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 organizing and interpreting data to get meaningful information is Data Interpretation.

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 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 straight forward.

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.

CONCEPT TO REVISE:

Average= Sum of observations/Total number of observations
Percentage Increase= (Increase/Original Value)*100
Percentage Decrease=(Decrease/Original Value)*100
where, Original Value is the value to which increase and decrease has been done or the old value

TYPE1
TABULAR FORM

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

MONTH/ PRODUCTION UNIT	A	B	C	D	E	F
APRIL	310	180	169	137	140	120
MAY	318	179	177	162	140	122
JUNE	320	160	188	173	135	130
JULY	326	167	187	180	146	130
AUGUST	327	150	185	178	145	128

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

Ans: c)

2 . **Which of the following units shows continuous increase in production of sugar over months?**

a) A
b) B
c) C
d) D

Ans: a)

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

Ans:d)

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

Ans: a)

5 . **What was approximate percentage decrease in sugar production of unit B in June as compared to April?**

a) 8 %
b) 1 0%
c) 1 5%
d) 1 8%

Ans:b)

Directions (Qs. 6-10) The table below gives the production capacity (in thousands units) and the percent utilisation in respect of three products (A,B and C) over five years for an organisation. Study the table carefully and answer the questions that follow.

YEAR	PRODUCT						
	A		B		C		TOTAL CAPACITY (A+B+C)
	CAPACITY	UTILISATION	CAPACITY	UTILISATION	CAPACITY	UTILISATION	
1993	170	70%	28	75%	240	40%	438
1994	200	63%	35	60%	260	40%	495
1995	200	65%	30	80%	270	40%	500
1996	210	60%	40	50%	260	45%	510
1997	225	60%	40	55%	260	50%	525

6. Approximately, what was the overall utilization for all products taken together for the year 1993?

a) 5 0%

b) 5 5%

c) 6 0%

d) 6 5%

Ans: b)

7 . What is the approximate overall growth rate in respect of total capacity for the period shown?

a) 5 %

b) 1 0%

c) 1 5%

d) 2 0%

Ans: a)

8 . In which of the following years was the production of product A the maximum for all period shown?

a) 19 93

b) 19 97

c) 19 96

d) 19 94

Ans: b)

9 . What is the average production of product B over the period shown?

a) 21,600

b) 24,200

c) 34,600

d) 28,800

Ans: c)

10. In which of the following years was the production of product C the minimum for the period shown?

a) 19 97

b) 19 94

c) 19 93

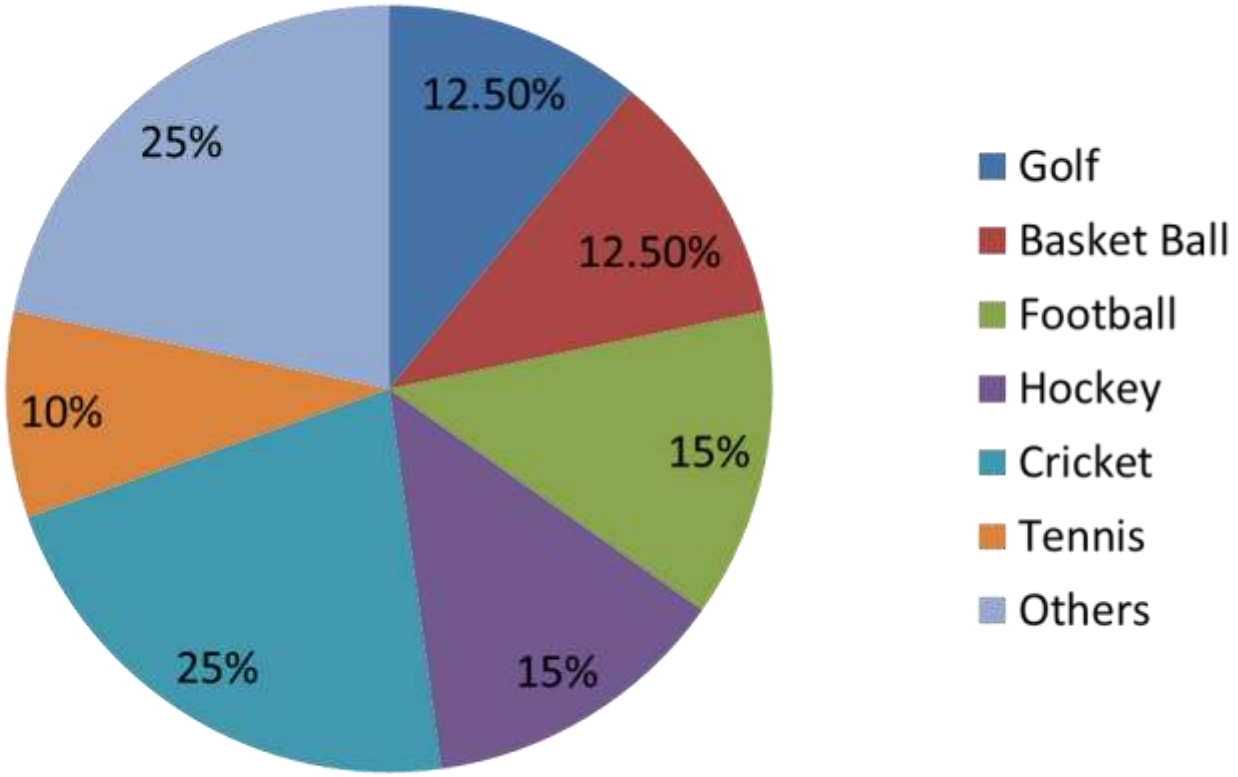
d) 19 96

Ans:c)

TYPE2
PIE CHART
(CIRCULAR GRAPH)

Directions (Qs. 11-15) The pie-chart drawn below shows the spending of a country on various sports during a particular year. Study the pie-chart carefully and answer the questions given below it.

PERCENT OF MONEY SPENT ON VARIOUS SPORTS FOR ONE YEAR



11. If the total amount spent on sports duringn the year was Rs. 15000000, the amount spent on cricket and hockey together was

a) Rs. 2500000
b) Rs. 3750000
c) Rs. 5000000
d) Rs. 6000000

Ans: d)

12.Out of the following, the country spent the same amount on

a) Hockey and Tennis

b) Golf and foot ball

c) Cricket and Foot ball

d) Football and Hockey

Ans:d)

13.Pie-chart shows that the most popular game of the country is (on the basis of money spent)

a) Cricket

b) Foot ball

c) Basket ball

d) Hockey

Ans: a)

14.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

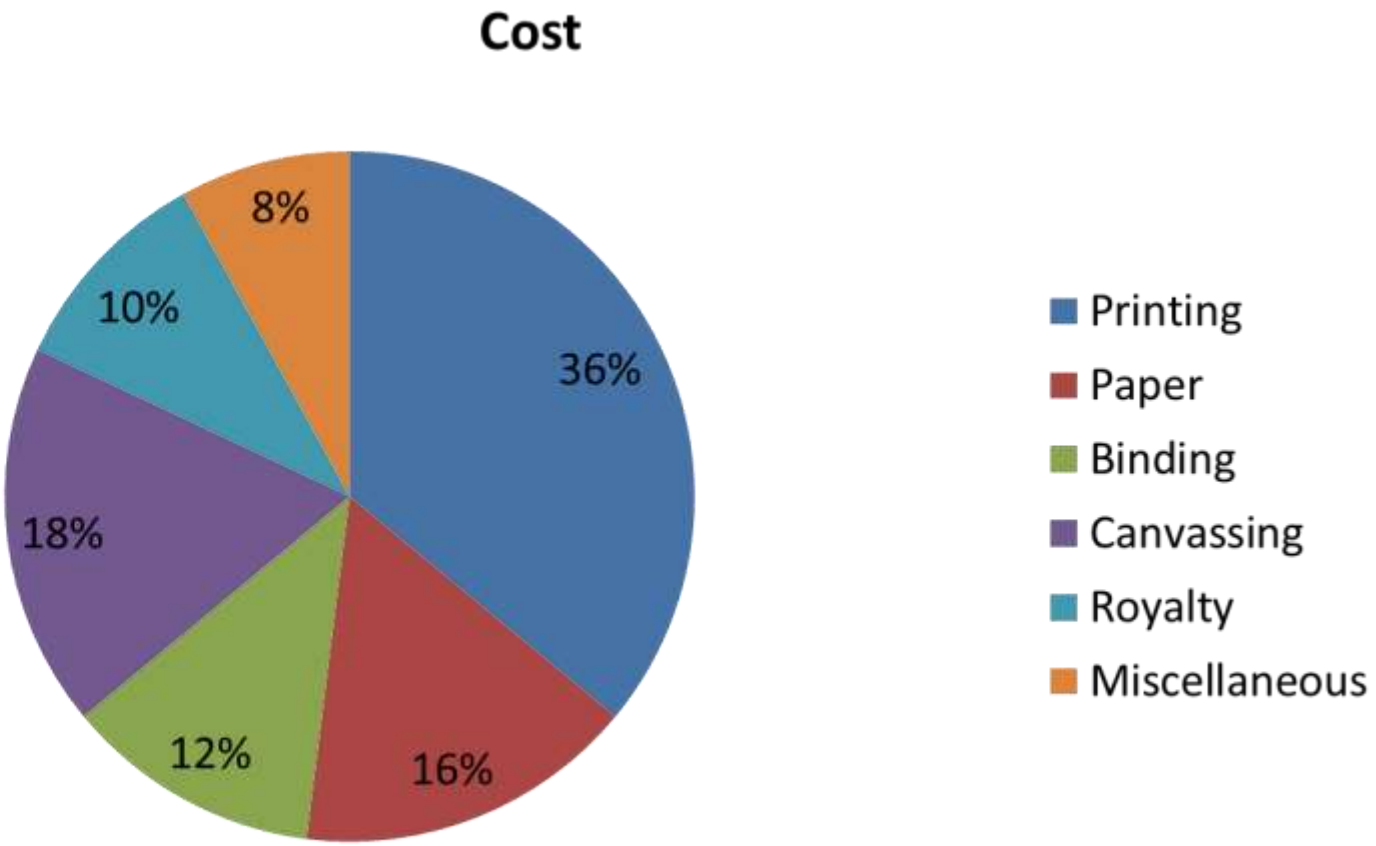
Ans: b)

15.If the total amount spent on sports during the year was Rs. 12000000, how much was spent on basket ball?

a) Rs. 950000
b) Rs. 1000000
c) Rs. 1200000
d) Rs. 1500000

Ans: d)

Directions (16-20) The pie chart given below shows the expenditure incurred in bringing out a book, by a publisher.



