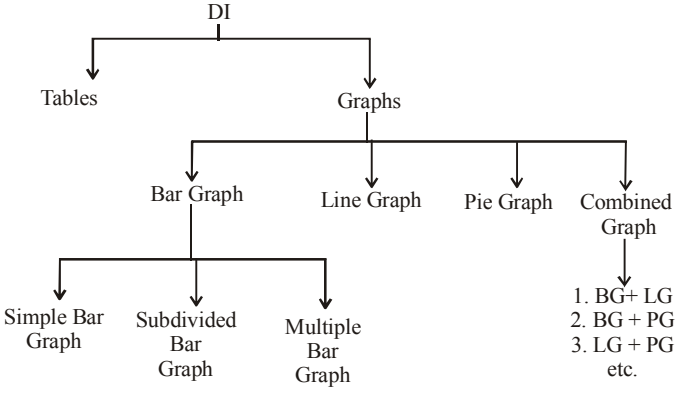
CHAPTER 1

Data Interpretation

INTRODUCTION

Data Interpretation questions are based on the information given in the tables and graphs.

Classification of Data Interpretation



TABLES

A table is one of the easiest way for summarising data.
A statistical table is the logical listing of related quantitative data in vertical columns and horizontal rows of numbers with sufficient explanatory and qualifying words, phrases and statements in the form of titles, heading and notes to make clear the meaning of data.

REMEMBER

$$\text{Average} = \frac{\text{Sum of all items}}{\text{Total number of items}}$$

λ = The bars are drawn proportional in length to the total and then divided in the ratios of their components.
% change (increase or decrease)

$$= \frac{\text{Final value} - \text{Initial value}}{\text{Initial value}} \times 100$$

GRAPHS

Graphs are a convenient way to represent information. The graphs should be labelled properly to show what part of the graphs shows what a value.

1. Bar Graph

Bar diagram consists of a number of equidistant rectangles. One for each category of the data in which the magnitudes are represented by the length or height of rectangle, whereas width of rectangles are immaterial. Thus, a bar is just one dimensional as only the length of the bar is to be considered and not the width. All the bars drawn in a diagram are generally of uniform width which depends on the number of bars to be constructed and the availability of the space.
Types of Bar Graphs are–

(i) Simple Bar Graph

It is used to represent only one dependent variable.

(ii) Sub-divided Bar Graphs

These are used to represent the break down of a total into its component bars. A bar is divided into different segments, each segment respresents a given component. Different shades, colours, designs etc. are used to distinguish the various components. An index is given to represent the various components. To compare, the order of various components in the different bars is same.

(iii) Multiple Bar Graph (MBG)

When a combination of inter-related variables are to be represented graphically, multiple bar diagrams are used. These are extended form of simple bar diagrams. In M.B.G. many aspects of the data are presented simultaneously with separated bars or various shades of colours. An index is given to explain the shades or colours used.

2. Line Graph (LG)

LG are used to show how a quantity changes, very often the quantity is measured as time changes. If the line goes up, the quantity is increasing and the line goes down, the quantity is decreasing. If the line is horizontal, the quantity is not changing.

3. Pie Graph (PG)

It is s a pictorial representation of numerical data by non-intersecting adjacent sectors of a circle sector's area of each sector is proportional to the magnitude of the data represented by the sector.

$$1\% \text{ of total value} = \frac{360}{100} = 3.6^\circ$$

The % of components parts can be converted to degrees by multiplying 3.6°.
Degree of any component part

$$= \frac{\text{component value}}{\text{total value}} \times 360 .$$

EXERCISE

Directions (Qs.1-5): Study the following table to answer the given questions:

Percentage of marks obtained by seven students in six subjects

Subject (Max, Marks ↓ Students	Eng	His	Com	Math	Science	Econ
	(100)	(100)	(100)	(100)	(100)	(100)
Meera	100	80	50	90	90	60
Subodh	80	70	80	100	80	40
Kunal	90	70	60	90	70	70
Soni	60	60	65	80	80	80
Richu	50	90	62	80	85	95
Irene	40	60	64	70	65	85
Vgay	80	80	35	65	50	75

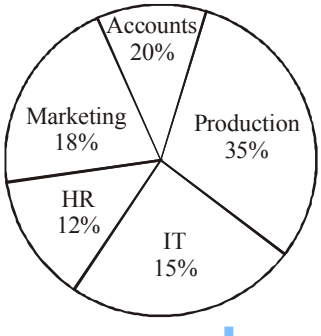
1. What is the total marks obtained by Meera in all the subject?
   (a) 448 (b) 580
   (c) 470 (d) 74.67
   (e) None of these
2. What is the average marks obtained by these seven students in History? (rounded off to two digits)
   (a) 72.86 (b) 27.32
   (c) 24.86 (d) 29.14
   (e) None of these
3. How many students have got 60% or more marks in all the subjects?
   (a) One (b) Two
   (c) Three (d) Four
   (e) None of these
4. What is the overall percentage of Kunal ?
   (a) 64 (b) 65
   (c) 75 (d) 64.24
   (e) None of these
5. In which subject is the overall percentage the best ?
   (a) Maths (b) Economics
   (c) History (d) Science
   (e) None of these

Directions (Qs. 6- 10): Study the given pie-charts carefully to answer the questions that follow :

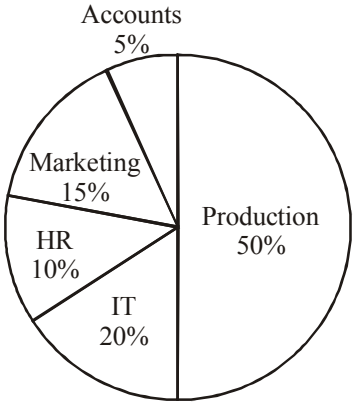
Breakup of Number of Employees working in Different Departments of an Organisation, the Number of Males and the Number of Employees Who Recently Got Promoted. In Each Department Break-UP of Employees Working In Different Departments:

Total Number of Employees = 3,600

Employees Working in Different Departments

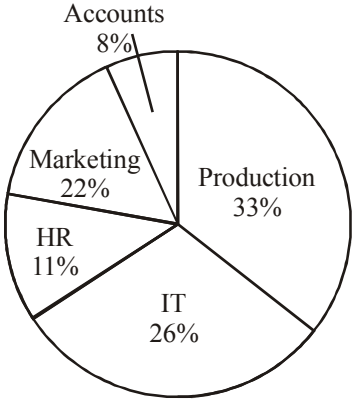


Break-UP of Number of Males In Each Department Total Number Of Males In the Organisation = 2,040 Break-UP of Number of Males Working In Each Department



Break-UP of Number of Employees who recently got promoted In Each Department

Total Number of Employees who got promoted = 1,200 Number of Employees Who Recently Got Promoted From Each Department



6. If half of the number of employees who got promoted from the IT department were males, what was the **approximate** percentage of males who got promoted from the IT department?
   (a) 61 (b) 29
   (c) 54 (d) 42
   (e) 38
7. What is the total number of females working in the Production and Marketing departments together ?
   (a) 468 (b) 812
   (c) 582 (d) 972
   (e) None of these
8. How many females work in the Accounts department ?
   (a) 618 (b) 592
   (c) 566 (d) 624
   (e) None of these

9. The total number of employees who got promoted from all the departments together was what percent of the total number of employees working in all the departments together ? (Rounded off to the nearest integer)
(a) 56 (b) 21
(c) 45 (d) 33
(e) 51

10. The number of employees who got promoted from the HR department was what percent of the total number of employees working in that department ?
(rounded off to two digits after decimal)
(a) 36.18 (b) 30.56
(c) 47.22 (d) 28.16
(e) None of these

Directions (Qs. 11 - 15): Study the information carefully to answer the questions that follow:

A school consisting of a total of 1560 students has boys and girls in the ratio of 7 :5 respectively. All the students are enrolled in different types of hobby classes, viz: Singing, Dancing and Painting. One-fifth of the boys are enrolled in only Dancing classes. Twenty percent of the girls are enrolled in only Painting classes. Ten percent of the boys are enrolled in only Singing classes. Twenty four percent of the girls are enrolled in both Singing and Dancing classes together. The number of girls enrolled in only Singing classes is two hundred percent of the boys enrolled in the same. One-thirteenth of the boys are enrolled in all the three classes together. The respective ratio of boys enrolled in Dancing and Painting classes together to the girls enrolled in the same is 2 : 1 respectively. Ten percent of the girls are enrolled in only Dancing classes whereas eight percent of the girls are enrolled in both Dancing and Painting classes together. The remaining girls are enrolled in all the three classes together. The number of boys enrolled in Singing and Dancing classes together is fifty percent of the number of girls enrolled in the same. The remaining boys are enrolled in only Painting classes.

11. What is the total number of boys who are enrolled in Dancing ?
(a) 318 (b) 364
(c) 292 (d) 434
(e) None of these

12. Total number of girls enrolled in Singing is **approximately** what percent of the total number of students in the school?
(a) 37 (b) 19
(c) 32 (d) 14
(e) 26

13. What is the total number of students enrolled in all the three classes together ?
(a) 135 (b) 164
(c) 187 (d) 142
(e) None of these

14. Number of girls enrolled in only Dancing classes is what percent of the boys enrolled in the same ? (rounded off to two digits after decimal)
(a) 38.67 (b) 35.71
(c) 41.83 (d) 28.62
(e) None of these

15. What is the respective ratio of the number of girls enrolled in only Painting classes to the number of boys enrolled in the same?
(a) 77 : 26 (b) 21 : 73
(c) 26 : 77 (d) 73 : 21
(e) None of these

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

Number & Percentage of Candidates Qualified in a Competitive Examination:

Number of Candidates appeared in a Competitive Examination From Five Centres Over The Years

Centre → Year ↓	Mumbai	Delhi	Kolkata	Hyderabad	Chennai
2001	35145	65139	45192	51124	37346
2002	17264	58248	52314	50248	48932
2003	24800	63309	56469	52368	51406
2004	28316	70316	71253	54196	52315
2005	36503	69294	69632	58360	55492
2006	29129	59216	64178	48230	57365
2007	32438	61345	56304	49178	58492

Approximate Percentages of Candidates Qualified To Appeared In the Competitive Examination From Five Centres Over the year

Centre → Year ↓	Mumbai	Delhi	Kolkata	Hyderabad	Chennai
2001	12	24	18	17	9
2002	10	28	12	21	12
2003	15	21	23	25	10
2004	11	27	19	24	8
2005	13	23	16	23	13
2006	14	20	21	19	11
2007	16	19	24	20	14

16. In which of the following years was the difference in number of candidates appeared from Mumbai over the previous year the minimum ?
(a) 2004 (b) 2006
(c) 2007 (d) 2002
(e) None of these

17. In which of the following years was the number of canditates qualified from Chennai, the maximum among the given years ?
(a) 2007 (b) 2006
(c) 2005 (d) 2003
(e) None of these

18. **Approximately** what was the total number of canditates qualified from Delhi in 2002 and 2006 together ?
(a) 27250 (b) 25230
(c) 30150 (d) 28150
(e) 26250

19. **Approximately** how many candidates appearing from Kolkata in 2004 qualified in the competitive examination ?
(a) 13230 (b) 13540
(c) 15130 (d) 15400
(e) 19240

20. **Approximately** what was the difference between the number of candidates qualified from Hyderabad in 2001 and 2002 ?
(a) 1680 (b) 2440
(c) 1450 (d) 2060
(e) 1860

Directions (Qs. 21–25): Study the following information carefully and answer the questions that follow :

An Organisation consists of 2400 employees working in different departments, viz; HR, 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 percent 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.

21. The number of males working in the IT department forms **approximately** What percent of the total : number of males in the Organisation ?
(a) 5 (b) 12
(c) 21 (d) 8
(e) 18

22. How many males work in the Accounts department ?
(a) 170 (b) 165
(c) 185 (d) 160
(e) None of these

23. The total number of employees working in the Accounts department forms what percent of the total number of employees in the organisation ? (rounded off to two digits after decimal)
(a) 19.34 (b) 16.29
(c) 11.47 (d) 23.15
(e) None of these

24. The number of females working in the production department forms what percent of the total number of females in the Organisation ?
(a) 7 (b) 12
(c) 4 (d) 15
(e) None of these

25. What is the total number of females working in the HR and Marketing department together ?
(a) 363 (b) 433
(c) 545 (d) 521
(e) None of these

Directions (Qs.26-31): Study the following table to answer the given questions:

Production (in crore units) of six companies over the year

Company	Years						Total
	1997	1998	1999	2000	2001	2002	
TP	103	150	105	107	110	132	707
ZIR	75	80	83	86	90	91	505
AVC	300	300	300	360	370	340	1970
CTU	275	280	281	280	285	287	1688
PEN	25	30	35	40	42	45	217
SIO	85	87	89	91	92	96	540
Total	**863**	**927**	**893**	**964**	**989**	**991**	**5627**

26. The production of Company AVC in 2000 is **approximately** what per cent of its average production over the given years?
(a) 300 (b) 110
(c) 136 (d) 18.25
(e) 95

27. For SIO, which year was the per cent increase or decrease in production from the previous year, the highest?
(a) 2001 (b) 1998
(c) 2002 (d) 2000
(e) None of these

28. Which company has less average production in the last three years compared to that of first three years?
(a) No company (b) CTU
(c) ZIR (d) SIO
(e) None of these

29. The total production of the six companies in the first two given years is what per cent of that of last two given years? (round off up to two decimal places)
(a) 87.08 (b) 104.55
(c) 90.40 (d) 10.62
(e) None of these

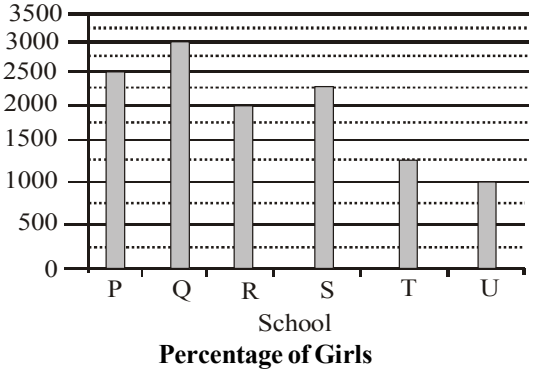
30. For ZIR, which of the following is the difference between production in 2002 and that in 2001?
(a) 10,00,00,000 (b) 1,00,00,000
(c) 10,00,000 (d) 40,00,000
(e) None of these

31. For how many companies did the production increase every year from that of the previous year?
(a) One (b) Two
(c) Three (d) Four
(e) None of these

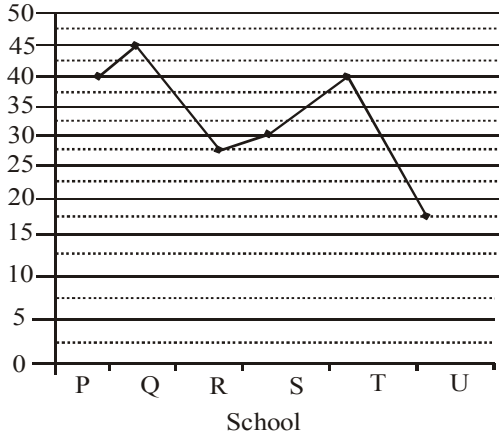
Directions (Qs. 32–36) : Study the graphs carefully to answer the questions that follow :

Total number of children in 6 different schools and the percentage of girls in them

Number of Children



Percentage of Girls



32. What is the total percentage of boys in schools R and U together (rounded off to two digits after decimal)
(a) 78.55 (b) 72.45
(c) 76.28 (d) 75.83
(e) None of these

33. What is the total number of boys in School T ?
(a) 500 (b) 600
(c) 750 (d) 850
(e) None of these

34. The total number of students in school R, is **approximately** what percent of the total number of students in school S ?
(a) 89 (b) 75
(c) 78 (d) 82
(e) 94

35. What is the average number of boys in schools P and Q together ?
(a) 1425 (b) 1575
(c) 1450 (d) 1625
(e) None of these

36. What is the respective ratio of the number of girls in school P to the number of girls in school Q ?
(a) 27 : 20 (b) 17 : 21
(c) 20 : 27 (d) 21 : 17
(e) None of these

Directions (Qs. 37–41) : Study the tables carefully and answer the questions that follow :

Number of candidates (in lakhs) appearing in an entrance examination from six different cities and the ratio of candidates passing and failing in the same

City	Number of Candidates
A	1.25
B	3.14
C	1.08
D	2.27
E	1.85
F	2.73

Ratio of candidates passing and failing within the city

City	Passing	:	Failing
A	7	:	3
B	5	:	3
C	4	:	5
D	1	:	3
E	3	:	2
F	7	:	5

37. What is the respective ratio of the number of candidates failing in the Exam from City D to those failing in the exam from City A ?
(a) 289 : 42 (b) 42 : 289
(c) 227 : 50 (d) 50 : 227
(e) None of these

38. The number of candidates appearing for the exam from City C is what percent of the total number of candidates appearing for the exam from City B ? (rounded off to the nearest integer)
(a) 27 (b) 34
(c) 42 (d) 21
(e) 38

39. Number of candidates passing in the exam from City F is what percent of the total number of candidates appearing form all the Cities together ? (rounded off to two digits after the decimal)
(a) 12.93 (b) 14.46
(c) 10.84 (d) 11.37
(e) None of these

40. Which city has the highest number of students failing in the entrance exam ?
(a) F (b) C
(c) B (d) D
(e) None of these

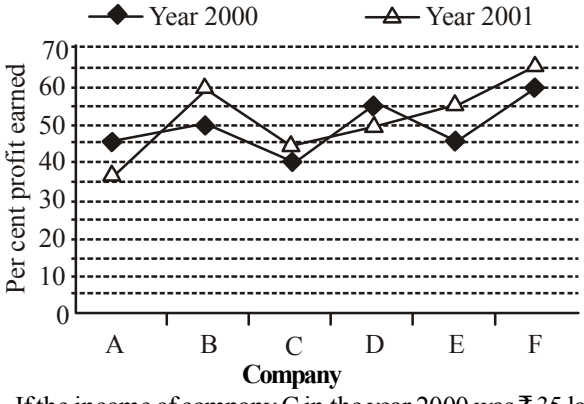
41. What is the number of candidates passing in the exam from city E ?
(a) 13,000 (b) 11,10,000
(c) 1,13,000 (d) 11,000
(e) None of these

Directions (Qs. 42-46): These questions are based on the graph given below:

Per cent profit earned by six companies during 2000 and 2001

Profit = Income – Expenditure

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



42. If the income of company C in the year 2000 was ₹ 35 lakhs, what was its expenditure in that year?
(a) ₹ 24 lakhs (b) ₹ 21 lakhs
(c) ₹ 25 lakhs (d) Can't be determined
(e) None of these

