Data Analysis and Interpretation

Directions (Q. 51–55) *Study the following table carefully to answer the questions that follow.*

Number (N) of Candidates (in Lakhs) Appearing for an Entrance Examination from Six Different States and the Percentage (P) of Candidates Clearing the Same Over the Years

Year \ State	A		B		C		D		E		F	
	N	P	N	P	N	P	N	P	N	P	N	P
2004	1.23	42	1.04	51	1.11	32	1.32	24	1.23	36	1.33	31
2005	1.05	43	1.12	62	1.07	47	1.15	49	1.18	55	1.24	24
2006	2.04	38	1.48	32	1.08	28	1.96	35	1.42	49	1.58	26
2007	1.98	41	2.07	43	1.19	30	1.88	46	1.36	47	1.79	29
2008	1.66	53	1.81	50	1.56	42	1.83	60	1.73	57	1.86	34
2009	1.57	39	1.73	36	1.64	52	2.01	56	1.69	55	1.95	37

51. In which year did the highest number of candidates clear the entrance exam from State D ?
(1) 2008
(2) 2006
(3) 2009
(4) 2007
(5) None of the above

52. What is the respective ratio of total number of candidates clearing the entrance exam from State B in the year 2004 to those clearing the entrance exam from State C in the same year ?
(1) 221 : 148
(2) 218 : 143
(3) 148 : 221
(4) 143 : 218
(5) None of the above

53. What is the total number of candidates clearing the entrance exam from States E and F together in the year 2006 ?
(1) 16160
(2) 110660
(3) 1.1066
(4) 1106600
(5) None of the above

54. What is the average number of candidates appearing for the entrance exam from State D in the years 2007, 2008 and 2009 together ?
(1) $1.907\frac{2}{3}$ (2) $18666\frac{1}{3}$
(3) $1.866\frac{1}{3}$ (4) $190666\frac{2}{3}$
(5) None of these

55. What is the number of candidates not clearing the entrance exam from State A in the year 2007 ?
(1) 186820 (2) 11682
(3) 1868200 (4) 116820
(5) None of these

Directions (Q. 56–60) *Study the given information carefully and answer the questions that follow :*

An urn contains 6 red, 4 blue, 2 green and 3 yellow marbles.

56. If two marbles are picked at random, what is the probability that both are red ?
(1) $\frac{1}{6}$ (2) $\frac{1}{3}$
(3) $\frac{2}{15}$ (4) $\frac{2}{5}$
(5) None of these

57. If three marbles are picked at random, what is the probability that two are blue and one is yellow ?
(1) $\frac{3}{91}$ (2) $\frac{1}{5}$ (3) $\frac{18}{455}$
(4) $\frac{7}{15}$ (5) None of these

58. If four marbles are picked at random, what is the probability that at least one is blue ?
(1) $\frac{4}{15}$ (2) $\frac{69}{91}$
(3) $\frac{11}{15}$ (4) $\frac{22}{91}$
(5) None of these

59. If two marbles are picked at random, what is the probability that either both are green or both are yellow ?
(1) $\frac{5}{91}$ (2) $\frac{1}{35}$
(3) $\frac{1}{3}$ (4) $\frac{4}{105}$
(5) None of these

60. If four marbles are picked at random, what is the probability that one is green, two are blue and one is red ?
(1) $\frac{24}{455}$ (2) $\frac{13}{35}$
(3) $\frac{11}{15}$ (4) $\frac{7}{91}$
(5) None of these

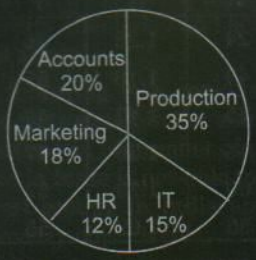
Directions (Q. 61–65) *Study the given pie-charts carefully to answer the questions that follow.*

Break-up 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 = 3600

Employees Working in Different Departments



Break-up of Number of Males in each Department

Total Number of Males in the Organisation = 2040

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 = 1200

Number of Employees who Recently got Promoted from each Department

61. The number of employees who got promoted from the HR department was what per cent of the total number of employees working in that department ? (rounded off to two digits after decimal)
(1) 36.18 (2) 30.56 (3) 47.22
(4) 28.16 (5) None of these

62. The total number of employees who got promoted from all the departments together was what per cent of the total number of employees working in all the departments together ? (Rounded off to the nearest integer)
(1) 56 (2) 21 (3) 45
(4) 33 (5) 51

63. What is the total number of females working in the Production and Marketing departments together ?
(1) 468 (2) 812
(3) 582 (4) 972
(5) None of these

64. 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 ?
(1) 61 (2) 29
(3) 54 (4) 42
(5) 38

65. How many females work in the Accounts department ?
(1) 618 (2) 592
(3) 566 (4) 624
(5) None of these

Directions (Q. 66–70) *Study the graph carefully to answer the questions that follow*

Per cent Rise in Profit of Two Companies over the Years

66. If the profit earned by company L in the year 2005 was ₹ 1.84 lakh, what was the profit earned by the company in the year 2006 ?
(1) ₹ 2.12 lakh
(2) ₹ 2.3 lakh
(3) ₹ 2.04 lakh
(4) Cannot be determined
(5) None of the above