16.What is the central angle showing the cost of paper?

a) 16°
b) 3 2 °
c) 28 . 8 °
d) 57.6°

Ans: d)

17. If the cost of printing is Rs. 23400, the royalty is:

a) Rs. 6500
b) Rs. 2340
c) Rs. 4680
d) Rs. 7840

Ans: a)

18. 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

Ans: d)

19. Royalty on the book is less than canvassing expenditure by:

a) 8 %
b) 8 0%
c) 44 (4/9)%
d) None

Ans: c)

30. If 5500 copies are published and miscellaneous expenditures amount to Rs. 36960 andthe marked price is 40% above cost price, then the marked price of each copy is:

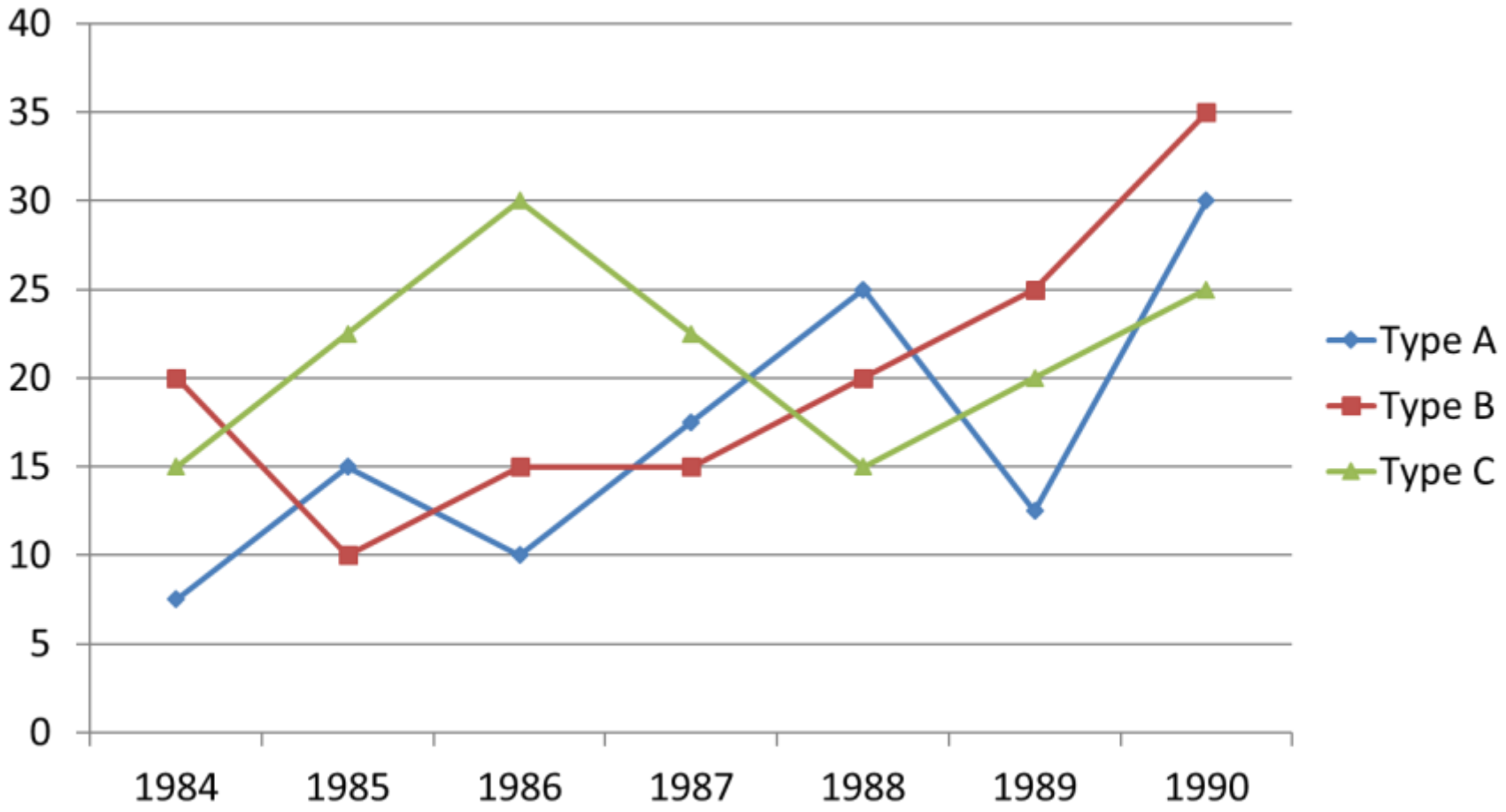
a) Rs. 122.50
b) Rs. 117.60
c) Rs. 126.40
d) Rs. 92.40

Ans: b)

TYPE3
LINE GRAPH

Direction (21-25) : 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)



21. What was the percentage increase in the production of C type vehicles from 1985 to1986?

a) 1 0
b) 5
c) 20
d) None of these

Ans: d)

22. The number of A type vehicles produced in 1986 was what percent of the number of C type vehicles produced in 1988?

a) 33 1/3
b) 66 2/3
c) 5 0
d) 1 5

Ans: c)

23. 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

Ans: b)

24. What was average number of B type vehicles produced by the company over the year s?

a) 20,000

b) 25,000

c) 15,000

d) 30,000

Ans: a)

25. In which of the following years was the total production of all the three types of vehicles 60,000?

a)19 85

b) 19 86

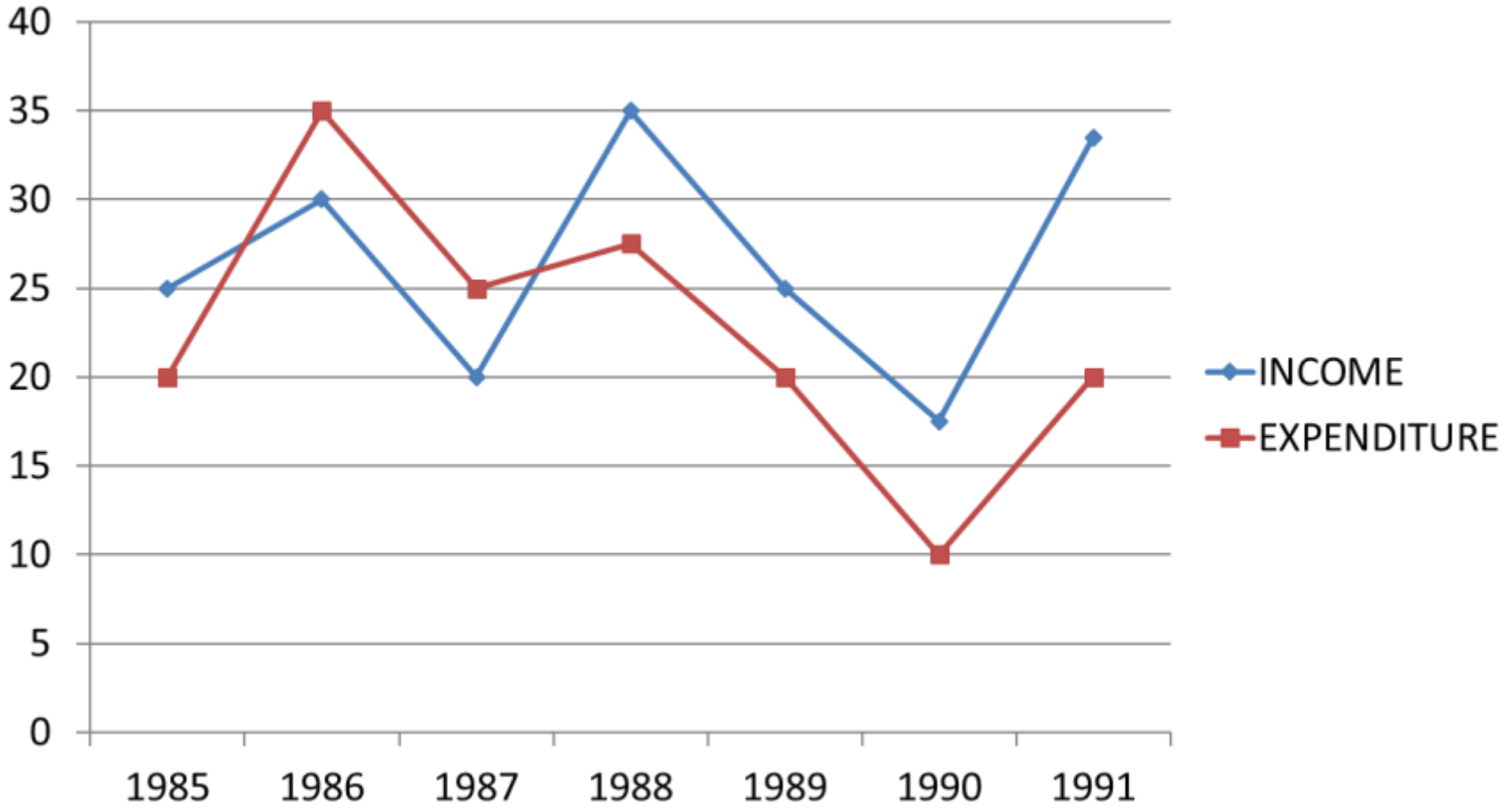
c) 19 87

d) 19 88

Ans: d)

Directions (Qs. 26 - 30) : Study the following graph carefully and answer the questions given below it.