43. If, in the year 2001, total expenditure of companies B and C was ₹ 48 lakhs, then what was their total income in the same year?
(a) ₹ 32 lakhs (b) ₹ 28.6 lakhs
(c) ₹ 34.2 lakhs (d) Can't be determined
(e) None of these

44. If, in the year 2000, expenditure of Company C was ₹ 32 lakhs, what was the income of the company in the same year?
(a) ₹ 44.2 lakhs (b) ₹ 48.4 lakhs
(c) ₹ 46.4 lakhs (d) ₹ 38 lakhs
(e) None of these

45. If the expenditures of Company E in the years 2000 and 2001 were the same, what was the ratio of the incomes of the company in the same years respectively?
(a) 19 : 21 (b) 11 : 12
(c) 29 : 31 (d) 9 : 11
(e) None of these

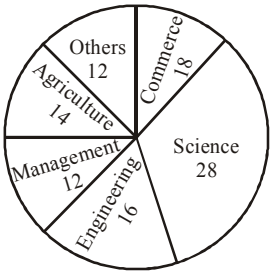
46. The income of Company D in the year 2000 was ₹ 31 lakhs. What was the earned profit?
(a) ₹ 11 lakhs (b) ₹ 20 lakhs
(c) ₹ 17 lakhs (d) ₹ 12 lakhs
(e) None of these

Directions (Qs. 47–51) : Study the following pie-charts carefully and answer the questions given below :

Disciplinewise Break up of Number of candidates appeared in Interview and Disciplinewise Break up of Number of Candidates selected by an organisation

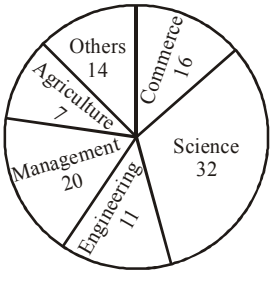
Disciplinewise Break up of Number of candidates appeared in Interview by the organisation

Total Number of candidates Appeared In the Interview = 25780 percentage



Disciplinewise Break up of Number of candidates selected after Interview by the organisation

Total Number of candidates selected After Interview = 7390 percentage



47. What was the ratio between the number of candidates appeared in interview from other disciplines and number of candidates selected from Engineering discipline respectively (round off to the nearest integer) ?
(a) 3609 : 813 (b) 3094 : 813
(c) 3094 : 1035 (d) 4 125: 1035
(e) 3981: 767

48. The total number of candidates appeared in interview from Management and other disciplines was what percent of number of candidates appeared from Engineering discipline?
(a) 50 (b) 150
(c) 200 (d) Cannot be determined
(e) None of these

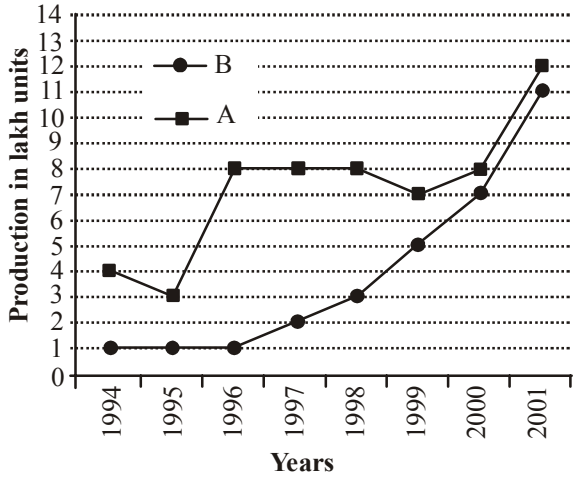
49. **Approximately** what was the difference between the number of candidates selected from Agriculture discipline and number of candidates selected from Engineering discipline?
(a) 517 (b) 665
(c) 346 (d) 813
(e) 296

50. For which discipline was the difference in number of candidates selected to number of candidates appeared in interview the maximum ?
(a) Management (b) Engineering
(c) Science (d) Agriculture
(e) None of these

51. **Approximately** what was the total number of candidates selected from Commerce and Agriculture discipline together?
(a) 1700 (b) 1800
(c) 2217 (d) 1996
(e) 1550

Directions (Qs. 52-56) : Study the following graph to answer the given questions.

Production of two companies A & B over the years (Production in lakh units)



52. For Company A, what is the per cent decrease in production from 1994 to 1995?
(a) 75 (b) 50
(c) 25 (d) 10
(e) None of these

53. In 2001, the production of Company B is **approximately** what per cent of that in 2000?
(a) 60 (b) 157
(c) 192 (d) 50
(e) 92

54. For Company A, in which year is the percentage increase/ decrease in the production from the previous year the highest?
(a) 2001 (b) 1995
(c) 1999 (d) 1996
(e) None of these

55. What is the difference in the total production of the two companies for the given years?
(a) 2700000 (b) 3100000
(c) 270000 (d) 310000
(e) None of these

56. Which of the following is the closest average production (in lakh units) of Company B for the given years?
(a) 4.1 (b) 3.5
(c) 4.3 (d) 3.75
(e) 3.9

Directions (Qs. 57-61): Study the following table to answer the given questions.

Centrewise and Postwise number of candidates

Post Specialist Centre	Officer	Clerk	Field Officer	Supervisor	Specialist officer
Bangalore	2000	5000	50	2050	750
Delhi	15000	17000	160	11000	750
Mumbai	17000	19500	70	7000	900
Hyderabad	3500	20000	300	9000	1150
Kolkata	14900	17650	70	1300	1200
Lucknow	11360	15300	30	1500	650
Chennai	9000	11000	95	1650	500

57. In Kolkata, number of Specialist Officers is **approximately** what per cent of Officers?
(a) 8.7 (b) 9
(c) 6.5 (d) 8
(e) 6.9

58. What is the difference between total number of Officers and Clerks?
(a) 29680 (b) 34180
(c) 32690 (d) 28680
(e) None of these

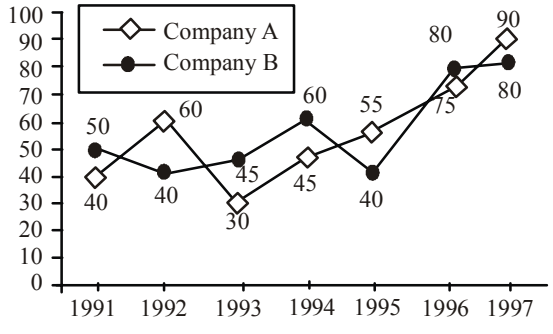
59. In Chennai, the number of Clerks is **approximately** how much per cent more than that of Officers?
(a) 18 (b) 22
(c) 20 (e) 2
(e) 13

60. Which centre has 300% more number of Clerks as compared to those in Bangalore?
(a) Lucknow (b) Mumbai
(c) Hyderabad (d) Chennai
(e) None of these

61. Which centre has the highest number of candidates?
(a) Delhi (b) Kolkata
(c) Hyderabad (d) Mumbai
(e) None of these

Directions (Qs. 62-66): Study the following graph carefully and answer the questions given below it :

Per cent profit earned by two companies *A* and *B* over the years 1991 to 1997



62. Investment of company *'B'* in 1997 is more by 40% than that in the previous year. Income in 1997 was what per cent of the investment in 1996?
(a) 280% (b) 252%
(c) 242% (d) 52%
(e) None of these

63. Average investment of company '*A*' over the years was ₹ 26 lakhs. What was its average income over the years?
(a) ₹ 40.56 lakhs (b) ₹ 41.60 lakhs
(c) ₹ 50.26 lakhs (d) Data inadequate
(e) None of these

64. Income of company '*A*' in 1995 was ₹ 21.7 lakhs. What was the investment ?
(a) ₹ 14.5 lakhs (b) ₹ 15.4 lakhs
(c) ₹ 15.8 lakhs (d) ₹ 14.6 lakhs
(e) None of these

65. Income of company '*A*' in 1995 is equal to the investment of the company '*B*' in 1996. What is the ratio of the investment of company '*A*' in 1995 to the investment of company '*B*' in 1996?
(a) 31 : 36 (b) 31 : 20
(c) 20 : 31 (d) Data inadequate
(e) None of these

66. Investment of company '*B*' in 1993 was ₹ 1540000. What was its income in that year?
(a) ₹ 23.33 lakhs (b) ₹ 22.33 lakhs
(c) ₹ 22. 23 lakhs (d) ₹ 23.23 lakhs
(e) None of these

Directions (Qs. 67-71): Study the following table carefully and answer the questions given below it.

A factory was opened in 1994 with certain initial strengths in different units as shown in the table. At the beginning of the subsequent years some of the workers left and some new workers were deployed. No worker left or joined in between. Details are given in the table given below. Study it carefully and answer the questions that follow.

	UNIT									
Year	A		B		C		D		E	
1994	156		132		98		76		125	
(Initial Strength)	L	J	L	J	L	J	L	J	L	J
1995	12	I5	23	32	12	36	6	26	11	13
1996	17	18	16	14	8	19	17	28	11	15
1997	9	20	12	12	17	14	9	16	19	16
1998	32	40	14	17	23	35	12	23	23	14
1999	22	35	11	15	18	25	14	24	32	38
2000	26	32	17	21	13	18	11	19	21	36

Note : L = Left, J = Joined

67. What was the strength of Unit '*B*' in 1998?
(a) 142 (b) 125
(b) 159 (c) 207
(e) None of these

68. In 1999 the strength of workers was maximum in which unit'?
(a) E (b) D
(c) C (d) B
(e) A

69. The strength of workers in unit *C* in 1996 is **approximately** what per cent of the strength in unit *E* in 1997?
(a) 97 (b) 110
(c) 104 (d) 98
(e) 112

70. What was the total strength of workers in all the five units in 1996'?
(a) 647 (b) 570
(c) 690 (d) 697
(e) None of these

71. What was the **approximate** increase/decrease in the strength of the workers in unit *D* in 1998 with respect to its initial strength'?
(a) 47.37% increase (b) 64.47% decrease
(c) 64.47% increase (d) 47.37% decrease
(e) 59.38% increase

Directions (Qs. 72-75): Study the following table carefully and answer the questions given below: Per cent marks obtained by 6 students in different subject

	Subject					
Student	Physics (out of 150)	Chemis-try (out of 75)	Maths (out of 200)	History (out of 100)	Geogra-phy (out of 50	English (out of 75)
A	77	63	89	55	64	72
B	69	72	71	78	69	66
C	82	78	69	65	75	57
D	73	81	76	67	58	63
E	58	69	54	74	66	75
F	66	57	61	62	71	59

72. What is the total marks obtained by *B* in all the subjects?
(a) 542 (b) 560.5
(c) 425 (d) 459.5
(e) None of these

73. What is the average marks obtained by 6 students in Chemistry out of 75 marks'?
(a) 52.5 (b) 70
(c) 55.5 (d) 62.5
(e) None of these

74. What is the difference in the total marks obtained by *C* in Physics and Chemistry and that obtained by *E* in the same subjects?
(a) 38.75 (b) 33
(c) 42.75 (d) 43
(e) None of these

75. What is the per cent marks obtained by *A* in both Maths and History? Find up to two decimal places.
(a) 72 (b) 77.67
(c) 48 (d) 73.33
(e) None of these

Directions (Qs. 76-78): These questions are based on the following information. Study the information carefully and answer the questions.

The students of a school have an option to study only Hindi, only Sanskrit or a composite subject Hindi and Sanskrit. Out of, the 175 students in the school, boys and girls are in the ratio of 3 : 4 respectively. 40% of boys have opted for only Hindi. 44% of the students have opted for only Sanskrit. Out of the total number of girls 32% have opted for the composite subject. The number of boys who opted for only Sanskrit and that for composite subject are in the ratio of 2 : 1 respectively.

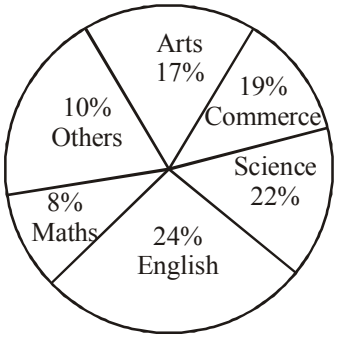
76. What is the ratio between the number of boys who have opted for only Hindi and the number of girls who have opted for the composite subject respectively?
(a) 15 : 16 (b) 10 : 7
(c) 10 : 9 (d) 11 : 12
(e) None of these

77. How many boys have opted for the composite subject?
(a) 30 (b) 15
(c) 21 (d) 32
(e) None of these

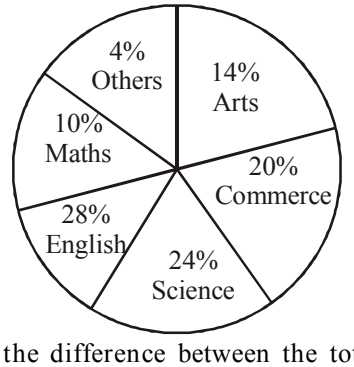
78. How many girls have opted for only Sanskrit?
(a) 72 (b) 47
(c) 51 (d) 77
(e) None of these

Directions (79-83): In the following pie-charts, the percentage wise distribution of candidates who have applied for different subjects in a college and that of selected candidates has been given. Read the following pie-charts to answer the questions.

Percentage of Candidates
Applied Number of candidates = 88000



Percentage of Candidates Qualified
Number of candidates = 14400



79. What is the difference between the total number of candidates who got selected in Science and the number of candidates who applied for the same ?
(a) 15904 (b) 14904
(c) 15940 (d) 16940
(e) None of these

80. What is the sum of the total number of candidates who applied for Arts and the number of candidates who got selected in Maths and English both ?
(a) 19432 (b) 20432
(c) 20342 (d) 19432
(e) None of these

81. What is the ratio between the number of candidates who qualified in Arts and commerce together and the number of candidates who qualified in English and Science ?
(a) 17 : 25 (b) 17 : 29
(c) 17 : 26 (d) 29 : 17
(e) None of these

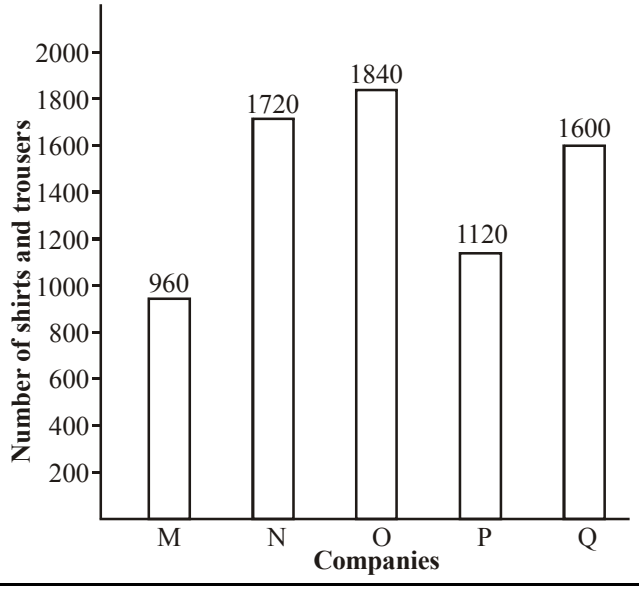
82. What percent of candidates qualified in English of the total candidates applied for the same ?

(a) 15 (b) 16
(c) 17 (d) 19
(e) 22

83. Find the average number of candidates who got selected for English, Science and Arts.
(a) 3618 (b) 3682
(c) 3628 (d) 3268
(e) 3168

Directions (Qs. 84-88) : In the following bar diagram number of shirts and trousers manufactured by five different companies M, N, O, P and Q has been given. The ratio of shirts and trousers has been given in the adjoining table. Read both the data and answer the questions.

Number of Shirts and Trousers manufactured by five companies M, N, O, P and Q



Ratio of Shirts & Trousers

Companies	Shirts	Trousers
M	5	3
N	24	19
O	7	9
P	3	5
Q	8	17

84. What is the average of the number of shirts manufactured by the companies M, O and Q ?
(a) 639 (b) 539
(c) 693 (d) 369
(e) None of these

85. The number of shirts manufactured by company P is
(a) 320 (b) 420
(c) 480 (d) 460
(e) None of these

86. What is the total number of trousers manufactured by companies N and P ?
(a) 1360 (b) 1260
(c) 1460 (d) 1406
(e) None of these

87. The number of shirts manufactured by company Q is what per cent of its total production ?
(a) 25% (b) 28%
(c) 30% (d) 32%
(e) None of these

88. The ratio between the number of shirts manufactured by company M and that of trousers manufactured by company P is
(a) 9 : 7 (b) 8 : 7
(c) 7 : 8 (d) 5 : 7
(e) 6 : 7

Directions (Qs. 89-93) : In the following table, the number of vehicles passing over a bridge during different time intervals on different days of a week is given. Read the table carefully to answer the following questions. Number of Vehicles (In thousands)

Time Intervals	8-11 am	11 am - 1 pm	1 pm - 4 pm	4 pm - 7 pm	7 pm - 10 pm
Days					
Monday	12	10	8	11	6
Tuesday	15	12	10	12	5
Wednesday	10	8	6	8	6
Thursday	11	7	7	7	7
Friday	13	10	8	10	6
Saturday	8	6	7	8	5

89. What is the difference between the total number of vehicles, crossing during 7pm-10 pm and the number of vehicles crossing during 11am-lpm on Tuesday, Thursday and Saturday?
(a) 8000 (b) 8500
(c) 7500 (d) 7800
(e) None of these

90. Find the difference between the number of vehicles crossing on Tuesday and Saturday during lpm-4pm and the number of vehicles crossing on Thursday during lpm-4pm.
(a) 7000 (b) 10000
(c) 24000 (d) 14000
(e) None of these

91. What is the percentage decrease in the number of vehicles crossing from time interval 8-11am to 7pm-10pm on Wednesday?
(a) 45% (b) 38%
(c) 40% (d) 50%
(e) 46%

92. Find the average number of vehicles crossing the bridge during 8-11 am.
(a) 11056 (b) 12500
(c) 11050 (d) 11500
(e) None of these

93. Find the total number of vehicles crossing the bridge during 11 am -1 pm on Thursday and Friday.
(a) 11000 (b) 19500
(c) 17500 (d) 19000
(e) 17000

Directions (Qs. 94-98): Study the following table carefully and answer the questions given below:

Number of bales of wool processed by 5 woollen mills

	Name of the Company				
Month	Polar	Shephered	Kiwi	Warmwear	Comfy
Jan	900	850	350	1000	850
Feb	800	700	1050	1100	850
March	1050	800	1000	1100	950
April	800	850	850	1100	850
May	950	900	1050	1150	850
Total	4500	4100	4900	5450	4350

94. In the case of which mill is the processing of wool in March the highest percentage of the total processing by that mill during the five month period?
(a) Polar (b) Shephered
(c) Kiwi (d) Warmwear
(e) Comfy

