

Quantitative Aptitude & Reasoning Ability

300 Must Solve Questions for IBPS Clerk 2018

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Quantitative Aptitude

Directions (1-5): The following table shows the number of trips taken by each driver in different days and the total amount given to the driver per trip:

Drivers	Number of trips taken on Tuesday, Thursday and Sunday	Number of trips taken on Monday and Friday	Amount per Trip (in Rs.)
W	3	-	4000
V	2	0	2000
P	2	3	3500
F	4	-	4500
S	1	2	6000

Note: Wednesday and Saturday are holidays. Intentionally some missing values are given as “-”, we have to find the value according to the question.

- Find the ratio of the trip covered by F on Tuesday and Thursday to that of the number of trip covered by W on Monday, Tuesday and Friday of the week, if W has received total amount of Rs. 52000 in that week?
 a) 1 : 1 b) 1 : 2 c) 4 : 3 d) 8 : 7 e) None of these
- Find the difference between the earnings made by F in 3 weeks to that of the earnings made by S in 4 weeks, if earning of P for 3 weeks is equal to the earning of F in 2 weeks.
 a) Rs. 74000 b) Rs. 84000 c) Rs. 82000 d) Rs. 70000 e) None of these
- If V takes 2 trips each on Saturday and Friday, then how much he can earn in 2 weeks?
 a) Rs. 15000 b) Rs. 154000 c) Rs. 40000 d) Rs. 88000 e) None of these

4. If total earnings of W is Rs. 1.32 lakhs for 3 weeks, then find the number of trips taken by the driver W on Monday?
- a) 2 b) 4 c) 3 d) 1 e) None of these
5. Earning of P in two weeks is what percent more or less than earning of S in a week?
- a) 100 b) 50 c) 200 d) 75 e) None of these

Directions (6-11): Study the following table carefully to answer the questions that follow.

The table shows the online and offline contestants taking part in a survey from four villages and total contestant who have not completed the survey (online and offline)

Note-1: Total contestants in a village = Online contestants + Offline contestants

2: Total contestants in a village = Contestants who complete the survey + contestants who do not complete survey

Village	Online contestants	Offline contestants	Contestants who do not complete the survey (online + offline)
A	350	44%	122
B	560	65%	92
C	465	40%	108
D	480	60%	190

6. In village A, if the number of online and offline contestants who didn't complete the survey are equal, then online contestants from village A who completed the survey are what percent (approximate) more than offline contestants who completed the survey from the same village?
- a) 27% b) 22% c) 35% d) 31% e) 37%
7. Total number of contestants from village C who completed the survey are how much more or less than total number of contestants who completed the survey from village B?
- a) 841 b) 857 c) 837 d) 851 e) 860

8. If ratio of online & offline contestants who didn't complete the survey in village 'D' is 8 : 11 and 65% of online contestants who completed the survey are male and 60% of offline contestants who complete the survey are female, then find the difference between females of online contestants who completed the survey and males of offline contestants who completed the survey?
- a) 102 b) 88 c) 104 d) 108 e) None of these
9. Find the difference between the number of offline contestants of village C and that of village A.
- a) 45 b) 40 c) 38 d) 35 e) None of these
10. Find the total number of male offline contestants who participated in the survey from all four villages together, if total number of female offline contestants those participated in the survey is 1425?
- a) 950 b) 980 c) 960 d) 735 e) 840
11. The number of offline and online contestant together who completed the survey from village C are approximately what percent of total participants on survey from village D?
- a) 52% b) 62% c) 48% d) 56% e) 58%
12. P and Q started business with Rs 840 and Rs 700 respectively. After 4 months, R replaces Q with X% of Q's capital. After 1 year R's share out of the total profit 18600 is 4800. Find the value of X.
- a) 60 b) 70 c) 75 d) 80 e) None of these
13. A train is 265 m long. It crosses a platform in 17 seconds with speed 90 km/hr. If some 25 m long boxes are added to train and it crosses same platform, then it takes 28 seconds to cross

the platform at same speed. How many boxes were added to the train?

- a) 7 b) 10 c) 11 d) 5 e) 8

14. A can complete a work in 48 days. B is 33.33% more efficient than A. In how many days both complete the work if they work on alternate days starting with B?