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



26. In which of the following years was the difference between the income and the expenditure the maximum?

a) 19 88

b) 19 91

c) 19 86

d) 19 87

Ans: b)

27. 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

Ans: c)

28. What was the approximate percentage drop in expenditure from 1988 to 1989?

a) 3 5

b) 2 5

c) 7 5

d) 4 0

Ans: b)

29. What was the percentage increase in income from 1987 to 1988?

a)1 7 5

b) 7 5

c) 6 0

d) 1 2 5

Ans: b)

30. In how many of the given years was the expenditure more than the income?

a) 1

b) 3

c) 4

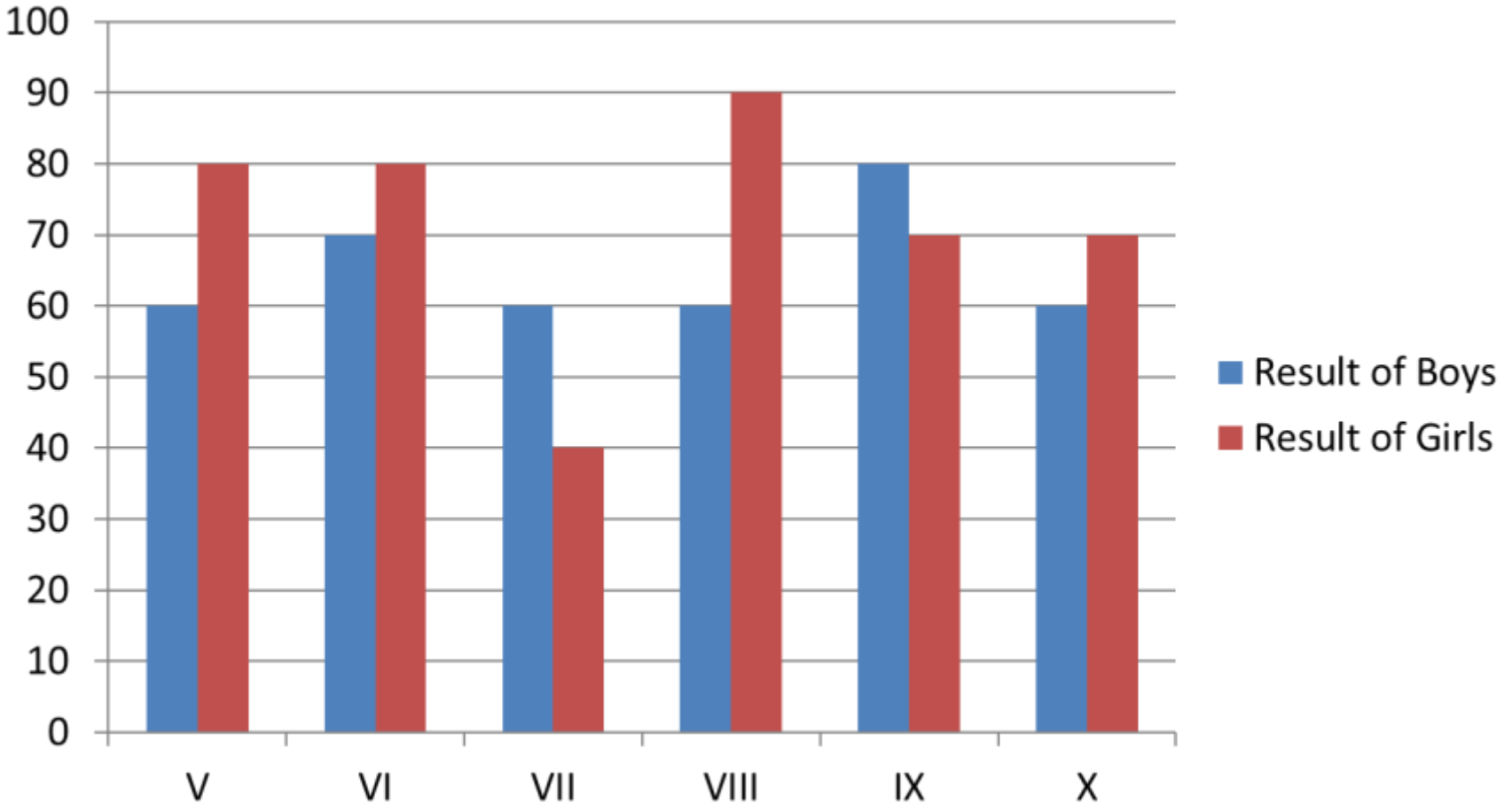
d) 2

Ans: d)

TYPE4
BAR CHART

Directions (31-35)Study the following graph and answer the questions given:

Result of Annual Examination In a High School



31. In which standard is the difference between the results of girls and boys maximum?

a) V

b) VII

c) X

d) VIII

Ans: d)

32. In which standard is the result of boys more than the average result of the girls?

a)VII

b) IX

c) VI

d) VIII

Ans: b)

33. 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

Ans:b)

34. 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

Ans: d)

35. In which standard is the failure of girls lowest?

a) IX

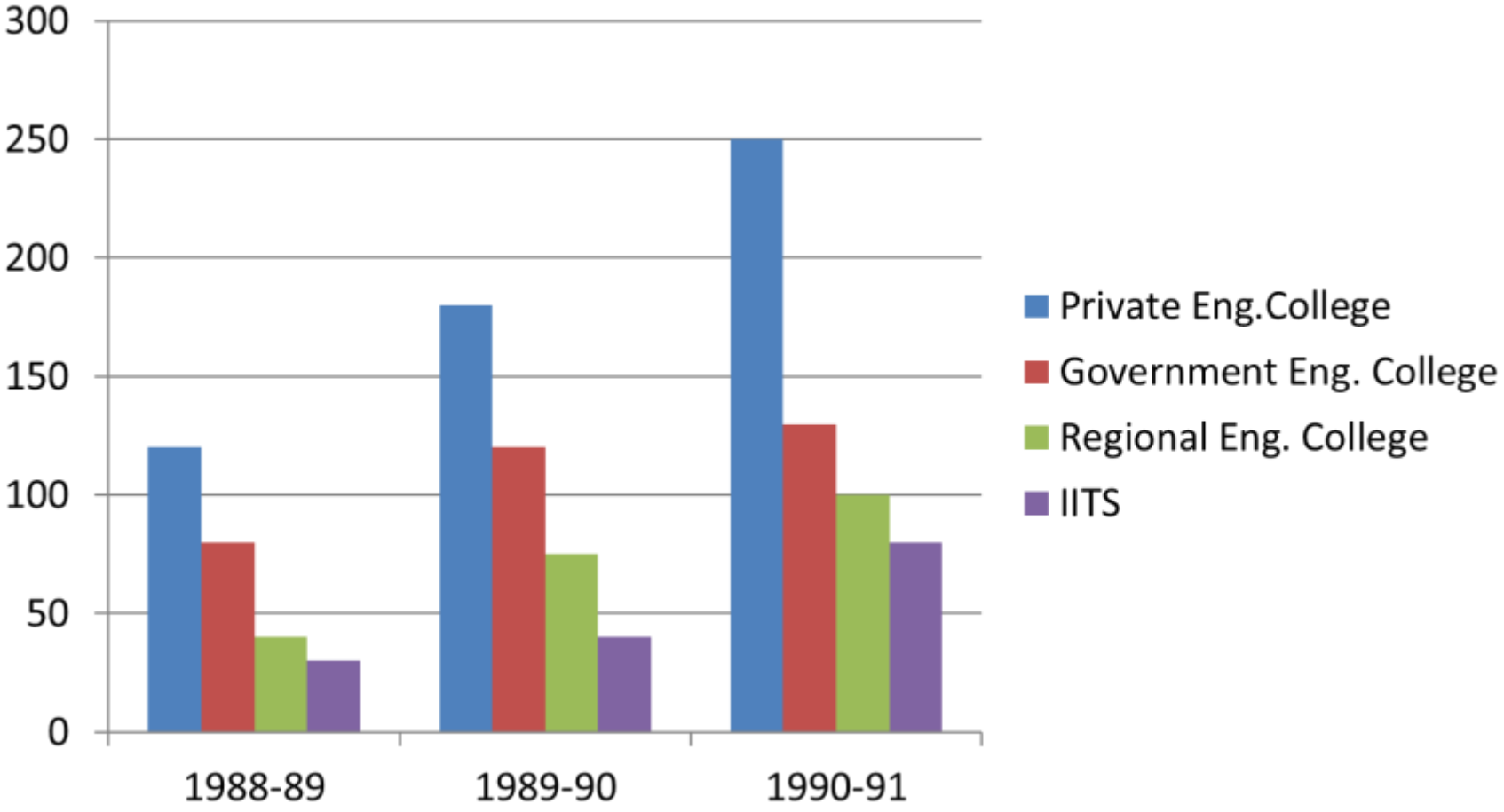
b) VII

c) VIII

d) V

Ans: c)

Directions(36-39)) Study the graph below and answer the questions that follow.