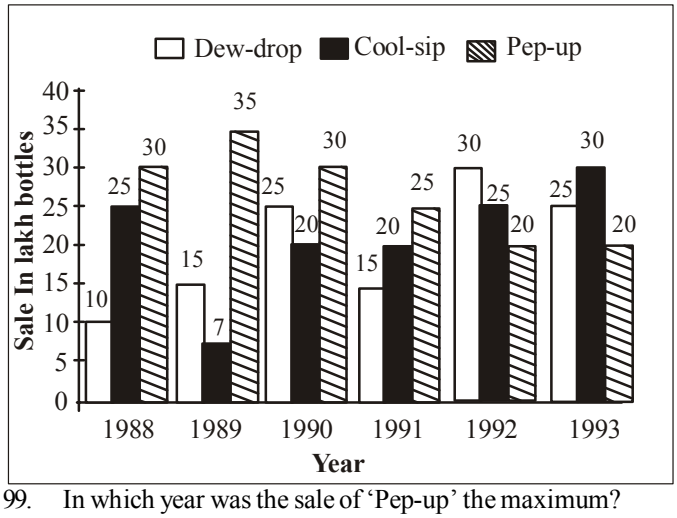
95. The wool-processing by Warmwear in April is what percent of its wool-processing in Janauary?
(a) 91 (b) 110
(c) 115 (d) 10
(e) 11

96. Which of the five mills has the highest ratio of wool processing done in April to that done in February?
(a) Polar (b) Shephered
(c) Kiwi (d) Warmwear
(e) Comfy

97. In the case of which mill is the wool-processing in February and March together the lowest among the five mills processing during the same period?
(a) Comfy (b) Warmwear
(c) Kiwi (d) Shephered
(e) Polar

98. The total of wool-processing done by Kiwi during the given period is approximately what per cent of that done by Shephered?
(a) 80 (b) 87
(c) 8 (d) 108
(e) 120

Directions (Qs. 99-103): Study the following graph carefully and answer the questions given below:



99. In which year was the sale of 'Pep-up' the maximum?
(a) 1990 (b) 1991
(c) 1992 (d) 1993
(e) None of these

100. In the case of which soft drink was the average annual sale maximum in the given period?
(a) Pep-up only (b) Cool-sip only
(c) Dew-drop only (d) Cool-sip and Dew-drop
(e) Pep-up and Dew-drop

101. In the case of Cool-sip drink, what was the **approximate** per cent increase in sale in 1992 over its sale in 1991?
(a) Less than 20 (b) 20-25
(c) 25 (d) 31-35
(e) 36-40

102. In the year 1990, what was the difference between the number of 'Pep-up' and 'Cool-sip' bottles sold?
(a) 50,00,000 (b) 5,00,000
(c) 50,000 (d) 5,000
(e) 10,00,000

103. What was the **approximate** per cent drop in sale of Pep-up in 1990 over its sale in 1989?
(a) 5 (b) 12
(c) 14 (d) 20
(e) None of these

Directions (Qs.104-108): Read the following information carefully and answer the questions based on it: In 6 educational years, number of students taking admission and leaving from the 5 different schools which are founded in 1990 are given below

School	**A**		**B**		**C**		**D**		**E**	
	Ad	L	Ad	L	Ad	L	Ad	L	Ad	L
1990	1025	–	950	–	1100	–	1500	–	1450	–
1991	230	120	350	150	320	130	340	150	250	125
1992	190	110	225	115	300	150	300	160	280	130
1993	245	100	185	110	260	125	295	120	310	120
1994	280	150	200	90	240	140	320	125	340	110
1995	250	130	240	120	310	180	360	140	325	115

In the above table shown Ad = Admitted, L = Left

104. What is the average number of students studying in all the five schools in 1992?
(a) 1494 (b) 1294
(c) 1590 (d) 1640
(e) None of these

105. What was the number of students studying in school B in 1994?
(a) 2030 (b) 1060
(c) 1445 (d) 1150
(e) None of these

106. Number of students leaving school *C* from the year 1990 to 1995 is **approximately** what percentage of number of students taking admission in the same school and in the same year?
(a) 50% (b) 25%
(c) 48% (d) 36%
(e) 29%

107. What is the difference in the number of students taking admission between the years 1991 and 1995 in school *D* and B?
(a) 514 (b) 1065
(c) 965 (d) 415
(e) None of these

108. In which of the following schools, percentage increase in the number of students from the year 1990 to 1995 is maximum?
(a) A (b) B
(c) C (d) D
(e) E

Directions (Qs. 109-113) : Study the graph to answer the following Questions

4000 posts of different cadres have to be filled up by six different banks(A, B, C, D, E, F). Chart - I shows the breakup of vacant posts in these banks. Chart - II shows the percentage breakup of the requirement of personnel in the different cadres in a bank. Assume that these percentages are the same for all the banks.

Chart I

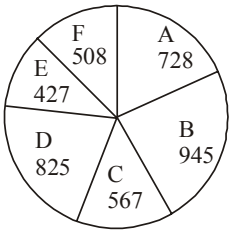
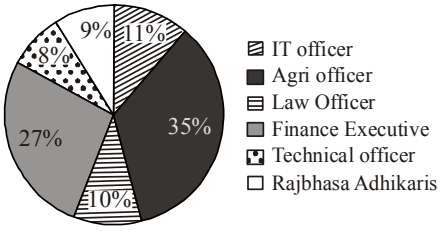


Chart II



109. Banks A and C recruited IT officers as per given requirement. After few days some of the newly employed IT officers left A and Joined C. The number of new requirements of IT officers in A and C have now become equal. The approximate percentage of new recruits who left A is
(a) 11% (b) 15%
(c) 22% (d) 20%
(e) None of these

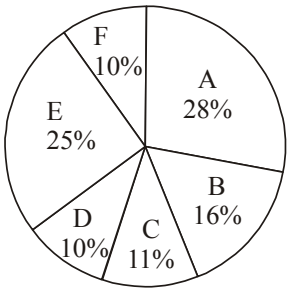
110. By what % is the number of recruitments of law officers more/less in C, E and F taken together than in A, B and D taken together?
(a) More by 40% (b) More by 20%
(c) less by 40% (d) less by 20%
(e) None of these

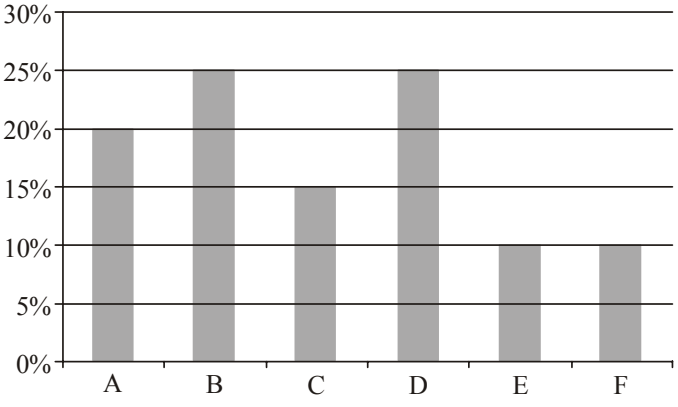
111. What is the ratio of requirement of Finance Executives in C and E taken together with D and F taken together?
(a) 1333:994 (b) 633:991
(c) 799:998 (d) 994:1333
(e) None of these

112. Banks D and F hired 15% of Rajbhasha Adhikaris than their own requirement(%). After 1 year the total strength of the staff was brought down to the original strength through retrenchments of some employees.What is the difference between the initial strength and the current strength of employees?
(a) 80 (b) 60
(c) 50 (d) 30
(e) None of these

113. In Bank E, about how many more technical officers should be employed than the required number so that the ratio of technical officers to that of finance executives becomes 2:3?
(a) 63 (b) 33
(c) 43 (d) 53
(e) None of these

Directions (Qs. 114-118) : The following Pie chart shows the percentage number of the candidates passed in examination from States A, B, C, D, E, F of a country in 2006. The Bar graph shows the percentage of fresh candidates who passed their graduation in 2006.





114. If in 2006, the total passed candidates from states A, B, C, D, E and F was 650, then percentage of non-fresher candidates from State A who passed the examination in 2006 is
(a) 95% (b) 86%
(c) 80% (d) 70%
(e) None of these

115. If in 2006, the total number of freshers from state D was 160, then how many non-fresher candidates passed the exam from State E?
(a) 1430 (b) 1240
(c) 1420 (d) 1440
(e) None of these

116. If total passed candidates from state B in 2006 was 112. what is the ratio between the number of freshers from state A and that of non-freshers from state C?
(a) 39:65 (b) 38:65
(c) 43:65 (d) 41:65
(e) None of these

117. If there is an increase of 10% and 20% candidates from state A and state B in the year 2007 respectively and the number of total passed candidates from state C in 2006 was 77, what would be the approximate total no of passed candidates from state A and State B in 2007?
(a) 400 (b) 350
(c) 450 (d) 380
(e) None of these

118. If the non-fresher candidates from state B in 2006 were 60, how many candidates passed the exam from all the states?
(a) 600 (b) 400
(c) 500 (d) 350
(e) None of these

Directions (Qs. 119-123): Study the following table carefully to answer these questions.

Number of students studying different disciplines at graduate level from State 'A' over the years

Discipline /year	Arts	Commerce	Science	Agriculture	Medicine	Engineering
1997	2400	3200	4200	840	2350	3180
1998	2250	3500	4820	760	2120	3340
1999	3050	2850	4550	1120	2640	3650
2000	2800	3640	4680	930	1890	3490
2001	2980	3080	5220	780	2260	3280
2002	2770	3800	3950	810	2450	3500

119. Total number of students studying Medicine for all the years together is **approximately** what per cent of those studying Engineering for all the years together?
(a) 60 (b) 67
(c) 72 (d) 75
(e) 73

120. What is the average number of students studying Arts? (Rounded off to an integer)
(a) 2905 (b) 2480
(c) 2308 (d) 2708
(e) None of these

121. For which of the following years, percentage increase/decrease in the number of students studying Commerce with respect to the previous year is the maximum?
(a) 1998 (b) 1999
(c) 2000 (d) 2001
(e) 2002

122. The number of students studying Agriculture in the year 1999 is what per cent of the total number of students studying rest of the disciplines together during that year? (Rounded off to two digits after decimal)
(a) 6.69 (b) 6.27
(c) 6.82 (d) 6.39
(e) None of these

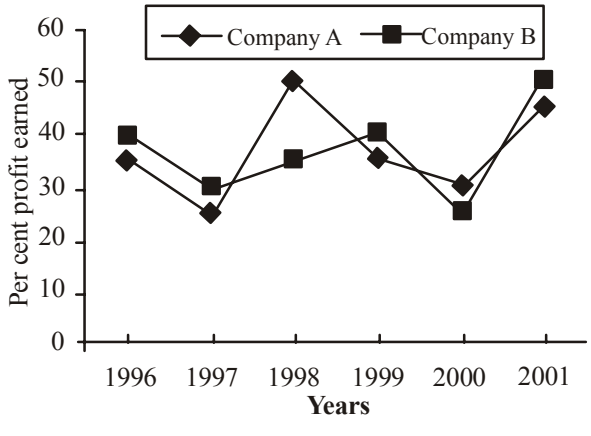
123. The number of students studying Commerce in 2001 is **approximately** what per cent of the total number of students studying Commerce for all the given years together?
(a) 19 (b) 11
(c) 12 (d) 18
(e) 15

Directions (Qs. 124-128): Study the following graph to answer these questions.

Per cent profit earned by two Companies A & B over the years

Profit = Income – Expenditure

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



124. If the income of Company '*A*' in 1998 was ₹ 1,42,500 what was its expenditure in that year?
(a) ₹ 1,05,000 (b) ₹ 95,500
(c) ₹ 99,500 (d) ₹ 1,05,555
(e) None of these

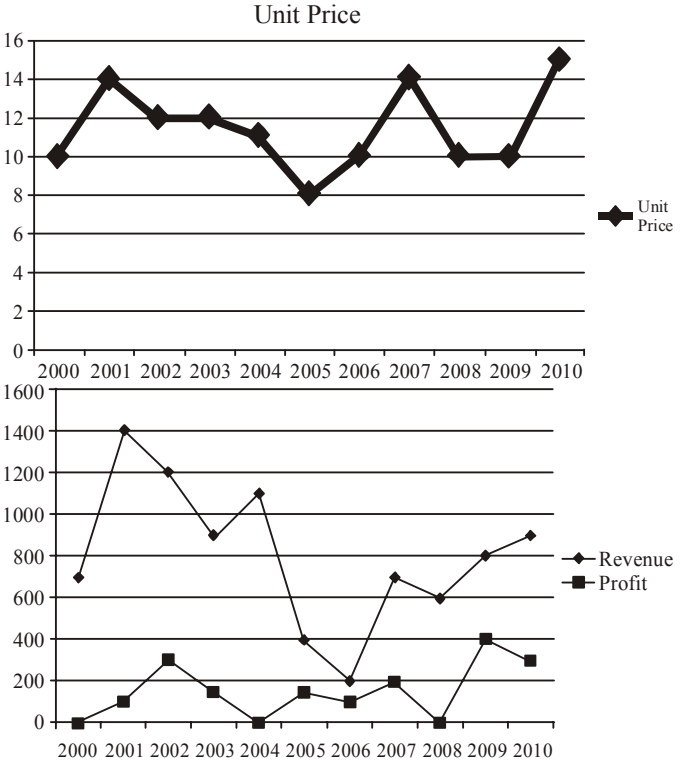
125. Expenditure of Company '*B*' in 1999 was 90% of its expenditure in 1998. Income of Company '*B*' in 1999 was what per cent of its income in 1998?
(a) 130.5 (b) $96\frac{2}{3}$
(c) 121.5 (d) $93\frac{1}{3}$
(e) None of these

126. If the expenditure of Company '*A*' in 1997 was ₹ 70 lakhs and income of Company *A* in 1997 was equal to its expenditure in 1998, what was the total income (in ₹ lakh) of the Company *A* in 1997 & 1998 together?
(a) 175 (b) 131.25
(c) 218.75 (d) Cannot be determined
(e) None of these

127. Expenditure of Company '*B*' in years 1996 and 1997 were in the ratio of 5 : 7 respectively. What was the respective ratio of their incomes?
(a) 10 : 13 (b) 8 : 13
(c) 13 : 14 (d) 11 : 14
(e) None of these

128. Total expenditure of Companies *A* & *B* together in 2001 was ₹ 13.5 lakhs. What was the total income of the two companies (in ₹ lakh) in that year?
(a) 19.575 (b) 20.25
(c) 19.75 (d) Cannot be determined
(e) None of these

Directions (Qs. 129-133) : Answer the following questions, based on the following two graphs, assuming that there is no fixed component and all the units produced are sold in the same year.



129. In which year per unit cost is lowest?
(a) 2002 (b) 2003
(c) 2006 (d) 2007
(e) None of these

130. In which year per unit cost is highest?
(a) 2001 (b) 2005
(c) 2006 (d) 2007
(e) None of these

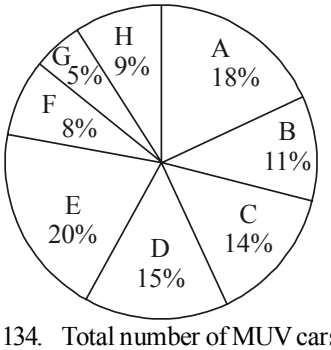
131. What is the approximate average quantity sold during the period 2000-2010?
(a) 50% (b) 60%
(c) 81% (d) 70%
(e) None of these

132. What is the average number of total units sold in the years of 2002,2003,2004,2005 and 2008 together?
(a) 88 (b) 66
(c) 77 (d) 44
(e) None of these

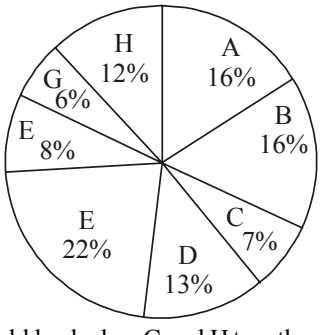
133. If the price per unit decrease by 10% during 2000-2004 and cost per unit increase by 10% during 2005-2010, then the cumulative profit for the entire period 2000-2010 decrease by?
(a) 700 (b) 500
(c) 565 (d) 775
(e) None of these

Directions (Qs. 134-138) : Refer to Pie Charts and answer the following questions:
Given Data:
Total number of cars (both MUV & SUV) distributed by 8 dealers in 2004 = 56000
Total number of SUV cars distributed by 8 dealers in 2004 = 32000

Distribution of Cars (MUV & SUV)



Distribution of Cars SUV



134. Total number of MUV cars sold by dealers C and H together is by what % less than total number of cars(both SUV and MUV) sold by stores F and H together?
(a) 27.58% (b) 25.58%
(c) 26.58% (d) 28.57%
(e) None of these

135. The number of cars(MUV and SUV) sold by store D is by what % more than total number of SUV cars distributed by dealers C, F and G together?
(a) 50% (b) 25%
(c) 75% (d) 605
(e) None of these

136. What is the average number of MUV cars delivered by dealers A, D, E, F and H together?
(a) 2892 (b) 3354
(c) 3634 (d) 3296
(e) None of these

137. What is the respective ratio between total no of SUV cars distributed by dealers A and B together and total number of cars(MUV and SUV) delivered by stores C and F together?
(a) 64:77 (b) 64:79
(c) 54:77 (d) 64:73
(e) None of these

138. If the number of cars distributed by stores A, D and E increased by 10%, 35% and 15% respectively from 2004-2005, what was the total number of MUV cars distributed by these three dealers in 2005?
(a) 14964 (b) 15964
(c) 13964 (d) 12964
(e) None of these

Directions (Qs. 139-143): Answer these questions on the basis of the information given below:
(i) In a class of 80 students the girls and the boys are in the ratio of 3:5. The students can speak only Hindi or only English or both Hindi and English.
(ii) The number of boys and the number of girls who can speak only Hindi is equal and each of them is 40% of the total number of girls.
(iii) 10% of the girls can speak both the languages and 58% of the boys can speak only English.