67. Which of the following statements is TRUE with respect to the above graph ?
(1) Company M made the highest profit in the year 2009
(2) Company L made least profit in the year 2005
(3) The respective ratio between the profits earned by company L and M in the year 2006 was 6 : 5
(4) Company L made the highest profit in the year 2008
(5) All are true

68. What is the per centage increase in per cent rise in profit of company M in the year 2009 from the previous year ?
(1) 25 (2) 15
(3) 50 (4) 75
(5) None of these

69. If the profit earned by company M in the year 2008 was ₹ 3.63, what was the amount of profit earned by it in the year 2006 lakh ?
(1) ₹ 2.16 lakh (2) ₹ 1.98 lakh
(3) ₹ 2.42 lakh (4) Cannot be determined
(5) None of these

70. What is the average per cent rise in profit of company L over all the years together ?
(1) $15\frac{1}{3}$ (2) $25\frac{1}{3}$
(3) $18\frac{5}{6}$ (4) $21\frac{5}{6}$
(5) None of these

Directions (Q. 71–75) *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 per cent of the girls are enrolled in only Painting classes. Ten per cent of the boys are enrolled in only Singing classes. Twenty four per cent of the girls are enrolled in both Singing and Dancing classes together. The number of girls enrolled in only Singing classes is two hundred per cent 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 per cent of the girls are enrolled in only Dancing classes whereas eight per cent 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 per cent of the number of girls enrolled in the same. The remaining boys are enrolled in only Painting classes.

71. Total number of girls enrolled in Singing is approximately what per cent of the total number of students in the school ?
(1) 37 (2) 19
(3) 32 (4) 14
(5) 26

72. What is the respective ratio of the number of girls enrolled in only Painting classes to the number of boys enrolled in the same ?
(1) 77 : 26 (2) 21 : 73
(3) 26 : 77 (4) 73 : 21
(5) None of these

73. Number of girls enrolled in only Dancing classes is what per cent of the boys enrolled in the same ? (rounded off to two digits after decimal)
(1) 38.67 (2) 35.71
(3) 41.83 (4) 28.62
(5) None of these

74. What is the total number of boys who are enrolled in Dancing ?
(1) 318 (2) 364
(3) 292 (4) 434
(5) None of these

75. What is the total number of students enrolled in all the three classes together ?
(1) 135 (2) 164
(3) 187 (4) 142
(5) None of these

Directions (Q. 76-80) *Study the table carefully to answer the questions that follow.*

Profit (In ₹ '000) Made by Six Different Shopkeepers over the Months

Shopkeeper \ Month	October 2009	November 2009	December 2009	January 2010	February 2010	March 2010
P	5.25	6.04	5.84	6.10	5.95	6.02
Q	4.84	4.28	4.97	4.88	5.04	5.12
R	4.99	5.82	5.48	5.45	5.68	5.36
S	5.06	5.11	5.28	5.38	5.44	5.59
T	5.28	4.96	5.31	5.69	4.93	5.72
U	5.94	6.23	5.87	6.07	6.19	6.23

76. Which shopkeeper's profit kept increasing continuously over the given months ?
(1) R (2) Q
(3) T (4) U
(5) None of these

77. What was the average profit earned by shopkeeper R in the months of October – 2009 and November – 2009 together ?
(1) ₹ 5405 (2) ₹ 5040
(3) ₹ 4825 (4) ₹ 4950
(5) None of these

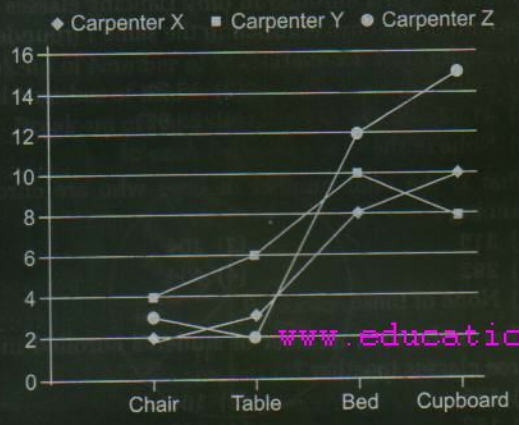
78. What is the per cent increase in profit of shopkeeper S in the month of December – 2009 over the previous month ? (rounded off to two digits after decimal)
(1) 3.15 (2) 2.67
(3) 2.18 (4) 3.33
(5) None of these

79. What is the respective ratio between the profit earned by shopkeeper U in the months February–2010 and March – 2009 together to that earned by shopkeeper Q in the same months ?
(1) 637 : 512 (2) 621 : 508
(3) 512 : 637 (4) 508 : 621
(5) None of these

80. What is the difference in profit earned by shopkeeper T in January – 2010 from the previous month ?
(1) ₹ 640 (2) ₹ 420
(3) ₹ 380 (4) ₹ 760
(5) None of these

Directions (Q. 81–83) *Study the given graph carefully to answer the questions that follow.*