36. What was the total number of engineering students in 1989-90?

(a) 28500
(b) 4400
(c) 4200
(d) 42000
Ans: d)

37. The growth rate in students of Govt. Engg. Colleges compared to that of Private Eng. Colleges between 1988-89 and 1989-90 is:

(a) more
(b) less
(c) equal
(d) 3/2
Ans: c)

38. The total number of Engg. Students in 1991-92, assuming a 10% reduction in the number over the previous year, is

(a) 5700

(b) 57000

(c) 44800

(d) none of these

Ans: d)

39. In 1990 – 91, what percent of Eng. Students were studying at IIT's?

(a) 16%

(b) 15%

(c) 14%

(d) 12%

Ans: c)

PRACTICE QUESTIONS

Q.(1-4)The following table gives the percentage distribution of population of five states, P, Q, R, S and T on the basis of poverty line and also on the basis of sex.

STATE	Percentage of Population below the Poverty Line	Proportion of Males and Females	
		Below Poverty Line	Above Poverty Line
		M:F	M:F
P	35	5:6	6:7
Q	25	3:5	4:5
R	24	1:2	2:3
S	19	3:2	4:3
T	15	5:3	3:2

1. If the male population above poverty line for State R is 1.9 million, then the total population of State R is?

A.4.5 million

B.4.85 million

C.5.35 million

D.6.25 million

Ans: D

2. What will be the number of females above the poverty line in the State S if it is known that the population of State S is 7 million?

A.3 million

B.2.43 million

C.1.33 million

D.5.7 million

Ans: B

3. What will be the male population above poverty line for State P if the female population below poverty line for State P is 2.1 million?

A.2.1 million

B.2.3 million

C.2.7 million

D.3.3 million

Ans: D

4. If the population of males below poverty line for State Q is 2.4 million and that for State T is 6 million, then the total populations of States Q and T are in the ratio?

A.1:3

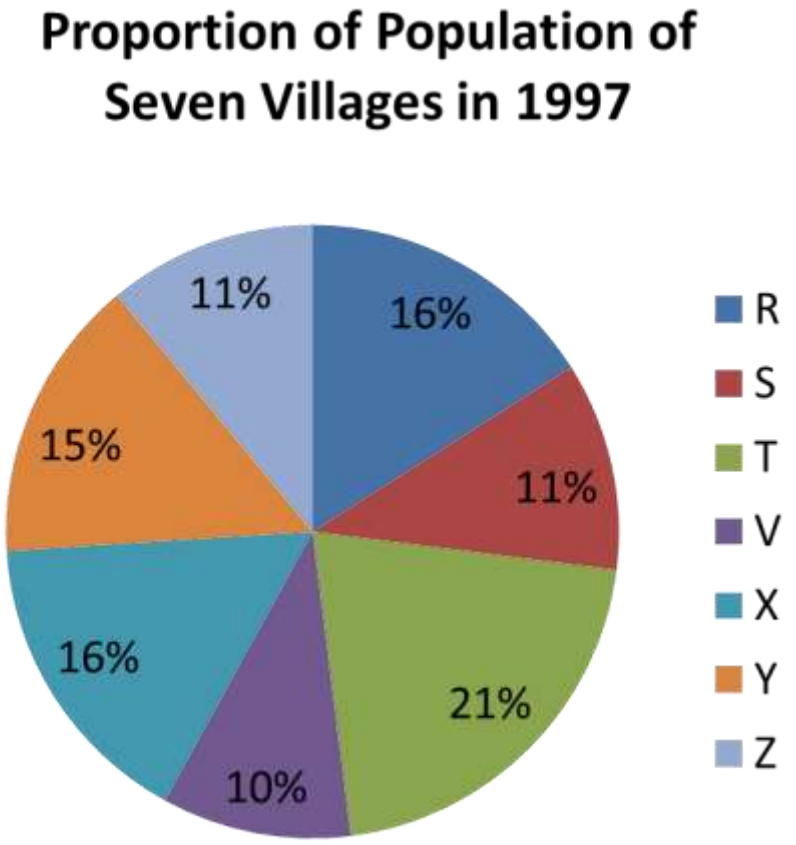
B.2:5

C.3:7

D.4:9

Ans: B

Q.(5-9)Study the following pie-chart and the table and answer the questions based on them.



VILLAGE	% Population below Poverty Line
R	38
S	52
T	42
V	51
X	49
Y	46
Z	58

5. 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
Ans: B

6. 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
Ans: C

7. 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
Ans: C

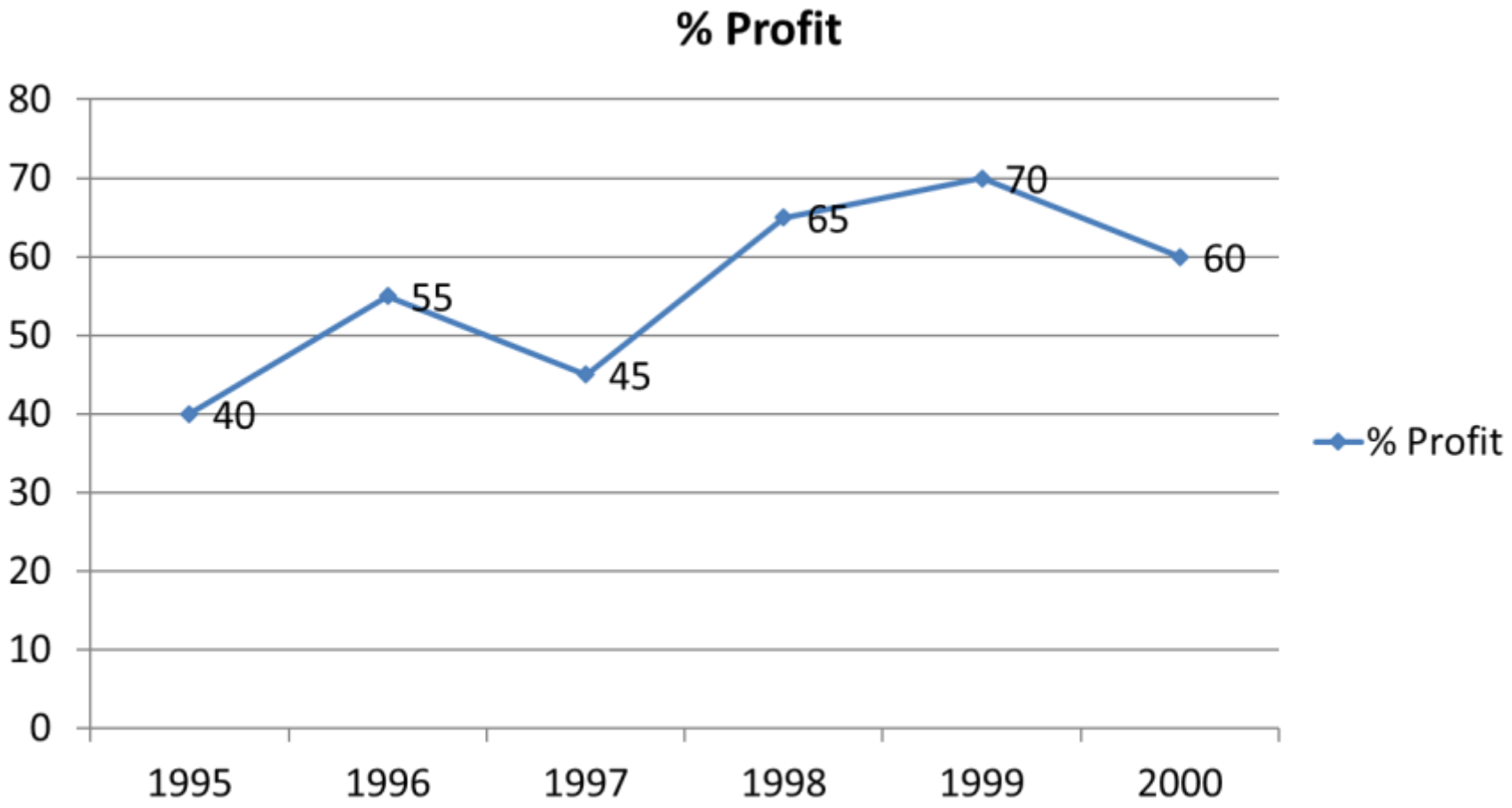
8. If in 1998, the population of villages Y and V increase by 10% each and the percentage of population below poverty line remains unchanged for all the villages, then find the population of village V below poverty line in 1998, given that the population of village Y in 1997 was 30000.

A.11250
B.12760
C.13140
D.13780
Ans: B

Q(9-14)The following line graph gives the annual percent profit earned by a Company during the period 1995 - 2000.

Percent Profit Earned by a Company Over the Years.

%Profit ={(Income – Expenditure)/Expenditure}*100



9.If the expenditures in 1996 and 1999 are equal, then the approximate ratio of the income in 1996 and 1999 respectively is?

A.1:1

B.2:3

C.13:14

D.9:10

Ans: D

10. If the income in 1998 was Rs. 264 crores, what was the expenditure in 1998?

A.Rs. 104 crores

B.Rs. 145 crores

C.Rs. 160 crores

D.Rs. 185 crores

Ans: C

11.If the profit in 1999 was Rs. 4 crores, what was the profit in 2000?