- a) 41 days b) 21 days c) $31 \frac{1}{3}$ days d) $41 \frac{1}{4}$ days e) None of these

15. Pratap invested 12% of his salary in PPF. $\frac{3}{8}$ th of his remaining salary is spent on clothes and the difference between PPF and amount spent on clothes is Rs 10500. Remaining amount is spent on house rent and other expenses and saves some amount which is equal to 125% of the House rent. If house rent expenses is Rs 1500 less than other expenses, then what is the amount saved by him?

- a) Rs. 12000 b) Rs. 10000 c) Rs. 13000 d) Rs. 11000 e) None of these

Directions (16-20): In each of the following series, one number does not follow a specific pattern. Find that number.

16. 200 101 105 210 848 6800

- a) 210 b) 848 c) 6800 d) 105 e) 200

17. 27 39 35 45 99 73 315

- a) 315 b) 35 c) 27 d) 45 e) 99

18. 4932 1646 828 284 152 65

- a) 152 b) 65 c) 4932 d) 284 e) None of these

19. 9025 4110 1915 584 241 116

- a) 4110 b) 116 c) 1915 d) 9025 e) 584

20. 13 15 25 80 313 1574

- a) 13 b) 313 c) 80 d) 1574 e) 15

Directions (21-25): What should come in next number in the following series?

21. 109 119 130 134 142 ?

- a) 154 b) 166 c) 149 d) 150 e) 162

22. 17 22 54 177 ? 3665

- a) 696 b) 728 c) 851 d) 927 e) 827

23. 1728 1557 1395 1242 1098 ?

- a) 1028 b) 926 c) 845 d) 963 e) 1015

24. 144 126 162 ? 180 90

- a) 98 b) 122 c) 102 d) 86 e) 108

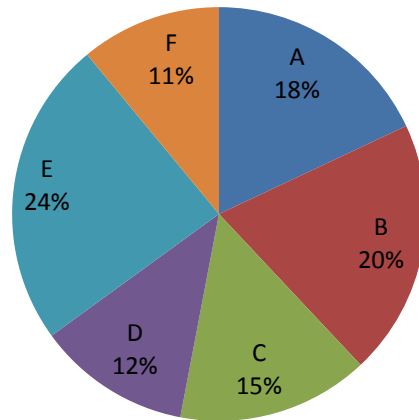
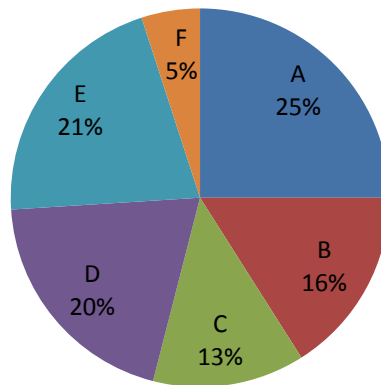
25. 33 35 40 51 ? 103

- a) 71 b) 65 c) 79 d) 83 e) 69

Directions (26-30): Study the following pie charts and answer the questions that follow:

Given below are two pie charts which shows the percentage distribution of Male employees and Female employees working in 6 different Companies out of the total Male and Female workers respectively in these six Companies.

Note: 1- If it is said that number of employees working "either" male or female, then it means sum of employees working both male and female.

Male = 2400**Female = 3200**

26. What is the difference between the total number of employees working from company D and those Female working in company C and E together?
- a) 152 b) 160 c) 165 d) 172 e) None of these
27. The ratio of Officers to labours who are working in E is 9 : 7. The Officers working in company E all are what percent of Female working in company F?
- a) 408 $\frac{2}{3}\%$ b) 437 $\frac{3}{4}\%$ c) 438 $\frac{3}{4}\%$ d) 416 $\frac{2}{3}\%$ e) None of these