139. How many girls can speak only English?
(a) 12 (b) 29
(c) 18 (d) 15
(e) None of these

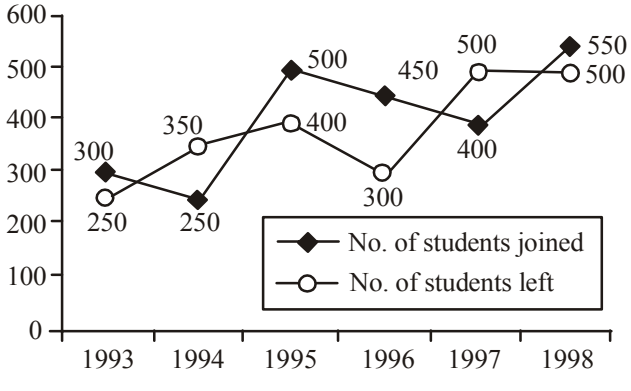
140. In all how many boys can speak Hindi?
(a) 12 (b) 9
(c) 24 (d) Data inadequate
(e) None of these

141. What percentage of all the students (boys and girls together) can speak only Hindi?
(a) 24 (b) 40
(c) 50 (d) 30
(e) None of these

142. In all how many students (boys and girls together) can speak both the languages?
(a) 15 (b) 12
(c) 9 (d) 29
(e) None of these

143. How many boys can speak either only Hindi or only English?
(a) 25 (b) 38
(c) 41 (d) 29
(e) None of these

Directions (Qs. 144-148): Study the following graph carefully and answer the questions given below it. The number of students who joined and left the school in the beginning of year for six years, from 1993 to 1998. Initial strength of the school in 1992 = 1500



144. What was the increase/decrease in strength of the school from 1994 to 1995?
(a) Increase by 100 (b) Decrease by 100
(c) Increase by 200 (d) Decrease by 200
(e) None of these

145. For which of the following years, the percentage rise/fall in number of students left from the previous year is the **highest**?
(a) 1994 (b) 1995
(c) 1996 (d) 1997
(e) 1998

146. How many students were there in the school during the year, 1996?
(a) 1495 (b) 1600
(c) 1550 (d) 1700
(e) None of these

147. During which of the following pairs of years, the strengths of the school is equal?
(a) 1994 and 1995 (b) 1995 and 1997
(c) 1996 and 1998 (d) 1995 and 1998
(e) 1993 and 1995

148. The number of students in 1996 is **approximately** what per cent of the number of students in 1994?
(a) 85 (b) 117
(c) 95 (d) 103
(e) 108

Directions (Qs. 149-153): Study the following information to answer the questions given below:

(i) The ratio of the populations of males, females and children 10 years old and above is 11 : 10 : 9 in State 'A'. Out of which 40% males or 8800 are literate, 20% children (10 year old and above) are illiterate while 30% females are literate.

(ii) The number of children below 10 years of age is 10% of the number of females. 5% of the total population of the State are below poverty line and 80% of them are illiterate.

149. What is the number of illiterate persons below the poverty line?
(a) 2480 (b) 3100
(c) 620 (d) Cannot be determined
(e) None of these

150. What is the total population of the State?
(a) 60,000 (b) 62,000
(c) 42,000 (d) 40,000
(e) None of these

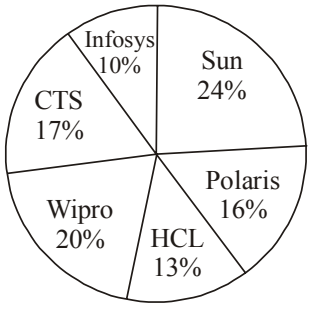
151. What is the number of literate children of age 10 years and above?
(a) 14400 (b) 14800
(c) 16200 (d) 12600
(e) None of these

152. Total number of women is what percentage of the total population of the State? (rounded off to two places of decimal)
(a) 28.86 (b) 30.25
(c) 32.86 (d) 32.26
(e) None of these

153. How many women are illiterate?
(a) 20000 (b) 6000
(c) 14400 (d) 16800
(e) None of these

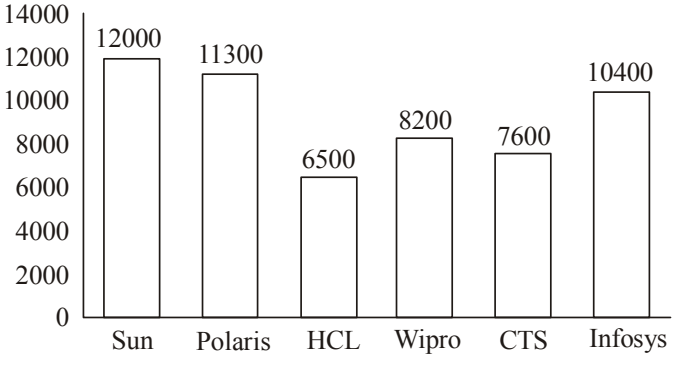
Directions (Qs. 154-158) : Study the given pie-Chart and Bar Graph carefully and answer the Questions given below

Percentagewise distribution of employees in 5 different Organizations in a state



Total No of Employees = 1,32,500

Number of Female employees out of the total employees



154. What is the total number of female employees in Wipro and male employees in Sun and Infosys ?
(a) 28900 (b) 30850
(c) 32600 (d) 26980
(e) None of these

155. What is the difference between the total number of employees in Polaris to the number of male employees in HCL ?
(a) 10500 (b) 10000
(c) 10725 (d) 10475
(e) None of these

156. Which of the following Organizations has more number of female employees than male employees ?
(a) Wipro (b) Sun
(c) Infosys (d) CTS
(d) None of these

157. The number of male employees in CTS is approximately what % of the total number of employees in Sun ?
(a) 47% (b) 32%
(c) 51% (d) 28%
(e) None of these

158. What is the average number of male employees in Wipro, Polaris and CTS ?
(a) 12560 (b) 15220
(c) 13725 (d) 14375
(e) None of these

Directions (Qs. 159-163): Study the following table carefully and answer the questions that follow:

The percentage marks obtained by seven students in six different subjects

Subject → / Student ↓	A (Out of 75)	B (Out of 150)	C (Out of 100)	D (Out of 50)	E (Out of 150)	F (Out of 75)
P	85	68	76	92	89	82
Q	78	72	84	80	64	70
R	66	75	79	88	72	66
S	74	62	91	74	70	74
T	90	75	67	68	69	78
V	86	80	69	78	82	80
W	82	68	81	85	76	72

159. What total percentage marks 'R' did secure in all the six subjects together?
(a) 75.73 (b) 74.33
(c) 73.75 (d) 74.75
(e) None of these

160. What is the difference between the marks obtained by 'P' in the subjects 'B', 'D' and 'E' together and by 'T' in the same subjects?
(a) 32.5 (b) 31.5
(c) 37 (d) 34
(e) None of these

161. What is the average of marks obtained by all the students in subject 'B'? (up to two decimal places)
(a) 107.14 (b) 71.4
(c) 114.07 (d) 73.14
(e) None of these

162. What is the average percentage of marks obtained by all the students in the subjects 'C' and 'D' together?
(a) 78 (b) 80.71
(c) 79.43 (d) 77.53
(e) None of these

163. What is the total marks obtained by all the students in subject 'F'?
(a) 422 (b) 398.5
(c) 522 (d) 391.5
(e) None of these

Directions (Qs. 164-168): Study the following table carefully and answer the questions that follow:

Investment (in ₹ crores) by six units of XYZ Company from 1996 to 2001

Year → / Unit ↓	'96	'97	'98	'99	'00	'01	Total
A	85	132	125	116	142	138	738
B	105	140	145	148	142	144	824
C	114	137	138	136	150	152	827
D	98	125	132	145	158	152	810
E	82	128	141	152	149	165	817
F	108	150	145	156	154	162	875
Total	592	812	826	853	895	913	4891

164. In which of the following years the investment of unit 'C' was **minimum** per cent of the investment of all the companies taken together in the same year?
(a) 1997 (b) 1998
(c) 1999 (d) 2001
(e) None of these

165. In the year 1997 the investment of which of the following units is the maximum per cent of the investment during the given years?
(a) A (b) F
(c) C (d) B
(e) None of these

166. What is the increase per cent in the investment of unit 'D' from 1996 to 1999?
(a) 26.75 (b) 21.55
(c) 21.60 (d) 27.55
(e) None of these

167. How much more/less is the investment by units A, B and C in the year 1998 than the investment by the same three units in the year 1999?
(a) ₹ 10 crores less (b) ₹ 8 crores more
(c) ₹ 8 crores less (d) ₹ 10 crores more
(e) None of these

168. What is the ratio between the total investment of unit A, B and C in the year 1998 and the total investment of units D, E and F in the year 1999?
(a) 36 : 51 (b) 51 : 36
(c) 26 : 43 (d) 43 : 26
(e) None of these

Directions (Qs. 169-173) : Study the following table carefully and answer the questions given below.

Percentage of malnourished children in Chile over the years

Year	Tested Number (in thousands)	Percentage of the malnourished		
		Low	Moderate	High
1984	998	12.5	2.9	0.7
1985	1015	12.1	2.7	0.7
1986	1048	12.1	3.0	0.8
1987	1071	11.9	2.5	0.5
1989	1048	10.8	1.8	0.3
1990	1023	10.4	1.6	0.2
1991	1048	10.0	1.4	0.1
1992	1063	8.70	1.1	0.1
1993	1161	7.80	0.9	0.1

169. What is the difference between the total numbers of the malnourished children in the years 1991 and 1986?
(a) 0 (b) 46112
(c) 22008 (d) 41920
(e) None of these

170. In which year was the percentage of the malnourished children the highest?
(a) 1986 (b) 1984
(c) 1985 (d) 1987
(e) None of these

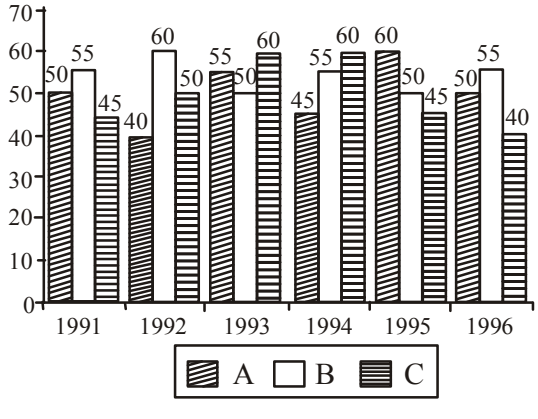
171. Which is true of the following?
(a) Over the years, there was uniform fall in the percentage of high malnourished cases in comparison to the previous year.
(b) Over the years, there was uniform fall in the percentage of moderate malnourished cases in comparison to the previous year.
(c) Over the years, there was uniform fall in the percentage of low malnourished cases in comparison to the previous year.
(d) Over the years, there was no rise in the percentage of high malnourished cases in comparison to the previous year.
(e) Over the years, there was no rise in the percentage of low malnourished cases in comparison to the previous year.

172. The malnutrition level of how many children was high in the year 1987?
(a) 600 (b) 12745
(c) 535 (d) 5355
(e) None of these

173. How many children were malnourished in 1993?
(a) 10,02,168 (b) 1,02,168
(c) 10,216 (d) 1,00,02,168
(e) None of these

Direction (Qs. 174-178) : Study the following graph carefully to answer the question given below it.

Production of paper (in lakh tonnes) by 3 different companies A, B & C over the years



174. What is the difference between the production of company C in 1991and the production of Company A in 1996?
(a) 50,000 tonnes (b) 5,00,00,000 tonnes
(c) 50,00,000 tonnes (d) 5,00,000 tonnes
(e) None of these

175. What is the percentage increase in production of CompanyA from 1992 to 1993?
(a) 37.5 (b) 38.25
(c) 35 (d) 36
(e) None of these

176. For which of the following years the percentage of rise/fall in production from the previous year the **maximum** for Company B?
(a) 1992 (b) 1993
(c) 1994 (d) 1995
(e) 1996

177. The total production of Company C in 1993 and 1994 is what percentage of the total production of Company A in 1991 and 1992?
(a) 95 (b) 90
(c) 110 (d) 115
(e) None of these

178. What is the difference between the average production per year of the company with highest average production and that of the company with lowest average production in lakh tonnes?
(a) 3.17 (b) 4.33
(c) 4.17 (d) 3.33
(e) None of these

Directions (Qs. 179-183) : Study the following table carefully and answer the questions given below it.

Fare in rupees for three different types of vehicles

Vehicle	Fare for distance upto					
	2 km	4 km	7 km	10 km	15 km	20 km
Type A	₹ 5.00	₹ 9.00	₹ 13.50	₹ 17.25	₹ 22.25	₹ 26.00
Type B	₹ 7.50	₹ 14.50	₹ 24.25	₹ 33.25	₹ 45.75	₹ 55.75
Type C	₹ 10.00	₹ 19.00	₹ 31.00	₹ 41.50	₹ 56.50	₹ 69.00

Note : Fare per km for intermittent distance is the same.

179. Shiv Kumar has to travel a distance of 15 kms in all. He decides to travel equal distance by each of the three types of vehicles. How much money is to be spent as fare?
(a) ₹ 51.75 (b) ₹ 47.50
(c) ₹ 47.25 (d) ₹ 51.25
(e) None of these

180. Ajit Singh wants to travel a distance of 15 kms. He starts his journey by Type A vehicle. After travelling 6 kms, he changes the vehicle to Type B for the remaining distance. How much money will he be spending in all?
(a) ₹ 42.25 (b) ₹ 36.75
(c) ₹ 40.25 (d) ₹ 42.75
(e) None of these

181. Mr X wants to travel a distance of 8 kms by Type A vehicle. How much more money will be required to be spent if he decides to travel by Type B vehicle instead of Type A?
(a) ₹ 16 (b) ₹ 12.50
(c) ₹ 14 (d) ₹ 13.50
(e) None of these

182. Rita hired a Type B vehicle for travelling a distance of 18 kms. After travelling 5 kms, she changed the vehicle to Type A. Again after travelling 8 kms by Type A vehicle, she changed the vehicle to Type C and completed her journey. How much money did she spend in all?

(a) ₹ 50 (b) ₹ 45.50
(c) ₹ 55 (d) ₹ 50.50
(e) None of these

183. Fare for 14th km by Type C vehicle is equal to the fare for which of the following?
(a) Type B – 11th km (b) Type B – 9th km
(c) Type A – 4th km (d) Type C – 8th km
(e) None of these

Directions (Qs. 184-188) : Answer these questions on the basis of the information given in the following table.

Production (in lakh tonnes) of six companies over the given years

	1995	1996	1997	1998	1999	2000
A	465	396	524	630	408	650
B	372	482	536	480	512	580
C	694	528	492	575	550	495
D	576	602	387	426	632	518
E	498	551	412	518	647	610
F	507	635	605	600	485	525

184. What is the difference between total productions of Companies A and C for all the given years together?
(a) 2, 61,00,000 tonnes (b) 2,61,900 tonnes
(c) 3,31,00,00 tonnes (d) 3,39,000 tonnes
(e) None of these

185. **Approximately,** what is the percentage rise/fall in total production of all the Companies together from 1996 to 1997?
(a) 4.5% rise (b) 6% rise
(c) 3.5% fall (d) 7% fall
(e) 7.5% fall

186. During which year is the percentage rise/fall from the previous year in production of company 'F' the highest?
(a) 1999 (b) 2000
(c) 1997 (d) 1996
(e) None of these

187. Production of companies A and B together in 1997 is **approximately** what percentage of the production of companies E and F together in 1998?
(a) 90 (b) 95
(c) 97 (d) 86
(e) 92

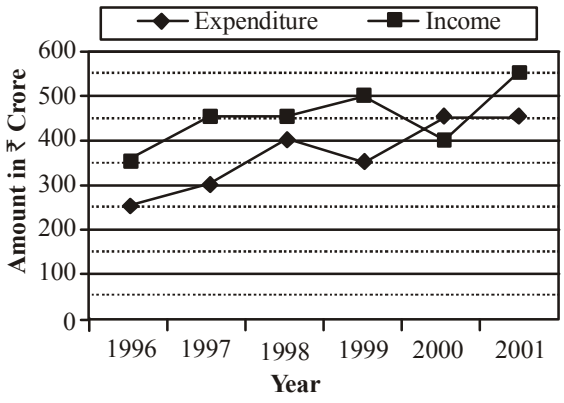
188. What is the difference between average production for the given years of companies B and E (in lakh tonnes rounded off to two digits after decimal)?
(a) 56.50 (b) 45.50
(c) 45.67 (d) 55.78
(e) None of these

Directions (Qs. 189-193) : Study the following graphs carefully and answer the questions that follow:

Income and Expenditure of Company 'X' during the period 1996 to 2001

Profit / Loss = Income – Expenditure

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



189. What is the average profit earned (in crore ₹) in the given years?
(a) $83\frac{1}{3}$ (b) 600
(c) $113\frac{2}{3}$ (d) 200
(e) None of these

190. What **approximately** is the per cent profit earned during the year 1999?
(a) 48 (b) 43
(c) 52 (d) 49
(e) None of these

191. Which of the following years has the maximum per cent increase/decrease in income from the previous year?
(a) 2000 (b) 1999
(c) 1997 (d) 2001
(e) 1997 & 1999

192. What is the percentage increase in expenditure from 1997 to 1998?
(a) 25 (b) $33\frac{1}{3}$
(c) $33\frac{2}{3}$ (d) 30
(e) None of these

193. What is the average income (in crore ₹) for the given years?
(a) $336\frac{2}{3}$ (b) 280
(c) 450 (d) $366\frac{2}{3}$
(e) None of these

Directions (Qs. 194-198): Study the following table carefully to answer these questions.