A.Rs. 4.2 crores

B.Rs. 6.6 crores

C.Rs. 6.8 crores

D.Cannot be determined

Ans: D

12. What is the average profit earned for the given years?

A.50(2/3)

B.55(5/6)

C.60(1/6)

D.335

Ans: B

13.During which of the following year was the ratio of income to the expenditure the minimum?

A.1996

B.1997

C.1998

D.1999

Ans: B

14. If the expenditure in 2000 is 25% more than expenditure in 1997, then the income in 1997 is what percent less than the income in 2000?

A.22.5%

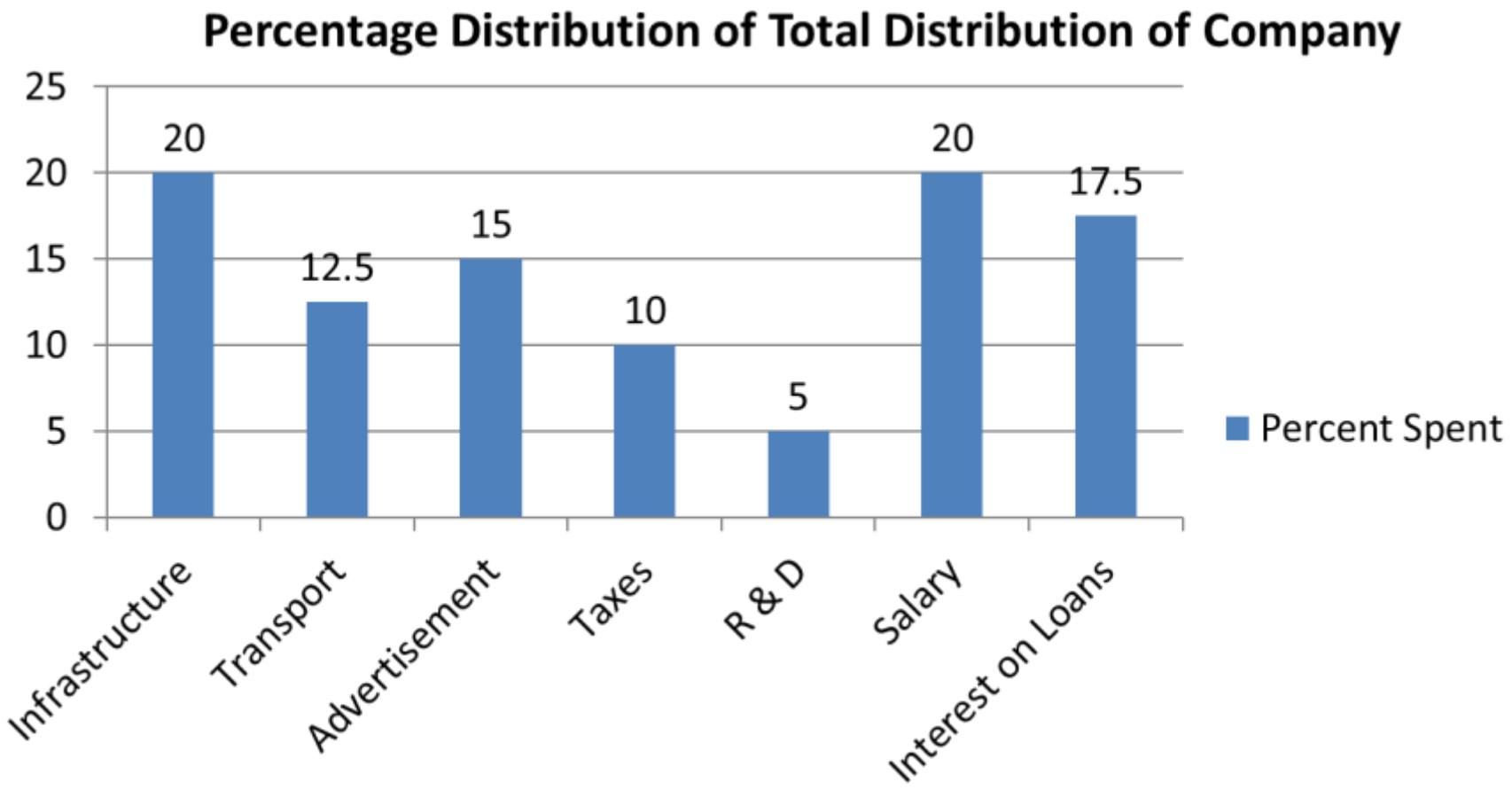
B.25%

C.27.5%

D.31.25%

Ans: C

Q.(15-19) The bar graph given below shows the percentage distribution of the total expenditures of a company under various expense heads during 2003.



15.The total amount of expenditures of the company is how many times of expenditure on research and development?

A.27

B.20

C.18

D.8

Ans: B

16. If the expenditure on advertisement is 2.10 crores then the difference between the expenditure on transport and taxes is?

A.Rs. 1.25 crores

B.Rs. 95 lakhs

C.Rs. 65 lakhs

D.Rs. 35 lakhs

Ans: D

17. What is the ratio of the total expenditure on infrastructure and transport to the total expenditure on taxes and interest on loans?

A.5:4

B.8:7

C.9:7

D.13:11

Ans: D

18. If the interest on loans amounted to Rs. 2.45 crores then the total amount of expenditure on advertisement, taxes and research and development is?

A.Rs. 7 crores

B.Rs. 5.4 crores

C.Rs. 4.2 crores

D.Rs. 3 crores

Ans: C

19.The expenditure on the interest on loans is by what percent more than the expenditure on transport?

A.5%

B.10%

C.20%

D.40%

Ans: D

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 organizing and interpreting data to get meaningful information is Data Interpretation.

There are of chart are here that we will discuss in the section

1. Table Chart
2. Bar Chart
3. Line Chart
4. Pie Chart

Table Chart

- A table chart is a means of arranging data in rows and columns. The use of tables is pervasive throughout all communication, research and data analysis.
- They are best used for comparison, composition, or relationship analysis when there are only few variables and data points.

Q1. The following table gives the percentage of marks obtained by seven students in six different subjects in an examination.

The Numbers in the Brackets give the Maximum Marks in Each Subject.

Student	Subject (Max. Marks)					
	Maths	Chemistry	Physics	Geography	History	Computer Science
	(150)	(130)	(120)	(100)	(60)	(40)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	60
Muskan	80	65	85	95	50	90
Tanvi	70	75	65	85	40	60
Tarun	65	35	50	77	80	80

Q1. What are the average marks obtained by all the seven students in Physics? (rounded off to two digit after decimal)

A. 77.26

B. 89.14

C. 91.37

D. 96.11

Q2. The number of students who obtained 60% and above marks in all subjects is?

A. 1

B. 2

C. 3

D. None

Q3. What was the aggregate of marks obtained by Sajal in all the six subjects?

A. 409

B. 419

C. 429

D. 449

Q4. In which subject is the overall percentage the best?

A. Maths

B. Chemistry

C. Physics

D. History

Q5. What is the overall marks of Tarun?

