</tr>
<tr>
<td>E</td>
<td>3300</td>
<td>3000</td>
</tr>
</tbody>
</table>

46. What is the ratio of companies having more demand than production to those having more production than demand?
   a) 2:3  b) 4:1  c) 2:2  d) 3:2

47. What is the difference between average demand and average production of the five companies taken together?
   a) 1400  b) 400  c) 280  d) 138
48. The production of company D is approximately how many times that of the production of the company A?
   a) 1.8  b) 1.5  c) 2.5  d) 1.11
49. The demand for company `B' is approximately what percent of the demand for company `C'?
   a) 4  b) 24  c) 20  d) 60
50. If company `A' desire to meet the demand by purchasing surplus T.V. sets from a single company, which one of the following companies can meet the need adequately?
   a) B  b) C  c) D  d) None of these

Directions (51-55)
Study the following graph and answer the questions given

Result of Annual Examination In a High School

<table>
<thead>
<tr>
<th>Standard</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>result of boys</td>
<td>80</td>
<td>80</td>
<td>70</td>
<td>40</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>result of girls</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

51. In which standard is the difference between the results of girls and boys maximum?
   a) V  b) VII  c) X  d) VIII

52. In which standard is the result of boys more than the average result of the girls?
   a) VII  b) IX  c) VI  d) VIII

53. In which pair of standards are the results of girls and boys in inverse proportion?
   a) V & X  b) VI & IX  c) VI & VIII  d) V & IX

54. In which standard is the result of the girls less than the average result of the boys of the school?
   a) IX  b) VIII  c) VI  d) VII

55. In which standard is the failure of girls lowest?
   a) IX  b) VII  c) VIII  d) V

ANSWERS TO PRACTICE TEST

1. (b)  2. (a)  3. (b)  4. (c)  5. (c)  6. (c)  7. (b)  8. (d)
9. (b)  10. (c)  11. (d)  12. (a)  13. (b)  14. (c)  15. (d)  16. (d)
17. (c)  18. (b)  19. (a)  20. (d)  21. (b)  22. (c)  23. (b)  24. (b)
25. (d)  26. (d)  27. (a)  28. (d)  29. (c)  30. (b)  31. (b)  32. (b)
33. (c)  34. (a)  35. (b)  36. (b)  37. (b)  38. (d)  39. (a)  40. (c)
41. (c)  42. (a)  43. (b)  44. (b)  45. (a)  46. (d)  47. (c)  48. (a)
49. (b)  50. (b)  51. (d)  52. (b)  53. (b)  54. (d)  55. (c)