Number of Days Taken by Three Carpenters to Finish Making One Piece Each of Four Different Items of Furniture



81. If Carpenter X and Carpenter Y were to make a chair together how many days would they take ?
(1) 1 day (2) 4 days (3) 3 days
(4) 2 days (5) None of these

82. What is the total number of days that Carpenter Z will take to make one piece each of all the four items together ?
(1) 32 days (2) 24 days
(3) $1\frac{1}{59}$ days (4) $1\frac{1}{32}$ days
(5) None of these

83. If Carpenters X, Y and Z were to make a table together how many days would they take ?
(1) 4 days (2) 3 days (3) 1 day
(4) 2 days (5) None of these

84. In how many different ways, can the letters of the word 'STRESS' be arranged ?
(1) 360 (2) 240
(3) 720 (4) 120
(5) None of these

85. The radius of a circular field is equal to the side of a square field whose perimeter is 784 feet. What is the area of the circular field ?
(1) 107914 sq ft (2) 120736 sq ft
(3) 107362 sq ft (4) 127306 sq ft
(5) None of these

Directions (Q. 86–90) *Study the given table carefully to answer the questions that follow.*

Number of People Staying in Five Different Localities and the Percentage Break-up of Men, Women and Children in them

Locality	Total Number of People	Percentage		
		Men	Women	Children
F	5640	55	35	10
G	4850	34	44	22
H	5200	48	39	13
I	6020	65	25	10
J	4900	42	41	17

86. What is the total number of men and children staying in locality I together ?
(1) 4115 (2) 4551
(3) 4515 (4) 4155
(5) None of these

87. The number of women staying in which locality is the highest ?
(1) H (2) J
(3) F (4) G
(5) None of these

88. What is the total number of children staying in localities H and I together ?
(1) 1207 (2) 1278
(3) 1827 (4) 1728
(5) None of these

89. What is the respective ratio of number of men staying in locality F to the number of men staying in locality H ?
(1) 517 : 416 (2) 403 : 522
(3) 416 : 517 (4) 522 : 403
(5) None of these

90. Total number of people staying in locality J forms approximately what per cent of the total number of people staying in locality F ?
(1) 81 (2) 72
(3) 78 (4) 93
(5) 87

91. The respective ratio of the present ages of a mother and daughter is 7 : 1. Four years ago the respective ratio of their ages was 19 : 1. What will be the mother's age four years from now ?
(1) 42 years (2) 38 years
(3) 46 years (4) 36 years
(5) None of these

92. The compound interest earned by Suresh on a certain amount at the end of two years at the rate of 8 p.c.p.a was ₹ 1414.4. What was the total amount that Suresh got back at the end of two years in the form of principal plus interest earned ?
(1) ₹ 9414.4 (2) ₹ 9914.4
(3) ₹ 9014.4 (4) ₹ 8914.4
(5) None of these

93. Three friends J, K and L jog around a circular stadium and complete one round in 12, 18 and 20 seconds respectively. In how many minutes will all the three meet again at the starting point ?
(1) 5 (2) 8 (3) 12
(4) 3 (5) None of these

94. 4 men can complete a piece of work in 2 days. 4 women can complete the same piece of work in 4 days whereas 5 children can complete the same piece of work in 4 days. If, 2 men, 4 women and 10 children work together, in how many days can the work be completed ?
(1) 1 day (2) 3 dys
(3) 2 days (4) 4 days
(5) None of these

95. The speed of a boat when travelling downstream is 32 km/h, whereas when travelling upstream it is 28 km/h. What is the speed of the boat in still water ?
(1) 27 km/h
(2) 29 km/h
(3) 31 km/h
(4) Cannot be determined
(5) None of the above

Directions (Q. 96–100) *Study the following tables carefully and answer the questions given below them.*

Number and Percentage of Candidates Qualified in a Competitive Examination
Number of Candidates appeared in a Competitive Examination from Five Centres over the Years
Number

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 Years
(Percentage)

Mumbai	Delhi	Kolkata	Hyderabad	Chennai
12	24	18	17	9
10	28	12	21	12
15	21	23	25	10
11	27	19	24	8
13	23	16	23	13
14	20	21	19	11
16	19	24	20	14

96. Approximately what was the difference between the number of candidates qualified from Hyderabad in 2001 and 2002 ?
(1) 1680 (2) 2440
(3) 1450 (4) 2060
(5) 1860

97. Approximately what was the total number of candidates qualified from Delhi in 2002 and 2006 together ?
(1) 27250 (2) 25230
(3) 30150 (4) 28150
(5) 26250

98. In which of the following years, was the difference in number of candidates appeared from Mumbai over the previous year the minimum ?
(1) 2004 (2) 2006
(3) 2007 (4) 2002
(5) None of these

99. In which of the following years, was the number of candidates qualified from Chennai, the maximum among the given years ?
(1) 2007 (2) 2006
(3) 2005 (4) 2003
(5) None of these

100. Approximately how many candidates appearing from Kolkata in 2004 qualified in the competitive examination ?
(1) 13230 (2) 13540
(3) 15130 (4) 15400
(5) 19240