Distribution of marks obtained by 160 students in each of the three subjects–Hindi, English and Maths– out

Sub/Marks	0-19	20-39	40-59	60-79	80-100
Hindi	12	31	79	30	8
English	21	30	65	42	2
Maths	31	22	34	45	28
Average of three subjects	24	28	68	35	5

194. If the criteria for passing is minimum 40% marks only in Maths, how many students will pass?
(a) 53 (b) 107
(c) 34 (d) 129
(e) None of these

195. If for passing, the student has to obtain minimum 60% marks on average of three subjects, how many students will pass?
(a) 40 (b) 108
(c) 68 (d) 73
(e) None of these

196. If for passing, a student has to obtain 40% marks in any one of the three subjects, what is the minimum number of students who will definitely pass?
(a) 107 (b) 109
(c) 117 (d) 108
(e) None of these

197. How many students will pass in English if minimum passing marks is 40%?
(a) 117 (b) 111
(c) 119 (d) 108
(e) None of these

198. How many students have obtained 20 or more marks in at least one of the three subjects?
(a) 148 (b) 139
(c) 129 (d) Data inadequate
(e) None of these

Directions (Qs. 199 – 203) : Study the following tables carefully and answer the questions given below :

Number of cars (In thousands) of different Models and Colours sold in two Metro cities in a year

	Metro M					Metro H				
Type	Colour					Colour				
	Black	Red	Blue	White	Silver	Black	Red	Blue	White	Silver
A	40	25	55	75	15	45	32	40	60	20
B	20	35	60	80	20	30	37	39	81	35
C	35	30	50	90	35	40	42	41	6	37
D	45	40	45	85	40	35	39	37	90	42
E	50	35	35	60	30	50	44	43	77	22
F	55	42	40	65	52	47	34	45	87	17

199. The difference between the white-coloured cars sold in the two metros of which of the following models is the **minimum?**
(a) A (b) C
(c) D (d) F
(e) None of these

200. The total number of blue-coloured cars of Model E and D sold in Metro H is exactly equal to the number of white-coloured cars of which model in Metro M?
(a) B (b) F
(c) C (d) A
(e) None of these

201. What is the difference between the number of blue-colour cars of model 'C' sold in Metro M and number of red colour cars of model 'F' sold in Metro H?
(a) 8,000 (b) 10,000
(c) 12,000 (d) 15,000
(e) None of these

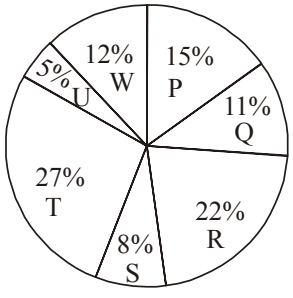
202. The total number of silver-coloured cars sold in Metro H is **approximately** what percentage of that in Metro M?
(a) 130 (b) 140
(c) 90 (d) 100
(e) 110

203. In Metro M the number of cars sold was **maximum** for which of the colour-model combinations?
(a) White - C (b) Blue - B
(c) Silver - B (d) White - D
(e) None of these

Directions (Qs. 204-208) : Study the following graph and answer the following: -

Cost of total production (both items together) by seven companies = rupees 25 crore

Percentage of total production by seven companies



Ratio of production between item A and B and the percent profit earned for the two items

Company	Ratio of production		Percent profit earned	
	ITEM A	ITEM B	ITEM A	ITEM B
P	2	3	25%	20%
Q	3	2	32%	35%
R	4	1	20%	22%
S	3	5	15%	25%
T	5	3	28%	30%
U	1	4	35%	25%
W	1	2	30%	24%

204. What is the total cost of production of item A by company P and R together?
(a) 3.9 (b) 4.9
(c) 5.9 (d) 6.9
(e) None of these

205. Cost of production of item A by company U is what percent of the cost of production of item B by company S?
(a) 10% (b) 15%
(c) 16.67% (d) 33.33%
(e) None of these

206. What is the total profit earned by company W for items A and B together?
(a) 78 lakh (b) 1.62 cr
(c) 7.8 lakh (d) 68 lakh
(e) None of these

207. What is the ratio of the cost of production of item A by company P to the cost of production of item A by company S?
(a) 1:2 (b) 1:3
(c) 3:1 (d) 2:1
(e) None of these

208. What is the amount of profit earned by company S on item B? (approx.)
(a) 21 lakh (b) 28 lakh
(c) 31 lakh (d) 35 lakh
(e) None of these

Directions (Qs. 209 - 213) : Study the following table carefully and answer the questions given below it. Number of candidates from different locations appeared and passed in a competitive examination over the years

Year	Rural		Semi-urban		State capitals		Metropolises	
	App.	Passed	App.	Passed	App.	Passed	App.	Passed
1990	1652	208	7894	2513	5054	1468	9538	3214
1991	1839	317	8562	2933	7164	3248	10158	4018
1992	2153	932	8139	2468	8258	3159	9695	3038
1993	5032	1798	9432	3528	8529	3628	11247	5158
1994	4915	1658	9784	4015	9015	4311	12518	6328
1995	5628	2392	9969	4263	1725	4526	13624	6419

209. For the candidates from which of the following locations was there continuous increase both in appeared and passed?
(a) Semi-urban (b) State capitals
(c) State capital & Rural (d) Metropolises
(e) None of these

210. In which of the following years was the percentage passed to appeared candidates from Semi-urban area the least?
(a) 1991 (b) 1993
(c) 1990 (d) 1992
(e) None of these

211. What **approximate** value was the percentage drop in the number of Semi-urban candidates appeared from 1991 to 1992?
(a) 5 (b) 10
(c) 15 (d) 8
(e) 12

212. In 1993 percentage of candidates passed to appeared was **approximately** 35 from which location?
(a) Rural
(b) Rural and Metropolises
(c) Semi-urban and Metropolises
(d) Rural and Semi-urban
(e) None of these

213. The total number of candidates passed from Rural in 1993 and Semi-urban in 1990 was exactly equal to the total number of candidates passed from State capital in which of the following years?
(a) 1990 (b) 1993
(c) 1994 (d) 1992
(e) None of these

Directions (Qs. 214–218) : Study the following table carefully and answer the questions given below:
Marks (out of 50) obtained by five students P, Q, R, S and T in five subjects in five periodical examination of each subject

	Students														
Sub	P					Q					R				
						Periodicals									
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Math	40	30	45	20	35	30	20	35	45	40	30	35	40	45	40
Sc.	30	40	25	30	20	25	45	30	37	28	48	46	31	40	80
His	35	25	15	30	40	33	27	40	34	26	35	45	40	30	35
Geo	45	47	32	39	37	42	43	30	40	25	25	35	48	37	25
Eng	24	28	36	39	43	30	28	37	34	31	26	28	31	30	40

	Students									
Sub	S					T				
						Periodicals				
	I	II	III	IV	V	I	II	III	IV	V
Math	25	35	40	45	30	29	31	39	41	40
Sc.	31	34	38	27	30	44	36	40	30	40
His	34	40	36	42	48	37	43	35	45	40
Geo	39	37	44	40	30	38	39	33	40	40
Eng	31	34	35	45	40	30	30	35	45	40

214. What was the average marks of the five subjects of student Q in the 1st periodical?
(a) 32 (b) 34
(c) 40 (d) 30
(e) None of these

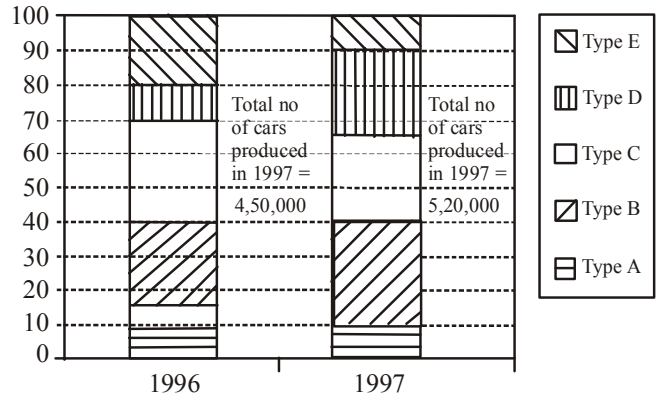
215. What was the total of marks of student T in Science in all the periodicals together?
(a) 160 (b) 180
(c) 190 (d) 140
(e) None of these

216. The average percentage of marks obtained by student P in Maths in the five periodicals was exactly equal to the average percentage of marks obtained by student R in the five periodicals in which of the following subjects?
(a) English (b) Geography
(c) Science and Geography (d) Maths
(e) None of these

217. In which of the following subjects was the average percentage of marks obtained by student S the highest?
(a) Maths (b) Science
(c) History (d) Geography
(e) English

218. In which of the periodicals the student P obtained, highest percentage of marks in Geography?
(a) I (b) II
(c) III (d) IV
(e) V

Directions (Qs. 219-223) : Study the following graph carefully and then answer the questions based on it. The percentage of five different types of cars produced by the company during two years is given below.



219. What was the difference in the production of C type cars between 1996 and 1997?
(a) 5,000 (b) 7,500
(c) 10,000 (d) 2,500
(e) None of these

220. If 85% of E type cars produced during 1996 and 1997 are being sold by the company, then how many E type cars are left unsold by the company?
(a) 1,42,800 (b) 21,825
(c) 29,100 (d) 25,200
(e) None of these

221. If the number of A type cars manufactured in 1997 was the same as that of 1996, what would have been its **approximate** percentage share in the total production of 1997?
(a) 11 (b) 13
(c) 15 (d) 9
(e) None of these

222. In the case of which of the following types of cars was the percentage increase from 1996 to 1997 the maximum?
(a) A (b) E
(c) D (d) B
(e) C

223. If the percentage production of B type cars in 1997 was the same as that of 1996, what would have been the number of cars produced in 1997?
(a) 1,12,500 (b) 1,20,000
(c) 1,30,000 (d) Data inadequate
(e) None of these

Directions (Qs. 224-228) : Read the following table carefully and answer the questions given below it:

Average marks obtained by 20 boys and 20 girls in five subjects from five different schools

Subject	Max Marks	P		Q		R		S		T	
		B	G	B	G	B	G	B	G	B	G
Eng	200	85	90	80	75	100	110	65	60	105	110
Hist	100	40	55	45	50	50	55	40	45	65	60
Geo	100	50	40	40	45	60	55	50	55	60	65
Math	200	120	110	95	85	135	130	75	80	130	135
Scien	200	105	125	110	120	125	115	85	90	140	135

In above table, B = Boys and G = Girls

224. What was the total marks obtained by boys in History from school Q?
(a) 900 (b) 1000
(c) 800 (d) 1300
(e) None of these

225. In which of the following subjects did the girls have highest average percentage of marks from all the schools?
(a) Science (b) Geography
(c) English (d) History
(e) Mathematics

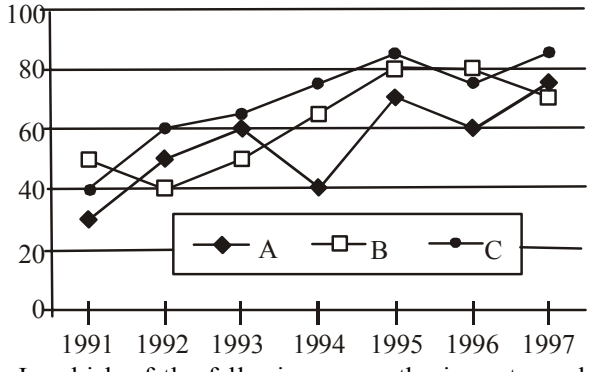
226. The pooled average marks of both boys and girls in all the subjects was minimum from which of the following schools?
(a) Q (b) P
(c) T (d) S
(e) R

227. In the case of which of the following schools was total marks obtained by girls in mathematics 100% more than the total marks obtained by boys in History?
(a) R (b) S
(c) P (d) Q
(e) T

228. What was the difference between the total marks obtained in Mathematics by boys from school R and the girls from school S?
(a) Nil (b) 1100
(c) 100 (d) 1200
(e) None of these

Directions (Qs. 229-233) : Study the following graph carefully and answer the questions given below it:

Imports of 3 companies over the years
₹ in crores



229. In which of the following years, the imports made by Company A was exactly equal to average imports made by it over the given years?
(a) 1992 (b) 1993
(c) 1994 (d) 1995
(e) None of these

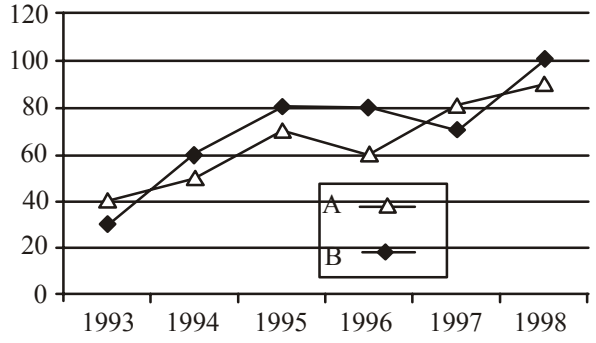
230. In which of the following years was the difference between the imports made by Company B and C the maximum?
(a) 1995 (b) 1994
(c) 1991 (d) 1992
(e) None of these

231. In which of the following years was the imports made by Company A exactly half of the total imports made by Company B and C together in that year?
(a) 1992 only (b) 1993 only
(c) 1992 and 1993 (d) 1995 only
(e) None of these ‘

232. What was the percentage increase in imports by Company B from 1992 to 1993?
(a) 10 (b) 25
(c) 40 (d) 20
(e) None of these

233. In which of the following years was the total imports made by all the three companies together the maximum?
(a) 1996 only (b) 1997 only
(c) 1995 only (d) 1995 and 1997 only
(e) None of these

Directions (Qs. 234-238) : Study the graph carefully and answer the questions given below it.
Per cent profit earned by the two companies A & B over the year



234. If income for Company A in the year 1994 was 35 lakhs what was the expenditure for Company B in the same year?
(a) 123.5 lakhs (b) 128 lakhs
(c) 132 lakhs (d) Data inadequate
(e) None of these

235. The income of Company A in 1996 and the income of Company B in 1997 are equal. What will be the ratio of expenditure of Company A in 1996 to the expenditure of Company B in 1997?
(a) 26 : 7 (b) 37 : 6
(c) 15 : 170 (d) 116 : 17
(e) None of these

236. During which of the following years the ratio of percent profit earned by Company *A* to that of Company *B* was the maximum?
(a) 1993 & 1996 both
(b) 1995 & 1997 both
(c) 1993 only
(d) 1998 only
(e) None of these

237. If the expenditure of Company B increased by 20% from 1995 to 1996, the income in 1996 will be how many times the income in 1995?
(a) 2.16 times (b) 1.5 times
(c) 1.8 times (d) equal
(e) None of these

238. If the income of Company A in 1996 was ₹ 36 lakhs, what was the expenditure of Company A in 1996?
(a) 22.5 lakhs (b) 28.8 lakhs
(c) 20 lakhs (d) 21.6 lakhs
(e) None of these

Directions (Qs. 239-243): Study the following table carefully and answer the questions given below it:
Statewise and Disciplinewise Number of Candidates Appeared (App.) and Qualified (Qual.) at a competitive Examination)

State	A.P.		U.P.		Kerala		Orissa		M.P.		W.B.		Total	
Discipline	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.	App.	Qual.
Arts	5420	1840	4980	1690	2450	845	3450	1200	7500	2000	4800	1500	28600	9075
Commerce	8795	2985	6565	2545	3500	2040	4800	2200	8400	2400	7600	2700	39660	14870
Science	6925	2760	8750	3540	4250	2500	4500	1950	6850	3000	8500	3200	39775	16950
Engineering	1080	490	2500	1050	1200	450	1850	850	2500	750	3400	1400	12530	4990
Agriculture	2040	850	1085	455	700	200	450	150	1500	475	1200	500	5775	2130
Total	23060	8425	23880	9280	12100	6035	15050	6350	26750	8625	25500	9300	126340	48015

239. For which of the following disciplines the proportion of qualifying candidates to the appeared candidates from U.P. State is the lowest?
(a) Arts (b) Commerce
(c) Science (d) Engineering
(e) Agriculture

240. For which of the pair of States, the qualifying percentage from Agriculture discipline is exactly the same?
(a) A.P. & U.P.
(b) A.P. & West Bengal
(c) U.P & West Bengal
(d) Kerala & Orissa
(e) None of these

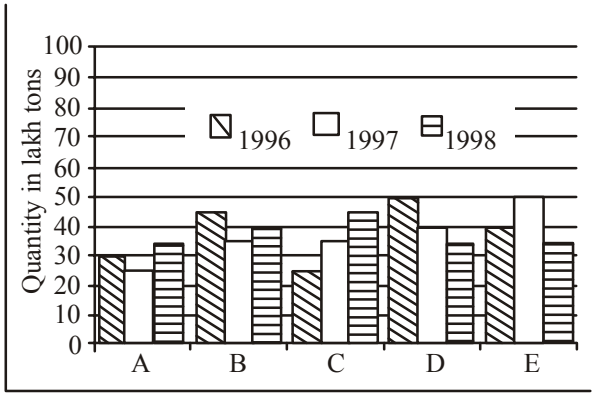
241. For which of the following states the percentage of candidates qualified to appeared is the minimum for commerce discipline?
(a) AP (b) UP
(c) Kerala (d) Orissa
(e) MP

242. **Approximately** what is the ratio between total qualifying percentage of UP and that of MP?
(a) 15 : 16 (b) 13 : 14
(c) 14 : 13 (d) 19 : 16
(e) 17 : 16

243. The qualifying percentage for which of the following states is the lowest for Science discipline?
(a) AP (b) UP
(c) Kerala (d) West Bengal
(e) None of these

Directions (Qs. 244 -248) : Study the following graph carefully to answer these questions.

The production of fertilizer in lakh tons by different companies for three years 1996, 1997 & 1998



244. The total production by five companies in 1998 is what per cent of the total production by companies B & D in 1996?
(a) 100% (b) 150%
(c) 95% (d) 200%
(e) None of these

245. What is the ratio between average production by Company B in three years to the average production by company C in three years?
(a) 6 : 7 (b) 8 : 7
(c) 7 : 8 (d) 7 : 6
(e) None of these

246. For which of the following companies the rise or fall in production of fertiliser from 1996 to 1997 was the maximum?
(a) A (b) B
(c) C (d) D
(e) E

247. What is the per cent drop in production by Company D from 1996 to 1998?
(a) 30 (b) 43
(d) 50 (d) 35
(e) None of these

248. The average production for three years was maximum for which of the following companies?
(a) B only (b) D only
(c) E only (d) B & D both
(e) D & E both

Directions (Qs. 249-253): Study the following table to answer the given questions.

Number of students of different classes of a school playing different games.

Class → Games ↓	XII	XI	X	IX	VIII	VII	VI
Chess	11	12	5	4	2	2	1
Cricket	38	40	12	17	25	18	20
Basket ball	11	9	7	6	0	0	0
Table Tennis	9	9	21	19	11	9	0
Football	40	27	18	19	12	16	14
Carrom	16	15	8	19	12	16	14
Tennis	8	9	11	5	6	0	0
Badminton	47	39	33	21	19	0	0

249. **Approximately** what per cent of Class VIII students play Cricket out of the total students playing Cricket?
(a) 13 (b) 4
(c) 25 (d) 15
(e) 17

250. What is the ratio of the students playing Football in Class XI to those in Class X?
(a) 1 : 2 (b) 2 : 5
(c) 2 : 3 (d) 3 : 2
(e) None of these

251. Which game is the most popular?
(a) Badminton (b) Football
(c) Carrom (d) Table Tennis
(e) Cricket

252. **Approximately** what per cent of Class X students play the Table Tennis out of the total Class X students playing the different given games?
(a) 20 (b) 21
(c) 27 (d) 26
(e) 18

253. Which game has ascending number of students from class IX to XII?
(a) Only Basketball (b) Only Badminton
(c) Chess and Badminton (d) No game
(e) None of these

Directions (Qs. 254-263) : Study the following charts and answer the following questions:

The students of a school have an option to study either only English, only maths or both. Out of 175 students in the school, boys and girls are in the ratio of 3:4 respectively. 40% percent of the boys opted only for English. 44% of the students opted only for maths. Out of the number of girls 32% opted for both the subjects. The number of boys who opted for only maths and both subjects are in the ratio of 2:1 respectively.

Explanation

Boys = 75 (only English = 30, only maths = 30, both subjects = 15)
Girls = 100 (only English = 21, only maths = 47, both subjects = 32)

254. What is the ratio of the number of boys who have opted for only English and the number of girls who have opted both subjects?
(a) 14:17 (b) 15:16
(c) 12:13 (d) 16:19
(e) None of these

255. How many boys have opted for both subjects?
(a) 21 (b) 32
(c) 30 (d) 15
(e) None of these

256. How many girls are opted for only maths?
(a) 32 (b) 20
(c) 47 (d) 15
(e) None of these

257. The number of boys who opted for only maths is what percent less than number of girls who opted for maths?
(a) 32% (b) 33%
(c) 36% (d) 38%
(e) None of these

Directions (Qs 258-263) : Study the following charts and answer the following questions:

In a school there are total of 240 staff members and 1600 students. 65 percent of the numbers of staff members are teachers and the remaining staff members are administrative officials. Out of the total number of the students 45 percent are girls. Twenty percent of the number of girls can speak only English. The remaining girls can speak both Hindi and English. Three-fourths of the number of boys can speak only English. The remaining boys can speak both Hindi and English. Two-thirds of the numbers of teachers are males. Five-fourteens of the number of the administrative officials are females.