28. $\frac{5}{12}$ th of male employees of company E are graduates and $\frac{7}{13}$ th of the female employees of company C are graduates . Find the sum of total number of non-graduates male employees from company E and total non-graduate female employees from company C.
- a) 528 b) 532 c) 548 d) 520 e) 522
29. Female employees from company D and B are what percent (approximate) more or less than male employees from company D and F?
- a) 112% b) 115% c) 105% d) 109% e) 95%
30. Find the difference in the number of male employees working in company A and C together and those female employees working in company B, D and F together.
- a) 615 b) 520 c) 525 d) 620 e) 515
31. In bag P there are 5 red balls, X blue balls and 9 white balls. Probability of drawing one blue ball from bag A is $\frac{3}{10}$. In bag Q there are (X+2) red balls, (X-2) blue balls and 5 white balls. 2 balls are drawn from bag B. Find the probability that both the balls are red colour?
- a) $\frac{7}{34}$ b) $\frac{5}{32}$ c) $\frac{6}{27}$ d) $\frac{8}{31}$ e) None of these
32. The ratio of ages of Q and S is 5:7. The sum of ages of P and Q is 37. 3 years hence the age of P is equal to the age of R 2 years ago. And the age of Q is 2 years hence is equal to the age of P 5 years hence. Find the sum of the age of R and S?
- a) 38 years b) 50 years c) 46 years d) 54 years e) None of these
33. Diameter of a cylinder is equal to the side of an equilateral triangle having area $144\sqrt{3} \text{ cm}^2$ and height of the cylinder is equal to the $(\frac{1}{8})$ th perimeter of the triangle. Then find the volume of cylinder
- a) $1572\pi \text{ cm}^3$ b) $2960\pi \text{ cm}^3$ c) $5184\pi \text{ cm}^3$ d) $1296\pi \text{ cm}^3$ e) None of these

34. A man invested Rs. 12000 in a scheme giving 15% p.a. compound interest for two year. The interest received from this scheme is 200% more than the interest on some other amount from another scheme giving 6% S.I. for 5 year. Find the total amount invested in both schemes.
- a) Rs. 19500 b) Rs. 20000 c) Rs. 16300 d) Rs. 18600 e) Rs. 17600
35. A borrow a sum of Rs 5250 at $x\%$ per annum S.I. from Y and lend it to the M with some rate of interest S.I. more than x . After 3 years he earns a profit of 9 % of the total amount. Then at what rate of interest he taken from Y?
- a) 10% b) 8% c) 12%
- d) Cannot be determined e) None of these
36. Kishore borrow a sum of Rs 22100 at S.I. from Prasanth and lend it to the Nikhil at 14% per annum S.I. After 3 years he earns a profit of Rs. 1989. Then find at what rate of interest he was taken from Prashanth?
- a) 10% b) 8% c) 12% d) 9% e) None of these
37. In 5 litre of mixture of alcohol and water, 35% is water. The amount of alcohol that must be added to the mixture, so that the part of Alcohol in the mixture becomes 75%, is what percent of the mixture:
- a) 40% b) 25% c) 55% d) 35% e) None of these
38. The surface area of a spherical part of a hemispherical bowl with a flat circular detachable cover, excluding the cover, is 924 sq cm. The area of the cover is 57.75 sq cm. What is the volume of the bowl?
- a) 1339 cm^3 b) 1430 cm^3 c) 1570 cm^3
- d) Cannot be determined e) None of these

Directions (39-42): The following questions are accompanied by three statements (I), (II), and (III). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

39. The ratio of the ages of Akbar and Antony is 5 : 7. Find out the ratio of their ages 3 years ago.

- I. The difference of ages between Akbar and Ashish 3 years ago is 17 years.
 - II. The difference of the ages of Akbar and Antony after 5 years will be 10 years.
 - III. The average of the ages of Akbar, Antony and Ashish sum of their ages is 34 years.
- a) Only I and II together are sufficient b) Anyone of I, II and III is sufficient
c) Either I or II are sufficient d) Only II or I and III sufficient
e) None of these

40. What is the cost of painting the two adjacent walls of a rectangular hall which has no windows or doors?

- I. The area of the base of hall is 112 sq. metres.
 - II. The breadth, length and the height of the hall are in the ratio of 7 : 4 : 3.
 - III. Area of one wall with length is it's base is 168 square metres.
- a) Only II and III together are sufficient b) Anyone of I, II and III is sufficient
c) All together are necessary d) Any two of I, II and III are sufficient
e) All together are not sufficient

41. 8 men and 12 women can complete a piece of work in 24 days. How many days will it take for 12 men and 6 adult to complete the same work?