A. 52.5%

B. 55%

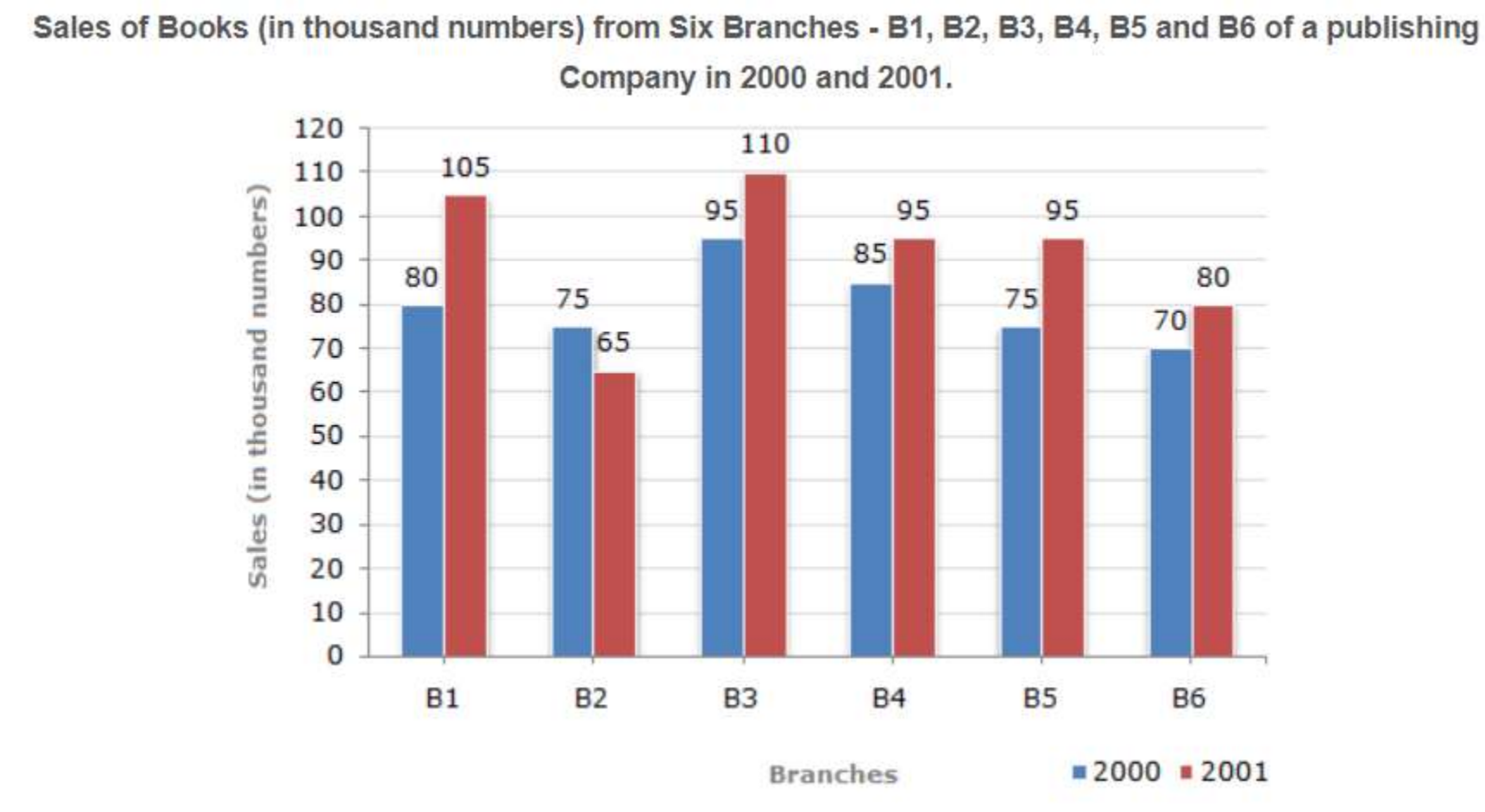
C. 60%

D. 63%

Bar Chart

A bar chart or bar graph is a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a column chart.

Q2. The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.



Q1. What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?

A. 2:3

B. 3:5

C. 4:5

D. 7:9

Q2. Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?

A. 68.54%

B. 71.11%

C. 73.17%

D. 75.55%

Q3. What percent of the average sales of branches B1, B2 and B3 in 2001 is the average sales of branches B1, B3 and B6 in 2000?

A. 75%

B. 77.5%

C. 82.5%

D. 87.5%

Q4. What is the average sales of all the branches (in thousand numbers) for the year 2000?

A. 73

B. 80

C. 83

D. 88

Q5. Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers) is?

A. 250

B. 310

C. 435

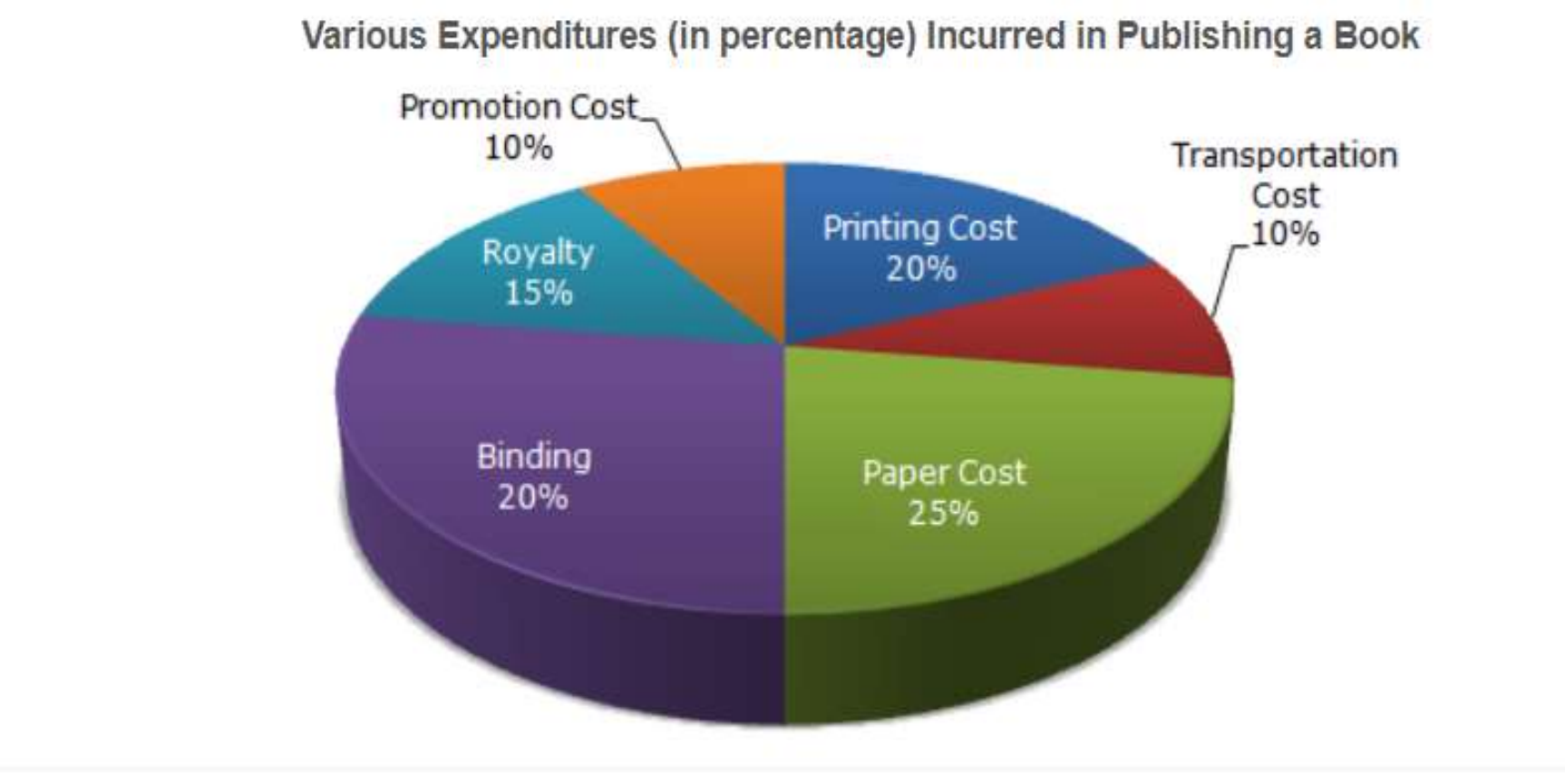
D. 560

Pie Chart

- A Pie Chart is a type of graph that displays data in a circular graph. The pieces of the graph are proportional to the fraction of the whole in each category. In other words, each slice of the pie is relative to the size of that category in the group as a whole.

- Pie charts can be helpful for showing the relationship of parts to the whole when there are a small number of levels.

Q3. The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie-chart and the answer the questions based on it.



Q1. If for a certain quantity of books, the publisher has to pay Rs. 30,600 as printing cost, then what will be amount of royalty to be paid for these books?

A. Rs. 19,450

B. Rs. 21,200

C. Rs. 22,950

D. Rs. 26,150

Q2. What is the central angle of the sector corresponding to the expenditure incurred on Royalty?

A. 15°

B. 24°

C. 54°

D. 48°

Q3. The price of the book is marked 20% above the C.P. If the marked price of the book is Rs. 180, then what is the cost of the paper used in a single copy of the book?

A. Rs. 36

B. Rs. 37.50

C. Rs. 42

D. Rs. 44.25

Q4. If 5500 copies are published and the transportation cost on them amounts to Rs. 82500, then what should be the selling price of the book so that the publisher can earn a profit of 25%?

A. Rs. 187.50

B. Rs. 191.50

C. Rs. 175

D. Rs. 180

Q5. Royalty on the book is less than the printing cost by:

A. 5%

B. 33(1/5) %

C. 20%

D. 25%

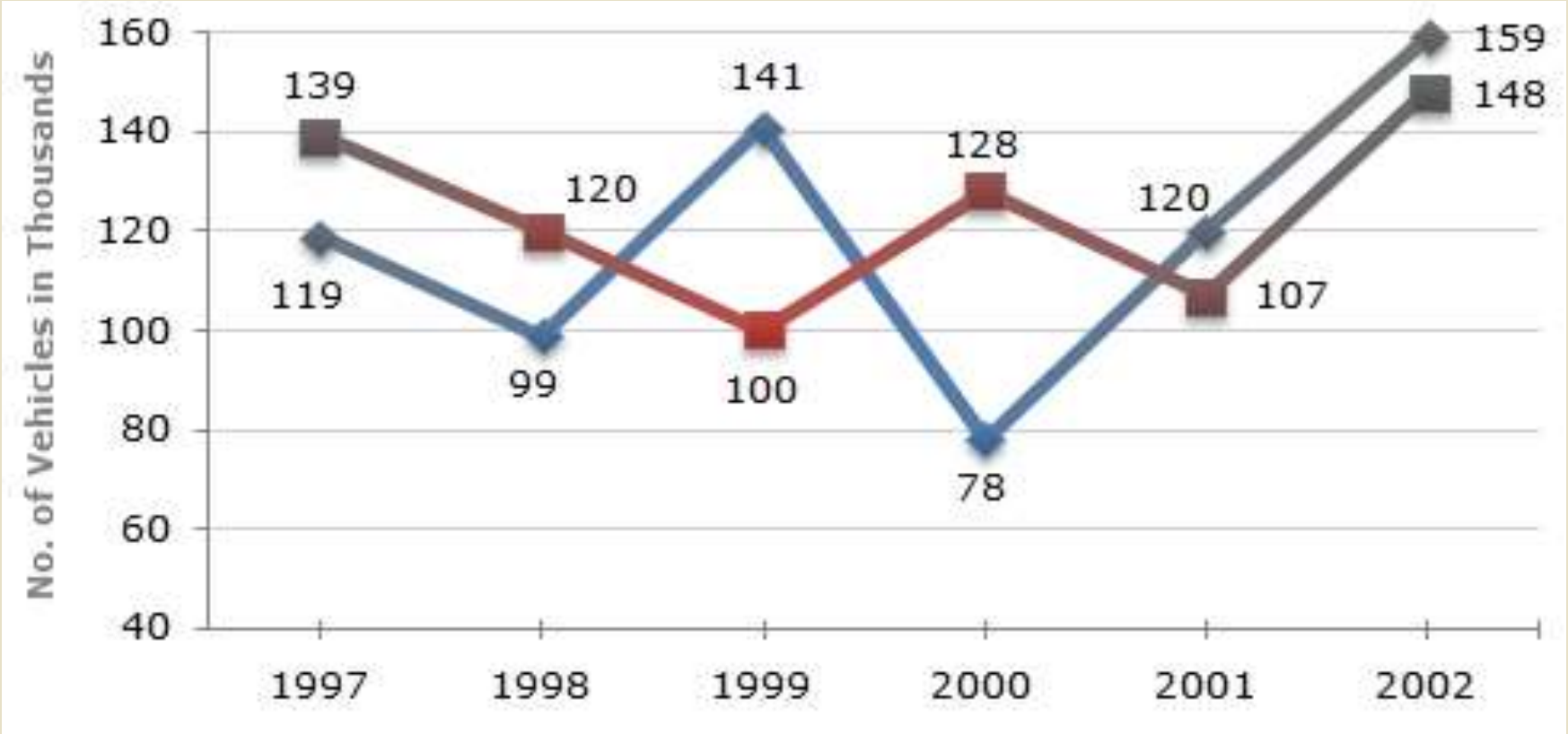
Line Chart

- A line chart is a type of chart that displays information as a series of data points connected by straight line segments. A line chart is a way of visually representing an asset's price history using a single, continuous line.

Q4. Study the following line graph and answer the questions based on it.

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

(Rectangle = Company Y , Diamond= Company X)



Q1. 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

Q2. What is the difference between the total productions of the two Companies in the given years ?

A. 19000 B. 22000 C. 26000 D. 28000

Q3. 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

Q4. In which of the following years, the difference between the productions of Companies X and Y was the maximum among the given years ?

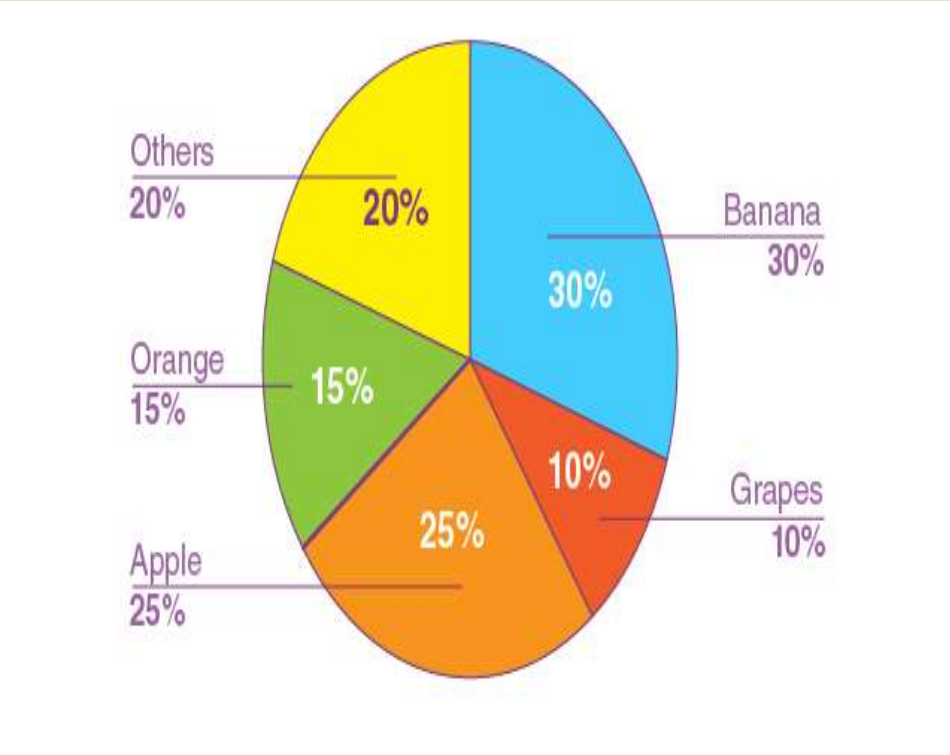
A. 1997 B. 1998 C. 1999 D. 2000

Q5. 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

Question:

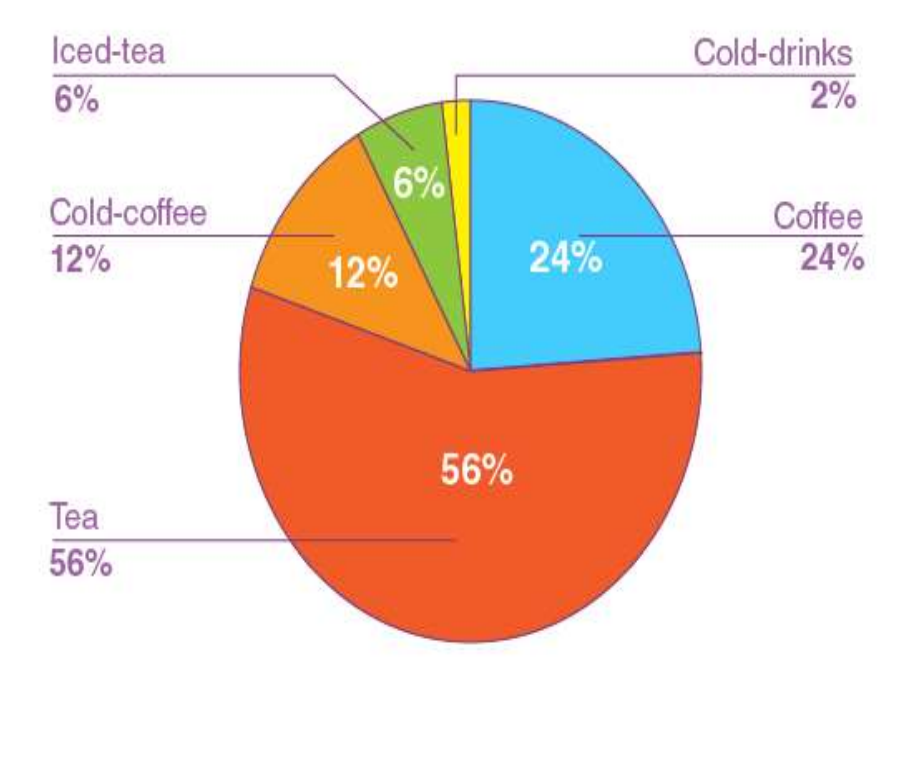
The below pie chart shows the sale of different fruits in a day for a shop:



- **Answer the following questions based on the pie chart:**
- **(i) If a total of 1200 kg of fruits were sold in a day, calculate the amount of bananas sold (in kg).**
- **(ii) Find the difference between sales of grapes and oranges.**
- **(iii) Calculate the central angle for others.**

Question:

In the summer, a survey was conducted among 400 people about their favourite beverages. The following pie chart shows the data:



- **Answer the following questions:**
- **(i) How many people like tea?**
- **(ii) How many more people like coffee than cold coffee?**
- **(iii) What is the total central angle for iced tea and cold-drinks?**

Data Sufficiency

Anatomy of a Data Sufficiency question:

- ✓ While the genre of Data Sufficiency is unique, the structure is not – all Data Sufficiency questions are structured exactly the same, with three key elements:
- ✓ The question stem (which may or may not contain important facts), the statements (always two statements), and the answer choices (which are always exactly the same).

Consider this example to see what a Data Sufficiency question will look like:

QUESTION STEM

- By what percent was the price of a certain candy bar increased?

STATEMENTS

- The price of the candy bar was increased by 5 cents.
- The price of the candy bar after the increase was 45 cents

ANSWER CHOICES:

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- EACH statement ALONE is sufficient.
- BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

- If you’re relatively new to Data Sufficiency, the most striking feature of this question is likely the answer choices – they’re not numbers that might answer the questions, they’re more logical descriptions of when you might be able to answer the question.
- The good news is that the answer choices are always the same, so you have plenty of opportunities to practice with them.
- By the time you take the test, you shouldn’t even have to glance down at the answer choices because you’ll already know them so well, but that takes practice.

How to Approach Each Question

The following is an outline of the core approach that you should use every time you answer a Data Sufficiency question:

- ✓ Read the question carefully and assess all information that is provided (or not provided) in the question stem. Organize this information so that you under-stand exactly what you will need to sufficiently answer the question.
- ✓ Note: **On many Data Sufficiency questions, the most important information is cleverly hidden in the question stem itself.**
- ✓ Avoid careless assumptions.

- **Do not assume anything that is not explicitly provided in the question stem or the statements that follow**.
- For instance, do not assume that x and y are integers unless it is explicitly given or can be deduced from the question stem or statements. Unless instructed otherwise, assume that fractions, negatives, and zero are all included in the set of potential values.
- Make a quick judgment on which statement is easier to assess and start with that one.
- **The order in which statements are analyzed does not matter.**
- By starting with the easier statement, you simplify the decision tree and leverage easier information first.

To internalize the answer choices and have a system to attack them, you should use a system.