258. What is the difference between the number of boys (students) who can speak both Hindi and English and the number of girls (students) who can speak both Hindi and English?
(a) 346 (b) 356
(c) 376 (d) 400
(e) None of these

259. The total number of girls students is what percent of the total number of staff members in the school?
(a) 100% (b) 200%
(c) 300% (d) 400%
(e) None of these

260. What is the difference between the number of total number of female administrative officials, female teachers and the number of male administrative officials?
(a) 14 (b) 22
(c) 28 (d) 30
(e) None of these

261. What is the ratio of the total number of teachers to the number of boys (students) who can speak English only?
(a) 13:53 (b) 13:55
(c) 13:56 (d) 13:57
(e) None of these

262. What is the total number of male administrative officials, female teachers and girls (students) who can speak English only?
(a) 125 (b) 225
(c) 250 (d) 300
(e) None of these

263. What is the ratio of the number of male administrative staff to the number of girls students who speak only English?
(a) 5:8 (b) 3:11
(c) 3:7 (d) 3:8
(e) None of these

Directions (Qs. 264-268) : Study the following table carefully and answer the questions given below :

Production of main crops in India (in million tonnes)

Crops	91 - 92	92 - 93	93 - 94	94 - 95	95 - 96	96 - 97
Pulses	20.5	22.4	24.6	23.5	27.8	28.2
Oilseeds	32.4	34.6	40.8	42.4	46.8	52.4
Rice	80.5	86.4	88.2	92.6	94.2	90.8
Sugercane	140.8	150.2	152.2	160.3	156.4	172.5
Wheat	130.2	138.4	146.8	141.6	152.2	158.4
Coarse grain	45.6	52.8	60.4	62.4	58.2	62.8
Sum	**450**	**484.8**	**513.2**	**522.8**	**535.6**	**565.1**

264. Production of sugarcane in1993 - 94 was **approximately** what percentage of the production of rice in 1992 - 93?
(a) 50 (b) 75
(c) 150 (d) 125
(e) 175

265. Production of what type of crop was going to increase in each year in the given years?
(a) Rice (b) Pulse
(c) Sugarcane (d) Oilseeds
(e) None of these

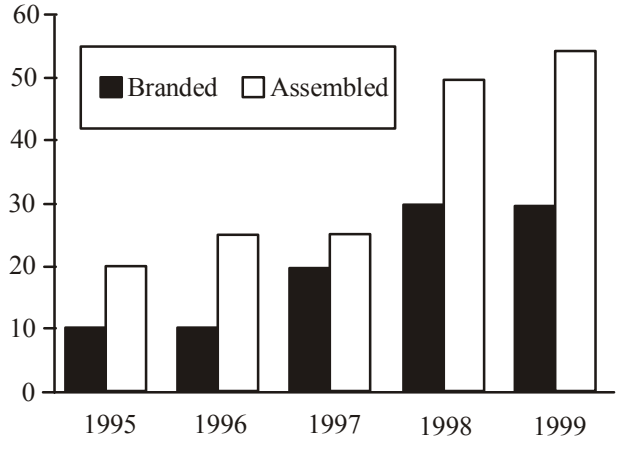
266. What was the average production of pulse in the given years?
(a) 26.8 million tonnes (b) 20.5 million tonnes
(c) 24.5 million tonnes (d) 22.5 million tonnes
(e) None of these

267. Production of oilseeds was what percentage of the total crops produced in the year 1991 - 92?
(a) 7.2 (b) 8.4
(c) 2.7 (d) 6.4
(e) None of these

268. In which of the following years the total production of oilseeds in the years 1994 - 95, 1995 - 96 and 1996 - 97 was equal to the production of wheat?
(a) 1993 - 94 (b) 1994 - 95
(c) 1996 - 97 (d) 1992 - 93
(e) None of these

Directions (Qs. 269-273): Study the following graph carefully and answer the questions given below:

The following graph shows the percentage growth of Branded and Assembled PCs



269. What is the average percentage growth of sales of Assembled PCs for the given years?
(a) 30 (b) 20
(c) 40 (d) 35
(e) None of these

270. If the Branded PCs sold in1996 were 100000, how many Branded PCs were sold in 1999?
(a) 202800 (b) 156000
(c) 234000 (d) Cannot be determined.
(e) None of these

271. What is the difference between total Branded and total Assembled PCs sold for the given years?

(a) 75000 (b) 750000
(c) 175000 (d) Cannot be determined
(e) None of these

272. In which year is the difference in the growth between Branded and Assembled PCs lowest'?
(a) 1995 (b) 1998
(c) 1999 (d) 1996
(e) None of these

273. For Assembled PCs sale, which year is the per cent growth the highest compared to previous year'?
(a) 1999 (b) 1996
(c) 1998 (d) Cannot be determined
(e) None of these

Directions (Qs. 274-278): Study the following table to answer the given questions.

Average production of six machines for the given years in thousands

Year	Machine I	Machine II	Machine III	Machine IV	Machine V	Machine VI
1999	620	400	1020	2050	680	980
1998	680	400	1040	2070	670	1000
1997	640	403	1043	2130	680	1020
1996	700	399	1060	1908	690	1060
1995	706	397	1080	1603	685	1200

274. For which machine has there been continuous increase in production from its previous years?
(a) No machine (b) III
(c) IV (d) II
(e) None of these

275. For which year and the machine has the production been highest for the given data?
(a) 1999, IV (b) 1998, IV
(c) 1997, III (d) 1996, IV
(e) None of these

276. Which of the following can be concluded?
(a) As the machine becomes older, the production goes down.
(b) The production goes down in the initial two or three years then it starts improving.
(c) All the fluctuations from one year to the other are in the range of 100.
(d) Each even-numbered machine produces more than the odd-numbered.
(e) None of these

277. Which machine has shown the least fluctuation in production?
(a) I (b) II
(c) V (d) VI
(e) None of these

278. How many machines have production lower than 700 for all the given years?
(a) Nil (b) One
(c) Two (d) Three
(e) None of these

Directions (Q. 279-286) : Read the following table carefully and answer the questions given below.

Highest marks and average marks obtained by students in subjects over the years
The maximum marks in each subject is 100.

	Subjects									
	English		Hindi		Maths		Science		History	
	High	Avg	High	Avg	High	Avg	High	Avg	High	Avg
1992	85	62	75	52	98	65	88	72	72	46
1993	80	70	80	53	94	60	89	70	65	55
1994	82	65	77	54	85	62	95	64	66	58
1995	71	56	84	64	92	68	97	68	68	49
1996	75	52	82	66	91	64	92	75	70	58
1997	82	66	81	57	89	66	98	72	74	62

279. What was the grand average marks of the five subjects in 1996?
(a) 63 (b) 64
(c) 65 (d) 68
(e) None of these

280. The difference in the average marks in History between 1994 and 1995 was exactly equal to the difference in the highest marks in Hindi between which of the following pairs of years?
(a) 1992 and 1995 (b) 1993 and 1995
(c) 1992 and 1996 (d) 1993 and 1997
(e) None of these

281. What was the **approximate** percentage increase in average marks in History from 1992 to 1993?
(a) 20 (b) 25
(c) 24 (d) 16
(e) 18

282. The average highest marks in English in 1992, 1993 and 1996 was exactly equal to the highest marks in Hindi in which of the following years?
(a) 1996 (b) 1997
(c) 1994 (d) 1996
(e) 1993

283. The difference between the highest marks and the average marks in Hindi was maximum in which of the following years?
(a) 1994 (b) 1997
(c) 1995 (d) 1996
(e) 1993

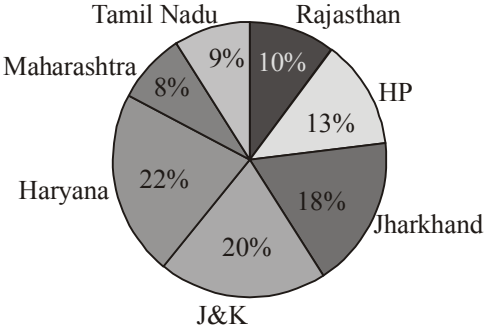
284. The highest marks in Hindi in 1993 was what per cent of the average marks in Mathematics in 1996?
(a) 135 (b) 130
(c) 125 (d) 140
(e) None of these

285. If there were 50 students in 1993, what was the total marks obtained by them in Mathematics?
(a) 2400 (b) 3000
(c) 2500 (d) 3200
(e) None of these

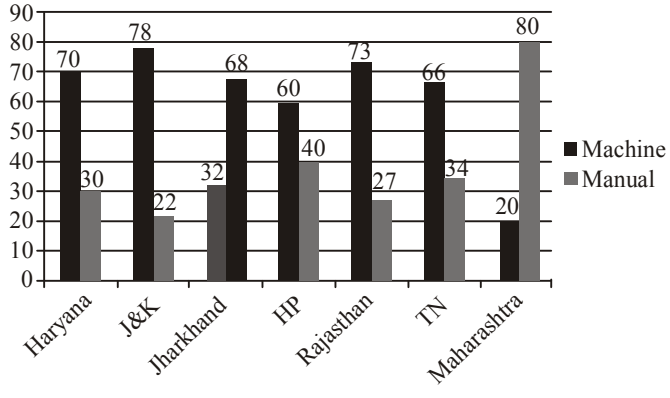
286. The difference between the highest marks in science was maximum between which of the following pairs of years among the given years?
(a) 1992 and 1993 (b) 1992 and 1996
(c) 1996 and 1997 (d) 1992 and 1995
(e) None of these

Directions (Qs. 287-291) : Study the following pie charts and answer the following questions:-

Production of rice in different states.
Total production = 50lac tones



Production: Machine v/s manual



287. What is the difference between the production by machine and manual method in Rajasthan?
(a) 2.5 lakh (b) 2.3 lakh
(c) 2.8 lakh (d) 2.7 lakh
(e) None of these

288. What is the ratio of production by manual method in TN to that of machine method in J&K?
(a) 9:40 (b) 99:260
(c) 51:260 (d) 33:130
(e) None of these

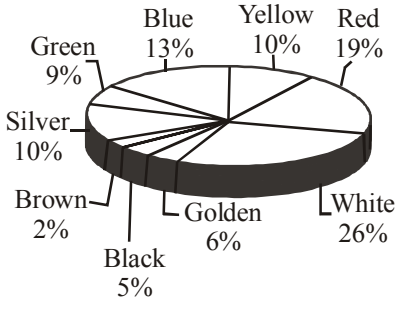
289. What is the average production of wheat by machine method for all states?
(a) 4.24 (b) 4.28
(c) 4.32 (d) 4.46
(e) None of these

290. The production by machine method in Haryana is approximately what percent greater than the production by manual method in Maharashtra?
(a) 130% (b) 135%
(c) 140% (d) 145%
(e) None of these

291. The production of tea in HP by manual method is approximately how many times the production in Jharkhand by machine method?
(a) 1.2 (b) 1.5
(c) 0.9 (d) 1
(e) 1.3

Directions (Qs.292-296): Study the chart and give the answer of following questions.

Selling of the car in UK according to the colours



292. 50% of all the cars consisted of which colours of car?
(a) Black, Golden, Blue, Red
(b) Blue, Black, Red, Silver
(c) White, Golden, Blue, Black
(d) White, Blue, Green, Black
(e) None of these

293. Cars of which colour are 20% less popular than white coloured cars?
(a) Black (b) Golden
(c) Red (d) Blue
(e) None of these

294. Cars of which colour are 13% less popular than white cars?
(a) Blue (b) Green
(c) Silver (d) Yellow
(e) None of these

295. Cars of which colour when increased by two per cent and then, combined with that of red cars will make 30 per cent of the total
(a) Gloden (b) Blue
(c) Black (c) Yellow
(e) None of these

296. If in a certain period the total production of all cars was 95400 then, how many more blue cars were sold than green?
(a) 2580 (b) 3618
(c) 2850 (d) 3816
(e) None of these

CHAPTER 2

Data Sufficiency

INTRODUCTION

Data sufficiency is not a new kind of problem. It is just a way to check your known reasoning ability in new format. In fact, in such problems 2 statements are given from different part of reasoning like coding, decoding. Problem solving, blood relation, etc, and the examinee is required to find out if each statement alone/combinedly sufficient to answer the question. Let us the format of the problem given below:-

PROBLEM FORMAT

Directions: The problem(s) below consist of a question/questions followed by two statements labelled I and II. You have to decide if these statements are sufficient to answer the question.

Mark Answer:

(a) If statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.

(b) If only statement II is sufficient to answer the question but statement I is not sufficient to answer the question.

(c) If both statements I and II are together sufficient to answer the question although neither statement sufficies by itself.

(d) If both the statements are sufficient to answer the question independently and separately.

(e) It both the statements are not sufficient but still more data is needed to answer the questions.

EXAMPLE 1. What is the age of x?

Statements: I The age of y is 50 years.
II x is older than y.

After seeing the sample problem, you must have got the idea of what is the problem all about. But before solving the sample problem, we must solve some other problems related to this segment. Only the solution of some problems will give you the clear concept about this chapter. Let us see some examples of solutions given below:-

EXAMPLE 2. What is the value of m?

Statements:

I. $m + n = 50$

II. $5x - n = 1$

Sol. As we know that when the question involves two unknowns then two distinct equations required for it. Here is the same situation. We have 2 equations and two unknowns (m and n). Then, we can easily conclude that both the statements are needed to answer the given question.

EXAMPLE 3. What is the date of birth of Rama?

Statements:

I. Veena remembers that Rama's date of birth is between 17th June and 21st June.

II. Surbhi says that Rama's date of birth is after 19th June but before 23rd June.

Sol. From I, we conclude that the possible answers are 18th June, 19th June, and 20th June. From II we come to the conclusion that 18th June and 19th June are ruled out. Hence, 20th June must be the answer clearly, both the statements are needed to answer the question but none of the two statements alone is sufficient to got the answer.

EXAMPLE 4. Who is the heaviest among L, M, N and O?

Statements:

I. M is heavier than L, but lighter than O.

II. N is lighter than M.

Sol. Write statement I as

O > M > L ('>' means heavier than) Write II as M > N

Now the two inequalities can be combined as

O > M > N > L or O > M > L > N

But in either case O is the heaviest. Hence, I and II are together needed to answer the question but neither of the two statement alone can give the answer.

EXAMPLE 5. Find the value of x.

Statements:

I. $x - 4 = 15$

II. $x + 2x + x = 3x$

From I.

$x - 4 = 15$

$\therefore x = 15 + 4 = 19$

$\therefore$ I alone is sufficient to answer the question.

From II.

$x + 2x + x = 3x$

$\Rightarrow 4x = 3x$

$\therefore x = 0$

$\therefore$ II alone is sufficient to answer the question.

Now, from above solved example you must have got the clear concept about data sufficiency and in a position to solve the sample problem also.

Solution to sample problem (Problem Format)

Answer choice 5 will be our correct answer as the given information is not sufficient. x can be of any age greater than 50 years.

Thus, it is clear to you that while solving problems related to data sufficiency, the following methodis used :-

Step I — Check statement I

Step II — Check statement II

Step III — Check both statement I and II if required.

EXERCISE

Directions (Qs. 1-173) : Each of the questions below consists of a questions and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

Read both the statements and Give answer

(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.

(d) if the data in both the statements I and II together are not sufficient to answer the question.

(e) if the data in both the statements I and II together are necessary to answer the question.

1. What was the ratio between the ages of P and Q four years ago?
   I. The ratio between the present ages of P and Q is 3:4.
   II. The ratio between the present ages of Q and R is 4:5.
2. What was the cost price of the suitcase purchased by Samir?
   I. Samir got 25 per cent concession on the labelled price.
   II. Samir sold the suitcase for ₹ 2000 with 25 per cent profit on the labelled price :
3. What is the height of a triangle?
   I. The area of the triangle is 20 times its base.
   II. The perimeter of the triangle is equal to the perimeter of a square of 10 cm side.
4. What percentage rate of simple interest per annum did Ashok pay to Sudhir?
   I. Ashok borrowed ₹ 8000 from Sudhir for four years.
   II. Ashok returned ₹ 8800 to Sudhir at the end of two years and settled the loan.
5. What is the speed of a running train?
   I. The train crosses a signal post in 6 seconds.
   II. The train crosses another train running in the opposite direction in 15 seconds.
6. What does 'pit' mean in a certain code language?
   I. 'ja na pit sod' means 'beautiful bunch of flowers' in that code language.
   II. 'na sod pa tok' means 'huge-bunch of twigs' in that code language.
7. Towards which direction is P from R?
   I. S is towards west of M and north-east of R.
   II. P is towards south of S.
8. How is M related to R?
   I. P and R are children of K, who is wife of M.
   II. N's sister M is married to R's father.
9. Among Q, R, S, T and V who is third from the top when they are arranged in ascending order of their heights?
   I. T is taller than Q and V but shorter than R.
   II. R and S are taller than T and Q is shorter than T but taller than V.
10. When was the election of the president of the society held?
    I. Suresh submitted his nomination for the election on 13th and left on 17th for Delhi the day after he won the election.
    II. The nominations were scrutinised on 14th and the ballot papers were prepared on the following day.
11. What is the original number?
    I. Sum of two digits of a number is 10. The ratio between the two digits is 1 : 4.
    II. Product of two digits of a number is 16. Quotient of the two digits is 4.
12. What is the rate of the compound interest?
    I. A certain amount invested at the compound interest rate amounts to ₹ 1331.
    II. The amount was invested for a period of three years.
13. What is the present age of the mother?
    I. Father's age is eight years more than the mother's age. Father got married at the age of 28 years.
    II. Present age of the father is 30 years. Four years back the ratio of mother's age to father's age was 12 : 13.
14. How many children are there in the group?
    I. Average age of this group of children is 16,years. The total of ages of all the children in the group is 240 years.
    II. The total of ages of all the children in the group and the teacher is 262 years. The teacher's age is six years more than the average age of the children.
15. What is the percentage profit earned?
    I. A shopkeeper invested ₹ 14000 and purchased a certain number of articles.
    II. All the articles were sold at ₹ 15000.
16. By selling a product at 20% profit, how much profit was earned'?
    I. The difference between cost and selling price is ₹ 40.
    II. The selling price is 120 per cent of the cost price.
17. A train crosses another train running in the opposite direction in x seconds. What is the speed of the train?
    I. Both the trains have the same length and are running at the same speed.
    II. One train crosses a pole in 5 seconds.
18. What is a two-digit number?
    I. The difference between the two digits is 9.
    II. The sum of the digits is equal to the difference between the two digits.
19. A spherical ball of radius x cm is melted and made into a right circular cylinder. What is the height of the cylinder?
    I. The volume of the cylinder is equal to the volume of the ball.
    II. The area of the base of the cylinder is given.

20. The area of a square is equal to that of a circle. What is the circumference of the circle'?
I. The diagonal of the square is x inches.
II. The side of the square is y inches.

21. A, B and C are positive integers. Is their product an even number?
I. A is an even number.
II. The product of A and B is an even number and that of A and C is also an even number.

22. What is the meaning of "nic" in a certain code language?
I. In that code language "pat nic no ran" means "what is your name"?
II. In that code language "nic sa ran ja" means "my name is Shambhu".

23. How many daughters does K have'?
I. L and N are sisters of M.
II. N's mother is K who has only one son.

24. How is S related to R?
I. R's sister is the mother of N, who is daughter of S.
II. P is the sister of S.

25. Is D brother of J ?
I. J is the sister of M and K.
II. K is the brother of D.

26. Which direction is John facing?
I. Alok is to the right of John.
II. Aman is sitting opposite of Alok facing north.

27. Who is the tallest among A, B, C, D and E?
I. C is taller than B and E.
II. E is taller than D and A and D is taller than B and C.

28. A box contains oranges, bananas and apples. How many apples are there in the box?
I. Of the hundred fruits in the box, fifty per cent constitute oranges and bananas together.
II. Fifty per cent of the fruits in the box are apples.

29. The area of a playground is 1600 square metres. What is its perimeter?
I. It is a perfect square playground.
II. It costs ₹ 3200 to put a fence around the playground at the rate of ₹ 20 per metre.

30. A, B,C and D made their project presentation, one on each day, on four consecutive days but not necessarily in that order. On which day did 'C' make his presentation?
I. The first presentations was made on 23rd,Tuesday and was followed by 'D's presentation.
II. 'A' did not make his presentation on 25th and one of them made his presentation, between A's and B's.

31. What is the shortest distance between Devipur and Durgapur?
I. Durgapur is 20 km away from Rampur.
II. Devipur is 15 km away from Rampur.

32. In a certain code "*al ed nop*" mens "We play chess". Which code word means "chess"?
I. "*id nim nop*' means "We are honest".
II. "*gob ots al*" means "They play cricket".

33. "You must submit your application within 10 days from the date of release of this advertisement." What is exact date before which the application must be submitted?
I. The advertisement was released on 18th February.
II. It was a leap year.

34. Kiran is older than Manoj and Dilip is older than Neelam. Who among them is the youngest?
I. Kiran is older than Neelam.
II. Manoj is younger than Dilip.

35. 'B' is the sister of 'A'. How is 'A' related to 'B'?
I. 'A' is the brother of 'C'.
II. 'A' is the uncle of 'D'.

36. Brinda's merit rank is 17th in her class. What is her rank from the last?
I. There are 70 students in her class.
II. Nisha who ranks 20th in Brinda's class is 51st from the last.

37. Mandar is taller than Sunil and Raghu is shorter than Abhishek. Who among them is the shortest?
I. Raghu is shorter than Mandar.
II. Abhishek is shorter than Sunil.

38. How is 'go' written in a certain language?
I. 'you may come' is written as '*pic na ta*' in that code language.
II. 'he may go' is written as '*ja ho pic*' in that code language.

39. Among P, Q, R, S, T and V, who is the heaviest?
I. P and S are heavier than Q, T and V but none of them is the heaviest.
II. P is heavier than S but lighter than R.

40. A, B, C, D and F are seated around a circular table facing at the center. Who is on the immediate right of B?
I. D is between A and F.
II. C is between B and F.

41. What is the relation between M and F?
I. M has two sons, one of whom is B.
II. The mother of F has two sons D and B.

42. H is in which direction with respect to V?
I. S is to the south of K, who is to the west of V.
II. M is to the north of H, who is to the east of V.

43. By selling a product for ₹ 100 how much profit was earned?
I. 20% profit would have been earned if it had been sold for ₹ 90.
II. The profit was one-third of the purchase price.

44. A train crosses another train running in the opposite direction in x seconds. What is the speed of the train?
I. Both the trains are running at the same speed.
II. The first train is y cm long.

45. The difference between the two digits of a number is 6. What is the number?
I. The digit at the units place is bigger than the other digit.
II. The sum of the two digits is 12.

46. X, Y and Z are integers. Is X an odd number?
I. An odd number is obtained when X is divided by 5.
II. $(X + Y)$ is an odd number.

47. What is the capacity of a cylindrical tank?
I. Radius of the base is half of its height, which is 28 metres.
II. Area of the base is 616 sq metres and height is 28 metres.

48. What is the per cent rate of interest per annum on an investment of ₹ 12500?
I. The compound interest for 2 years is more than the simple interest for the same period by ₹ 500.
II. The income from simple interest is ₹ 5000.

49. What is the length of the train which crosses a signal pole in 20 seconds'?
I. The speed of the train is 54 kmph.
II. The train crosses a 150-metre-long platform in 30 seconds.

50. What is the depth of a cylindrical pipe?
I. The area of the base is 616 cm^2.
II. The perimeter of the base is 88 cm.

51. 48 children of a class were asked to sit in rows and columns. How many children are seated in each row?
I. The number of columns is more than the number of rows.
II. The number of rows is 3/4 of the number of columns.

52. What is the height of the triangle *ABC*?
I. *AB* is the base and the sum of the sides is 25 cm.
II. The ratio of the sides *AB*, *BC* and *CA* is 2 : 2 : 1.

53. Who among *M, T, R, K* and *Q* is the tallest'?
I. *T* is taller than *R, M* and *Q* but shorter than *K*.
II. *R, T* and *M* are shorter than *K* but taller than *Q*

54. In which month of the year was Mohan born?
I. Mohan was born in winter.
II. Mohan was born exactly fourteen months after his elder sister, who was born in October.

55. *D* is in which direction of *P*?
I. *S* is to the south of *P*, which is to the west of *D*.
II. *P* and *R* are in a straight line and *R* is to the south of *D*.

56. How is *P* related to *M*?
I. *P* is brother of *K* and *T*.
II. *T* is daughter of *Q* and sister of *M*'s daughter.

57. In a certain code language what does 'come' mean?
I. 'pit na ja' means 'come and go' in the code language.
II. 'na dik sa' means 'you may go' in the code language.

58. What is Meena's rank from top in a class of twenty students?
I. Rama is fifth from the top and two ranks above Meena.
II. Ashok is tenth from the bottom and three ranks below Meena.

59. Who among *P, Q, S, T, V* and *W* is the shortest?
I. *S* is taller than *T, P* and *W* and is not the tallest.
II. *T* is shorter than *Q* but is not the shortest.

60. Which of the following means 'very' in a certain code language?
I. '*pit jo ha*' means 'very good boy' in that code language.
II. '*jo na pa*' means 'she is good' in that code language.

61. On which day of the week was Pramod born?
I. Pramod's sister was born on Wednesday?
II. Pramod's birthday was after his brother's birthday but before his sister's birthday.

62. How many sisters does *P* have?
I. *M* and *T* are sister of *K*.
II. *D* is husband of *B*, who is mother of *K* and *P*.

63. Who scored highest among *A, B, C, D,* and *E*?
I. *B* scored more than *D*, but not as much as *C*.
II. *E* scored more than *C* but not more than *A*.

64. How many boys are there in the class?
I. Mita's rank among girls is 5th from the top and her rank in the class is 9th from the bottom.
II. No. of boys in the class is twice the number of girls.

65. Who is to the immediate right of *P* among five persons *P, Q, R, S* and *T* facing North?
I. *R* is third to the left of *Q; P* is second to the right of *R*.
II. *Q* is to the immediate left of T, who is second to the right of *P*.

66. Z is in which direction with respect of *X*?
I. *Y* is to the South of *X* and *Z* is to the East of *P*, which is to the North of *Y*.
II. *P* is to the South of *X*.

67. How is *P* related to *N*?
I. *N* is sister of *M*, who is son of *Q*, whose wife is *P*.
II. *M* is brother of *N* and son of *Q*, whose wife is *P*.

68. What is the speed of a boat?
I. The boat covers a distance of 48 km in 6 hours while running upstream.
II. It covers the same distance in 4 hours while running downstream.

69. What was the population of State '*A*' in 1999?
I. Population of State '*A*' increases every year by 20%.
II. Population of State '*A*' in 1999 was 172.8% of its population in 1996.

70. What is a two-digit number?
I. Sum of the digits is equal to the difference between the digits.
II. Difference between the digits is 9.

71. What is Sudha's present age?
I. Sudha's present age is five times her son's present age.
II. Five years ago her age was twenty-five times her son's age that time.

72. What is the average age of the children in a class?
I. The age of the teacher is as many years as the number of children.
II. The average age increases by 1 year if teachers' age is also included.

73. What is Sunil's position in a row of forty students?
I. There are sixteen students towards the left of Sunil.
II. There are twenty-three students towards the right of Sunil.

74. On which date in April was Varun born?
I. Varun's mother remembers that Varun was born before nineteenth but after fifteenth.
II. Varun's sister remembers that Varun was born before seventeenth but after twelfth.

75. How is 'go' written in a code language?
I. 'you may go' is written as '*pit. ja ho*' in that code language.
II. 'he may come' is written as, '*ja da na*' in that language.

76. How is *D* related to *M*?
I. *M* has two sisters *K* and *R*.
II. *D*'s mother is sister of *K*'s father.

77. Who among *M, T, R, J* and *K* is the lightest?
I. *R* is heavier than *T* and *K* but lighter than *J*.
II. *J* is not the heaviest.

78. What is the distance (in km) between Achalpur and Durgapur by the shortest route?
I. Durgapur is 8 km to the north of Meerapur which is 162 km away from Achalpur.
II. Achalpur is 69 km away from Bijnaur which is 28 km away from Durgapur.

79. Is Mr 'Y' entitled to get promotion in the month of September 2002?
I. As per his office rules, the only condition for promotion is completion of 12 years of service in a particular grade on 31st December of every year.
II. Mr 'Y' has been working in this office for the last 12 years.

80. What is the area of a square ABCD?
I. The perimeter of the square is 16 cm.
II. The difference between the length of side CD and the sum of the lengths of side AB and CD is 4 cms.

81. How is 'M' related to 'N'?
I. 'P' is the daughter of 'M' and mother of 'S'?
II. 'T' is the son of 'P' and husband of 'N'.

82. On which date of a particular year was Aryabhatta commissioned into the Earth's orbit?
I. China's secret services claim that it was between 7th and 10th of May.
II. The Japan's space research scientists claim that it was between 5th and 10th of May.

83. How is 'A' related to 'D'?
I. 'C' is the daughter of A and sister of B.
II. 'D' is the son of F who is C's grandfather.

84. How many employees of bank 'X' opted for VRS?
I. 18% of the 950 officer cadre employees and 6% of the 1100 of all other cadre employees opted for VRS.
II. 28% of the employees in the age group of 51 to 56 and 17% of the employees in all other age groups opted for VRS.

85. In a row of five buildings A, B, C, D and E, which building is in the middle?
I. Buildings D and B are at the two extreme ends of the row.
II. Building E is to the right of building C.

86. Which codeword stands for 'good' in the coded sentence '*sin co bye*' which means 'He is good'?
I. In the same code language '*co mot det*' means 'They are good'.
II. In the same code language '*sin mic bye*' means 'He is honest'.

87. Among five colleagues, A, B, C, D and E who is the highest salary earner?
I. B's salary is less than the sum of the salaries of A and C, but more than the sum of salaries of E and D.
II. A's salary is more than that of both E and D but less than that of C who ranks second in the descending order of their salaries.

88. How many students are there in the school?
I. The number of boys is 90 more than that of girls.
II. The percentage of boys to the percentage of girls is 145.

89. What is a two-digit number?
I. The sum and difference of digits are 9.
II. The unit's digit is less than the ten's digit.

90. What is the rate of compound interest?
I. The principal was invested for 4 years.
II. The interest earned was ₹ 1491.

91. What is the measure of the third angle of a triangle?
I. The sum of the other two angles is 130°.
II. The sum of second and third angles is 110°.

92. What is the distance between the points X and Y?
I. A boat takes 4 hours in covering a distance from X to Y downstream and from Y to X in upstream.
II. The speed of the boat in still water is 5 kmph.

93. What is the volume of a 32-metre-high cylindrical tank?
I. The area of its base is 154 m^2.
II. The diameter of base is 14 m.

94. Aparna is twice as old as Savita. What is the difference between their ages?
I. Five years hence, the ratio of their ages would be 9: 5.
II. Ten years back, the ratio of their ages was 3 : 1.

95. A train crosses a pole in 10 seconds. What is the length of the train?
I. The train crosses another train running in opposite direction at a speed of 80 km/hr in 22 seconds.
II. The speed of the train is 108 km/hr.

96. What is the area of a rectangle?
I. The difference between the sides is 5 cm.
II. The measure of its diagonal is 10 cm.

97. Is X an odd integer?
I. When multiplied by an even number, it gives an even number.
II. When multiplied by an odd number, it gives an odd number.

98. How is 'flower' written in a code language?
I. 'it is a beautiful flower' is written as '*ho na ta ja pa*' in that code language.
II. 'this is a beautiful place' is written as '*ko ja ta po na*' in that code language.

99. K is in which direction of T?
I. P is towards South of T and towards East of N.
II. M is towards North of T and towards West of K.

100. How many children are there between M and P in a row of children?
I. M is fifteenth from the left in the row.
II. P is exactly in the middle and there are ten children towards his right.

101. P, Q, R, S and T are sitting in a circle, facing towards the centre of the circle. Who is second to the right of P?
I. R is on the immediate left of T and second to the right of S.
II. Q is on the immediate right of S and third to the left of P.

102. Among M, K, B, D and W, who is the youngest?
I. B is younger than D.
II. W is younger than K but older than M.

103. What does 'Ne' stands for in the code language?
I. 'Na Ni Nok Ne' means 'I will tell you' and 'Ni Nok Ne Nam' means 'he will tell you' in that code language.
II. 'Ni Ne Mo Nam' means 'will he call you' and 'Ne Mok Sac Ni' means 'how will you go' in that code language.

104. Who amongst P, Q, R, S, T and U is the tallest?
I. P is taller than R and T but not as tall as U, who is taller than Q and S.
II. R is the third in height in the ascending order and not as tall as U, P and Q, Q being taller than P but not the tallest.

105. Who among A, B, C, D, E & F read the book last?
I. F, who gave the book to B after reading, was third to read the same.
II. C, who read the book after A, was the third person to read the book before it reached E.

106. Who is paternal uncle of P?
I. P is brother of L, who is daughter of Q, who is sister of N, who is brother of S.
II. M is brother of K, who is husband of L, who is mother of G, who is sister of P.

107. What is Sudin's rank in the class of 44 students?
I. Ramesh, whose rank is 17th in the class, is ahead of Shyam by 6 ranks, Shyam being 7 ranks ahead of Sudin.
II. Suketu is 26 ranks ahead of Sudin and Shyamala is 6 ranks behind Sudin while Savita stands exactly in the middle of Shyamala and Suketu in ranks, her rank being 17.

108. What will be the compounded amount?
I. ₹ 200 were borrowed for 192 months at 6% compounded monthly.
II. ₹ 200 were borrowed for 16 years at 6%.

109. What would have been the selling price per kg of rice?
I. 50 kg of rice was purchased for ₹ 3,350 and ₹ 150 was spent on transport.
II. Profit earned was 5%.

110. What will be ratio of men to women and children in the town?
I. Population of the town is 93,280 of which 56,100 are men.
II. The ratio of men to children is 5 : 2 and women are double in number than the children.

111. What will be the average weight of the remaining class?
I. Average weight of 30 children out of total 46 in the class is 22.5 kg and that of the remaining children is 29.125 kg. A child having weight more than 40 kg is excluded.
II. Average weight of a class of 46 children is 23.5 kg. A child weighing 46 kg is dropped out.

112. What will be the number?
I. One-fifth of a number is equal to 20% of that number.
II. Thirty-five percent of a number is $\frac{7}{20}$ of that number.

113. How many children are there in the class?
I. Numbers of boys and girls are in the respective ratio of 3 : 4.
II. Number of girls is more than the number of boys by 18.

114. What was the population of State 'A' in 1999?
I. Population of the State increases every year by 20% and its population in 1997 was 1,20,000.
II. Population of State A in 1997 was twice that of State B in the same year.

115. What is the cost of laying carpet in a rectangular hall?
I. Cost of the carpet is ₹ 450 per square metre.
II. Perimeter of the hall is 50 metres.

116. What is the rate of interest p.c.p.a.?
I. Difference between compound interest and simple interest on an amount of ₹ 10,000 for two years is ₹ 225.
II. The amount doubles itself on simple interest in $6\frac{2}{3}$ years.

117. What is a two-digit number?
I. The number obtained by interchanging the digits is smaller than the original number by 63.
II. Sum of the digits is 11.

118. What will be the cost of the second necklace?
I. The cost of the first necklace is more than $\frac{1}{5}$ of the second and the cost of the third necklace is more than $\frac{2}{5}$ of the second. The total cost of all the three necklaces is Rs. 120000.
II. The cost of the first necklace is $\frac{2}{5}$ more than the second. The cost of the third necklace is the least and total cost of all the three necklaces is Rs. 1,20,000.

119. How many items did the distributor purchase?
I. The distributor purchased all the items for Rs. 4500.
II. If the distributor had given Rs. 5 more for each item, he would have purchased 10 items less.

120. How long will it take to fill a tank?
I. One pipe can fill the tank completely in 3 hours.
II. Second pipe can empty that tank in 2 hours.

121. What will be the area of a plot in sq. metres?
I. The length of that plot is $1\frac{2}{3}$ times the breadth of that plot.
II. The diagonal of that plot is 30 metres.

122. How much minimum marks will be required to pass an examination?
I. Student *A* secured 32% marks in that examination and he failed by 1 mark. Student *B* secured 36% marks in the same examination and his marks was 1 more than the minimum pass marks.
II. Student *A* secured 30% of full marks in the examination and he failed by 2 marks. If he had secured 5 more marks his percentage of marks would have been 40%.

123. What is the height of a circular cone?
I. The area of that cone is equal to the area of a rectangle whose length is 33 cm.
II. The area of the base of that cone is 154 sq cm.

124. What is the price of a table'?
I. The total price of 3 chairs and 5 tables is ₹ 18,800.
II. The total price of 6 chairs and 4 tables is ₹ 20,800.

125. What was the speed of a running train A?
I. The relative speed of train A and another train B running in opposite direction is 160 kmph.
II. The train B crosses a signal post in 9 seconds.

126. What is the difference between the two digits in a two-digit number?
I. The sum of the two digits is 8.
II. 1/5 of that number is 15 less than 1/2 of 44.