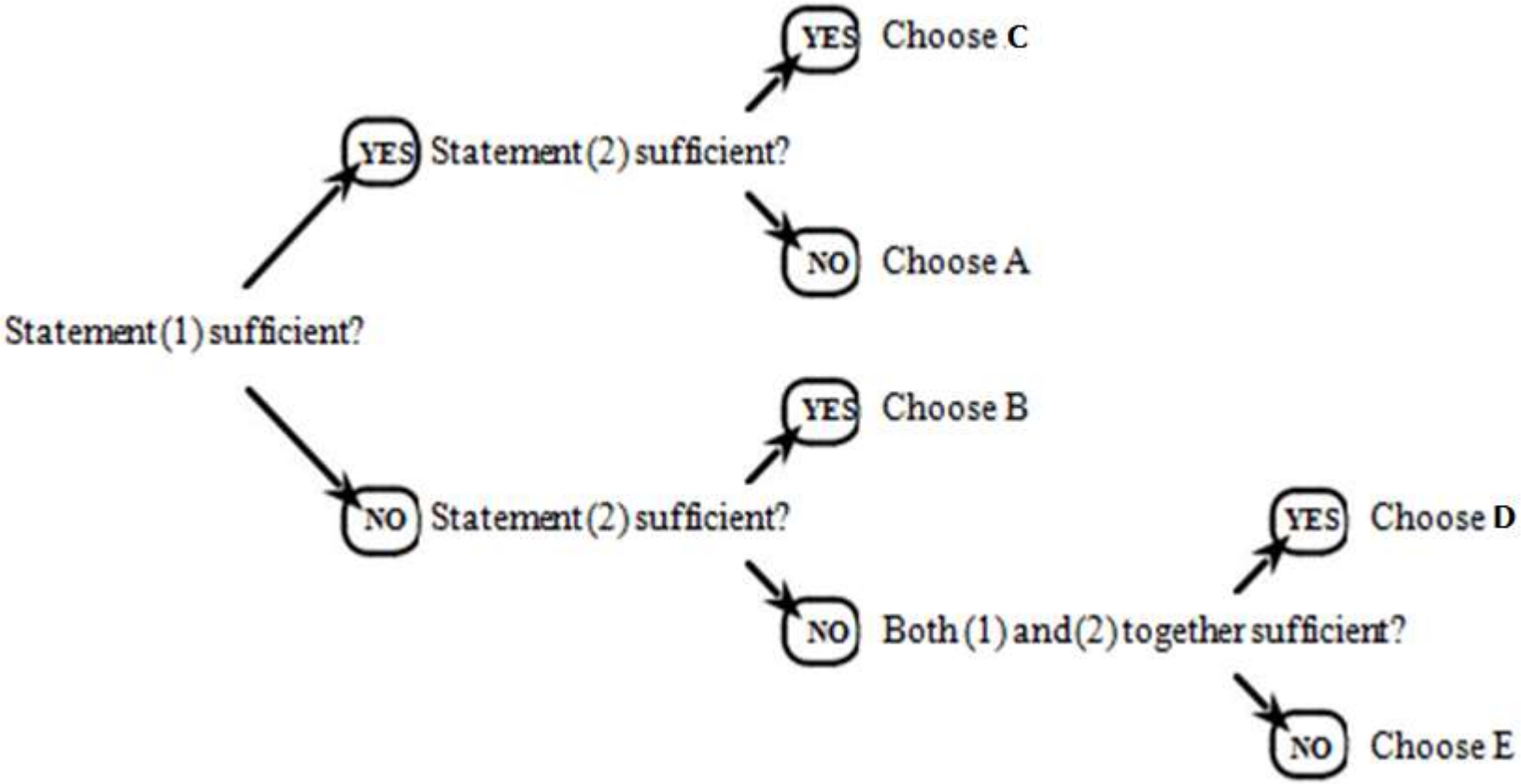
For every Data Sufficiency question, ask yourself the following questions (if starting with statement (1)):

- ✓ Is the information in statement (1) alone enough to answer the question?
- ✓ Is the information in statement (2) alone enough to answer the question?
- ✓ Can I answer the question if I combine the information from statements (1) and (2)?

(Only ask this of yourself if neither statement alone was enough to answer the question.)

Data Sufficiency Decision Tree:

Assess each statement to determine whether it is sufficient or not, and this tree will lead you to the correct answer:



PRACTICE QUESTIONS:

Each problem consists of a question and two statements, labeled (I) and (II), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question.

Mark,

A. If statement (i) ALONE is sufficient, but statement (ii) alone is not sufficient to answer the question asked.

B. If statement (ii) ALONE is sufficient, but statement (i) alone is not sufficient to answer the question asked.

C. If EACH statement ALONE is sufficient to answer the questions asked.

D. If BOTH statements (i) and (ii) TOGETHER are sufficient to answer the question asked, but NEITHER statement ALONE is sufficient

E. If statements (i) and (ii) TOGETHER are NOT sufficient to answer the question asked and additional data specific to the problem are needed.

Q1.

Five persons are to be seated in a round table conference, who will be seated between Ram and Gita?

I. Ram will sit on the right of Vinay and on the left of Kamal.

II. There will be two persons seated between Vinay and Kamal.

Q2.

When is the next bus scheduled for Mumbai from Delhi?

I. Every 30 minutes a bus is scheduled for Mumbai from Delhi. The return bus leaves Mumbai from Delhi every 45 minutes.

II. It is 4.45pm now .15 minutes ago one bus has left for Mumbai as per the schedule whereas the bus from Mumbai has arrived about 30minutes ago.

Q3.

Among four friends P,Q,R and S, who has scored the highest runs in the cricket match?

I. P took more wickets than S but scored less runs than R.

II. Q scored more runs than P but took less wickets than S and R.

Q4. Among five friends P,Q,R,S and T, who ranks 3rd in terms of salary obtained by them?

I. T’s salary is more than P and Q but not more than S.

II. R’s salary is the lowest among them.

Q5.

How long does it take to reach city Y from city X?

I. Sangeeta was scheduled to leave the city X at 17.15 hours but got late by 45minutes and reached city Y at 16.15 hours the next day.

II. Sangeeta reached the bus stand of city X at 14.25 hours and got the bus after waiting for 35 minutes. She reached city Y at 3.15 hours the next day.

Q6.

Among P, K, D and R, who could be the son of M?

I. P and K are sisters

II. D is the mother of K and wife of M.

Q7.

Who among N, F, P, J and D is youngest?

I. P and J are younger than N and D.

II. F is younger than N, D and P but older than J.

Q8.

Who among T, R and S is (are) to the East of P?

I. R, who is to the West of P, is not as near to S as P, S is in the farthest East.

II. P is not as far away from S and T

Q9.

What is K’s rank from the bottom in a class of thirty students?

I.M’s position is 3rd from the top and there are five students between M and K.

II. P’s position is 4th from the bottom and there are 7 students between P and K.

Q10.

Who is to the immediate right of Mohan when Mohan, Salil, Bhusan, Suresh and Jayesh are sitting around a circle facing at the centre?

I.Salil is 3rd to the left of Mohan.

II. Bhusan is between Salil and Jayesh.

Q11.

What is the rate of interest p.a on a sum of Rs. 12000 deposited in a bank?

I. The difference between the simple interest and the compound interest is Rs 172.8.

II. The simple interest for two years is Rs. 2880.

Q12.

What is the profit earned by selling the laptop for Rs 26,250?

I. The cost price of five such laptops is equal to selling price of 4 such laptops.

II. 25% of the profit is earned by selling each laptop.

Q13.

How many women can complete a piece of work in 15 days?

I. If 12 women can complete the same piece of work in 20 days.

II. If 10 men can complete the same piece of work in 12 days.

Q14.

Question: In which year was Rahul born ?

Statements:

I. Rahul at present is 25 years younger to his mother.

II. Rahul's brother, who was born in 1964, is 35 years younger to his mother.

Q15.

What is the age of C in a group of A, B, C, D and E whose average is 45 years?

I. Average of the ages of A and B is 53.

II. Average of the ages of D and E is 47.

Q16.

In a library 10% of the books are added every year, what was the number of books that the library had in 1994?

I. During 1996, 10,000 books were added

II. During 1995, the library had 1,00,000 books

Q17.

What is the difference in the ages of P and K?

I. P is 20 years older than M

II. M is 2 years younger than Z

Q18.

D is the sister of C. how is D related to A?

I. A is the sister of B

II. B is the brother of C

Q19.

A, B,C,D and E are sitting in a row. What is the position of B from the left end?

I. A is sitting at one end second right of D who is the immediate neighbour of C and B

II. E is to the left of B

Q20.

How INDIA will be coded?

I. If ALIVE is coded as LAIEV

II. If JAPAN is coded as AJPNA

Q21.

What will come in place of c in the series a,b,c,d,e?

I. a,b,c,d,e are five consecutive even numbers

II. common difference between two consecutive numbers is 2 and a is the second smallest natural number

Q22.

Who among A,B,C,D and E is the smallest?

I. B is taller than E and D is taller than A but smaller than E.

II. D is not the tallest and C is not the smallest

Q23.

X borrowed Rs. 1000 from Y on SI. What is the rate per annum?

I. After 4yrs, X paid Rs. 100 as interest.

II. After 4yrs, X paid Rs. 1100 to settle the loan.

Q24.

What is the total salary of Mr. X and his wife at present?

I. Salary of X and his wife together is 20% more than what they earned last month.

II. Last month salary of X was Rs. 600 more than that of his wife.

Q25.

A figure is composed of ten 1- inch cubes. What is the weight?

I. The cubes are arranged in five rows to two each.

II. The cubes have an average weight of 1 ounce each.