127. What is the monthly income of Q9
1. Q earns ₹ 6000 more than R, who earns ₹ 3000 less than P.
II. The total monthly income of P and Q is ₹ 27,000.

128. What will be the share of P in the profit earned by *P*, *Q* & *R* together?
A. *P*, *Q* & *R* invested total amount of ₹ 25,000 for a period of two years.
B. The profit earned at the end of two years is 30%.
C. The amount invested by *Q* is equal to the amount invested by *P* & *R* together.
(a) A only (b) B only
(c) C Only
(d) All A, B & C are required to answer the question
(e) Question cannot be answered even with the information given in all three statements.

129. What is the rate of simple interest per annum?
I. The sum triples in 20 years at simple interest.
II. The difference between the sum and the simple interest earned after 10 years is ₹1000.

130. What is the sum which earned interest?
I. The total simple interest was ₹7000 after 7 years.
II. The total of sum and simple interest was double of the sum after 5 years.

131. A train crosses a signal post in X seconds. What is the length of the train?
I. The train crosses a platform of 100 metres in Y seconds.
II. The train is running at the speed of 80 km/hr.

132. What is the area of a circle?
I. The circumference of the circle is 308 metres.
II. The radius of the circle is 28 metres.

133. A, B and C are integers. Is B an even number?
I. (A + B) is an odd number.
II. (C + B) is an odd number.

134. P, Q, R, S and T are sitting around a circular table facing the centre. Who is on the immediate right of R?
I. P and T are on the either sides of S.
II. Q is on the immediate left of T.

135. How is M related to D?
I. D says I have only one brother.
II. M says I have only one sister.

136. How is 'over' written in a code language?
I. 'go over there' is written as 'na ho ja' in that code language.
II. 'over and again' is written as 'pit tak na' in that code language

137. B is F's brother. K is mother of F. How is F related to B?
I. K has only one son and one daughter.
II. B is the only son of M, who has two children.

138. Among M, T, R, D, B, each one of them having different weight, who is the third from top when they are arranged in descending order of their weights?
I. R is heavier than M and T but lighter than B.
II. M is lighter than R but heavier than T.

139. What will be the cost of painting of the inner wall of a room if the rate of painting is ₹ 20 per square metre?
I. Perimeter of the floor is 44 feet.
II. Height of the wall of the room is 12 feet.

140. What is the ratio of the number of boys and girls in a school'?
I. Number of boys is 40 more than the girls.
II. Number of girls is 80 per cent of the number of boys.

141. What is the difference between two numbers?
I. First number is 60 per cent of the other number.
II. 50 per cent of the sum of first and second numbers is 24.

142. What was the speed of the running train?
I. Length of the train was 120 metre.
II. The train crossed the other train whose length was 180 m in 4 seconds.

143. What will be the compound interest after 3 years?
I. Rate of interest is 5 per cent.
II. The difference between the total simple interest and the total compound interest after two years is ₹ 20.

144. Which village is to the North-East of village A'?
I. Village 'B' is to the North of village A', and village `C' and `D' are to the East and West of village `B', respectively.
II. Village 'P' is to the South of village 'A', and village 'E' is to the East of village 'P', village 'K' is to the North of village 'P'.

145. Can Rohan retire from office 'X' in January 2000 with full pension benefits?
I. Rohan will complete 30 years of service in office 'X' in April 2000 and desires to retire.
II. As per office 'X' rules, an employee has to complete minimum 30 years of service and attain age of 60. Rohan has 3 years to complete age of 60.

146. Among five friends P, Q, R, S and T, who ranks third 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 lowest among them.

147. How is P related to Q?
I. J has two daughters, one of them 'R' is married to 'P'
II. Q is the mother of 'S', the younger sister of 'R'

148. Which word in the code language means 'flower'?
I. 'dem fu la pane' means 'rose flower is beautiful' and 'la quiz' means 'beautiful tree'.
II. 'dem fu chin' means 'red rose flower' and 'pa chin' means 'red tea'.

149. How many marks did Prakash obtain in Mathematics?
I. Prakash secured on an average 55 per cent marks in Mathematics, Physics and Chemistry together.
II. Prakash secured 10 per cent more than the average in Mathematics.

150. What is the rate of compound interest on a sum of money?
I. The total compound interest at the end of two years is ₹ 820.
II. The total simple interest at the same rate on ₹ 5,000 at the end of three years is ₹ 750.

151. Which is the smaller of the two numbers?
I. The difference between these two numbers is one-third of the largest number.
II. The sum of these two numbers is 30.

152. What is the height of a right-angled triangle?
I. The area of the right-angled triangle is equal to the area of a rectangle whose breadth is 12 cm.
II. The length of the rectangle is 18 cm.

153. What is the speed of a running train which takes 9 seconds to cross a signal post?
I. The length of the train is 90 metres.
II. The train takes 27 seconds to cross a platform of 180 metres.

154. In an examination 'X' four tests P, 'Q, R and S are given. Which is the easiest one?
I. Most of the examinees attempted test,'Q' first. While 'P' was left incomplete by many.
II. Test 'R' is found easier than test 'S' by all the examinees.

155. In a row of five A, B, C, D and E, who is standing in the middle?
I. D is to the immediate right of E and B is to the immediate left of E.
II. B is at the extreme left of the row.

156. What is the distance between villages 'X' and 'Y' by the shortest route?
I. Village 'X' is to the North of village 'Z' at a distance of 35 km.
II. Village 'Y' is to the west of village 'Z' at a distance of 20 km.

157. How is Sushma related to Nandini?
I. Sushma's husband is the only son of Nandini's mother.
II. Sushma's brother and Nandini's husband are cousins.

158. How many candidates were interviewed everyday by the panel 'A' out of the three panels A, B and C?
I. The three panels on an average can interview 15 candidates every day.
II. Out of a total of 45 candidates interviewed everyday by the three panels, the no. of candidates interviewed by panel 'A' is less by 2 than the candidates interviewed by panel 'C' and is less by 1 than the candidates interviewed by panel 'B'.

159. Which direction is Shashidhar facing?
Statements :
I. In the early morning Shashidhar was standing in front of a puppet and the shadow of the puppet was falling to the right of Shashidhar.
II. In the early morning Shashidhar was standing on the ground. His shadow was falling behind him when he turned to his left.

160. Who among A, B, C, D and E teaches History?
Statements :
I. Each one of them teaches only one subject. B teaches Mathematics, while E teaches Science. A or C does not teach Geography. A or D does not teach English.
II. C and E are teachers of English and Science respectively and A is the teacher of Mathematics.

161. In a row of boys facing South who is immediate left to Ramakant?
Statements :
I. Suresh is immediate right to Chandrakant, who is fourth to the right of Ramakant.
II. Suresh is third to the right of Ramakant and Naresh is second to the right of Suresh.

162. Who has secured the maximum marks among six friends A, B, C, D, E and F ?
Statements :
I. B secured less marks than A and F but not less than C, D and E.
II. F secured more marks than B but not as much as A.

163. What will be the position of hour hand of a clock at 7.30 PM ?
Statements :
I. There are English alphabets on the dial of the clock instead of digits.
II. The hour hand is at P at 7 O'clock.

164. Mahesh's flat is on which floor of the five-floor apartment?
I. His flat is exactly above Ganesh's flat whose flat is exactly above Nitin's first-floor flat.
II. Jeevan's flat, which is adjacent to Mahesh's flat, is exactly below Ahmed's flat, who is on fourth floor.

165. At present, how many villagers are voters in village 'X'?
I. There were 860 voters in village 'X' in the list prepared for the last election.
II. The present list of village 'X' has 15% more voters than the list for the last election.

166. How many stations are there while going from station 'X' to station 'Y'?
I. Station 'G' precedes station 'Y' and station 'K' is next station after station 'X'.
II. Station 'M' is third from 'K' and there are 4 stations between M and Y.

167. How many books did Dinesh purchase in 'X' bookshop?
I. Dinesh wanted to purchase 65 books, but only 45 books were available in shop 'X'.
II. Dinesh selected 37 books but had money to purchase 27 books and asked for some credit to which the shop-keeper of 'X' bookstall did not agree.

168. If the first day of a month is Thursday, how many days were there in that month?
I. The fourth Sunday happened to be on 25th.
II. The last day of the month was the fifth Saturday of that month.

169. How many girls are taller than Samir in his class?
I. When students of Samir's class are ranked in descending order of their height, Samir's rank is 17th from the top among all the students and 12th among boys.
II. Samir's rank from the bottom on the basis of height among boys is 18th and among all students is 29th.

170. Among Nitin, Amit, Sudesh, Rekha and Sujata, who came last for the programme?
I. Nitin came after Amit but not after Sujata.
II. Rekha came after Sujata but not after Sudesh.

171. (b) Out of the four teams A, B, C and D which team is not likely to win as per the opinion poll?
I. As per the opinion poll, chances of team C's winning are more than that of team A but not as much as that of team B, whose chances of winning are more than that of team A.
II. As per the opinion poll team C's chances of winning are less than that of team B but not less than that of team D, whose chances of winning are more than that of team A.

172. How is Pratibha related to Suresh?
I. Suresh's mother is Pratibha's mother-in-law.
II. Suresh is the only son of Sushila, who is Pratibha's mother-in-law.

173. Five friends P, Q, R, S and T are standing in a row facing East. Who is standing at the extreme right end?
I. Only P is between S and T ; R is to the immediate right of T.
II. R is between T and Q.

Directions (Qs. 174 - 188): In each of the following questions, a question is followed by information given in three statements. You have to study the question along with the statements and decide the information given in which of the statement(s) is necessary to answer the question.

174. What is the cost of flooring a rectangular hall?
I. The length and the breadth of the hall are in the ratio of 3 : 2.
II. The length of the hall is 48 metres and the cost of flooring is ₹ 850 per square metre.
III. The perimeter of the hall is 160 metres and the cost of flooring is ₹ 850 per square metre.
(a) Only I and II (b) Only I and III
(c) Only Ill (d) Only I and either II or III
(e) Any two of the three

175. What is the rate of interest pcpa?
I. The amount doubles itself in 5 years on simple interest.
II. Difference between the compound interest and the simple interest earned on this amount in two years is ₹400.
III. Simple interest earned per annum is ₹ 2000.
(a) Only I
(b) Only II and III
(c) Any two of the three
(d) All I,II and III
(e) Only I or only II and III

176. What is a two-digit number?
I. The difference between the two-digit number and the number formed by interchanging the digits is 27.
II. The difference between the two digits is 3.
III. The digit at unit's place is less than that at ten's place by 3.
(a) Only I and II
(b) Only I and either II or III
(c) Only I and III
(d) All I, II and III
(e) Even with all the three statements the answer cannot be given.

177. What is the present age of Subir?
I. The present age of Subir is half that of his father.
II. After 5 years the ratio of Subir's age to his father's will be 6 : 11.
III. Subir is 5 years younger than his brother.
(a) Only I and II (b) Only I and III
(c) Only II and III (d) All I, II and III
(e) Even with all the three statements answer cannot be given.

178. In how many days can 10 women finish a work?
I. 10 men can complete the work in 6 days.
II. 10 men and 10 women together can complete the work in $3\frac{3}{7}$ days.
III. If 10 men work for 3 days and thereafter 10 women replace them, the remaining work is completed in 4 days.
(a) Only I and II (b) Any two of the three
(c) Only I and III (d) Only II and III
(e) None of these

179. What is Sudha's present salary?
I. The salary increases every year by 15%.
II. Her salary at the time of joining was ₹ 10000.
III. She had joined exactly 5 years ago.
(a) II and III only (b) I and II only
(c) All I, II and III (d) I and III only
(e) None of these

180. What was the amount of profit earned?
I. 10% discount was offered on the labelled price.
II. Had there been no discount, profit would have been 30%
III. Selling price was more than the cost price by 20%
(a) I and either II or III (b) Any two of the three
(c) All I, II and III (d) Either I or II and III
(e) Question cannot be answered even with the information in all three statements

181. How many students are there in all in the institute of Arts, Commerce and Science?
I. 20% of the student study Science.
II. The numbers of students studying Arts and Commerce are in the ratio 3:5
III. The number of students studying Commerce is more than that studying Science by 375.
(a) II and III only (b) III and either I or II only
(c) Any two of the three (d) All I, II and III
(e) Question cannot be answered even with the information in all three statements

182. What is the cost of flooring a rectangular hall?
I. Perimeter of the hall is 76 m.
II. Area of the hall is 336 m^2.
III. Cost of flooring per square metre is ₹ 550.
(a) I and III only (b) II and III only
(c) Any two of the three (d) All I, II and III
(e) None of these

183. In how many days can a work be completed by *A* and *B* together?
I. *A* alone can complete the work in 8 days.
II. If *A* alone works for 5 days and *B* alone works for 6 days, the work gets completed.
III. *B* alone can complete the work in 16 days.
(a) Any two of the three (b) II and either I or III
(c) I and II only (d) II and III only
(e) None of these

184. What is the capacity of a cylindrical tank?
I. The radius of the base is half of its height.
II. The area of the base is 616 sq. metres.
III. The height of the cylinder is 28 metres.
(a) Only I and II (b) Only II and III
(c) Only I and III (d) All I, II and III
(e) Any two of the three

185. What is the speed of a train?
I. The train crosses a signal pole in 18 secs.
II. The train crosses a platform of equal length in 36 secs.
III. Length of the train is 330 metres.
(a) I and III only (b) II and III only
(c) I and II only (d) III and either I or II only
(e) Any two of the three

186. What is the staff strength of Company 'X'?
I. Male and female employees are in the ratio of 2 :3 respectively.
II. Of the officer employees 80% are males.
III. Total number of officers is 132.
(a) I and III only
(b) II and either III or I only
(c) All I, II and III
(d) Any two of the three
(e) Question cannot be answered even with the information in all the three statements.

187. What is this two-digit number?
I. The number obtained by interchanging the digits is more than the original number by 9.
II. Sum of the digits is 7.
III. Difference between the digits is 1.
(a) I and III only (b) I and II only
(c) II and III only (d) All I, II and III
(e) Question cannot be answered even with the information in all the three statements.

188. How many articles were sold?
I. Total profit earned was ₹ 1,596.
II. Cost price per article was ₹ 632.
III. Selling price per article was ₹765.
(a) II and III only (b) I and II only
(c) All I, II and III (d) Any two of the three
(e) Question cannot be answered even with the information in all the three statements.

Directions (Qs. 189 - 193) : Each of the questions below consists of a question and three statements denoted A, B and C are given below it. You have to study the questions and all the three statements and decide whether the question can be answered with any one or two of the statements or all the statements are required to answer the question.

189. What is R's share of profit in a joint venture?
A. Q started a business investing ₹. 80,000/-.
B. R joined him after 3 months.
C. P joined after 4 months with a capital of ₹. 1,20,000 and got ₹. 6,000 as his share of profit.
(a) Only A and C are required
(b) Only B and C are required
(c) All A, B and C together are required
(d) Even with all A, B and C the answer cannot be arrived at
(e) None of these

190. What is the area of a right-angled triangle?
A. The perimeter of the triangle is 30 cm.
B. The ratio between the base and the height of the triangle is 5 : 12.
C. The area of the triangle is equal to the area of a rectangle of length 10 cm.
(a) Only B and C together are required
(b) Only A and B together are required
(c) Only either A or B and C together are required
(d) Only A and C together are required
(e) None of these

191. What is the sum of two numbers?
A. The bigger of these two number is 6 more than the smaller number.
B. 40% of the smaller number is equal to 30% of the bigger number.
C. The ratio between half of the bigger number and one-third of the smaller number is 2:1.
(a) Only B and C together are required
(b) Only A and B together are required
(c) Any two of A, B and C together are required
(d) All A, B and C together are required
(e) None of these

192. How many marks did Arun get in English?
A. Arun secured an average of 60 marks in four subjects including English.
B. He secured a total of 170 in English and Mathematics together.
C. He secured a total of 180 in Mathematics and Science together.
(a) All A, B and C together are required
(b) Only A and B together are required
(c) Only B and C together are required
(d) Only A and C together are required
(e) None of these

193. What was the profit earned on the cost price by Mahesh by selling an article?
A. He got 15% concession on labelled price in buying that article.
B. He sold it for ₹. 3,060/-.
C. He earned a profit of 2%, on the labelled price.
(a) Only A and B together are required
(b) Only B and C together are required
(c) Only either A or C and B together are required
(d) Even with all A, B and C the answer cannot be arrived at
(e) All A, B and C together are required

Directions (Qs. 194-198): In each of the following questions, a question is asked followed by three statements. While answering the question, you may or may not require the data provided in the statements. you have to read the question and the three statements and then decide whether the question can be answered with any one or two of the statements or all the three statements are required to answer the question. The answer number bearing the combination of statements or single statement which is necessary to answer the question is your answer.

194. What is the perimeter of a rectangular garden?
   A. The area of the garden is 2400 sq. metres.
   B. The diagonal of the garden is 50 metres.
   C. The ratio between the length and the breadth of the garden is 3 : 2.
   (a) All A, B and C together are required
   (b) Any two of A, B and C are sufficient
   (c) Only A and B are required
   (d) Only B and C are required
   (e) None of these

195. What was the rate of compound interest on an amount of money?
   A. The amount fetches a total of ₹ 945.75 as compound interest at the end of three years.
   B. The difference between the total simple interest and the total compound interest at the end of two years with the same rate of interest was ₹ 15.
   C. The ratio between the principal amount and the total simple interest at the end of three years is 20 : 3.
   (a) Only A and B are required
   (b) Only B and C are required
   (c) All A, B and C together are required
   (d) Even with all A, B and C together the answer cannot be determined
   (e) None of these

196. What is the difference between two numbers X and Y?
   A. X is 20 per cent more than another number Z.
   B. Y is 20 per cent less than Z.
   C. The sum of Y and Z is 72.
   (a) Only A and B are required
   (b) Only A and C are required
   (c) All A, B and C together are required
   (d) Any two of A, B and C are required
   (e) Even with all A, B and C together the answer cannot be arrived at

197. What is the monthly salary of Pravin?
   A. Pravin earns ₹ 1,200 more than Amal.
   B. The ratio between Amal and Vimal's monthly salary is 5 : 3.
   C. Vimal earns ₹ 1,000 less than Amal.
   (a) Any two of A, B and C are required
   (b) Only A and B are required
   (c) Only B and C are required
   (d) All A, B and C together are required
   (e) None of these

198. How much marks was obtained by Mukesh in Geography?
   A. The average marks obtained by Mukesh in English, History and Geography was 65.
   B. The difference between the marks obtained by Mukesh in English and History was 15.
   C. The total marks obtained by Mukesh in Geography and Mathematics was 140.
   (a) All A, B and C together are required
   (b) Only A and C are required
   (c) Only B and C are required
   (d) Even with all A, B and C together the answer cannot be determined
   (e) Any two of A, B and C are sufficient