- I. 8 men can complete the work in 24 days and 9 women can complete the work in 32 days.
 - II. Efficiency of one adult is equal to 3 women.
 - III. The amount of work done by a woman is two-third of the work done by a man in one day.
- a) Any two of them b) Any one of them

- c) All together are necessary d) Either I or II only
e) Only II

42. A train crosses another train in 10 sec. Find out the sum of the length of the trains.

I. Ratio between the lengths the of second and first train is 6 : 5.

II. Ratio between the speed of first and second trains is 3 : 4.

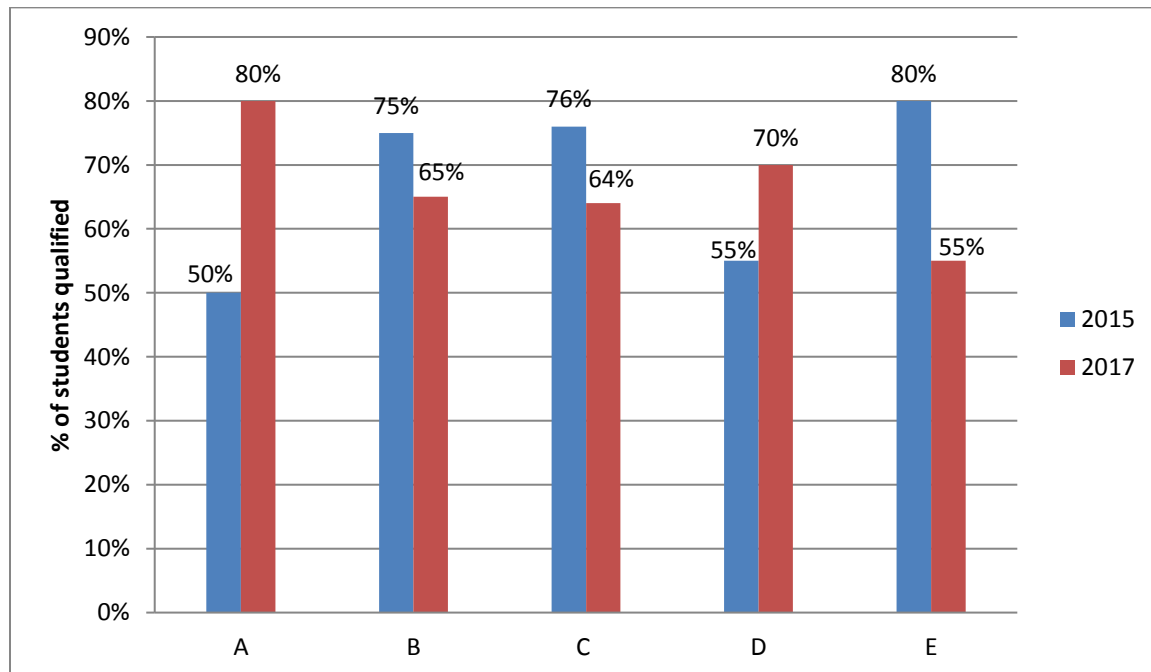
III. The speed of first train is 54 km/hr.

- a) Only A and B together b) Only B and C together
c) Only A and C together d) All together are not sufficient to answer
e) All together are necessary

Directions (43-47): The bar graph given below shows the percentage of students who qualified in Gate Exam in 5 colleges in two years 2015 and 2017.

Study the graph carefully to answer the based questions.

NOTE- Total students of the year = Qualified students + Not qualified students



43. What is the difference between not qualified students from college C in the two given years if qualified students in 2017 in that college are 4000 which is 31 11/19 % more than valid

qualified students of same college in 2015?

- a) 1190 b) 1250 c) 1290 d) 1350 e) 1365

44. If in College A in 2017, 2500 students were not qualified and 10% of the remaining students are not appear for test and there are 200 more boys than girls, who qualified in the test. Then find the total number of girls who qualified in 2017 in village A.

- a) 4400 b) 4600 c) 5400 d) 5200 e) 4800

45. In village B if the total students in 2015 were $13 \frac{1}{23}$ more than total students in 2017, then find the ratio of not qualified in 2015 to the not qualified in 2017 in same college.

- a) 131 : 160 b) 130 : 161 c) 127 : 141 d) 18 : 35 e) None of these

46. If there are 1600 boys in qualified students from E in 2015 and the girls in qualified students of same village and same year contributed is 36% of total qualified students, then find the percentage of not qualified boys in total students if total boys in college E in 2015 were 2000.

- a) 16.2% b) 12.4% c) 14.6% d) 12.8% e) 14.8%

47. If the ratio of qualified students from college B in 2015 and not qualified students from college D in 2017 was 16:3, then total no. of students from college D in 2017 were what percent more or less than those from college B in 2015?

- a) $45 \frac{2}{7}\%$ b) $53 \frac{4}{5}\%$ c) $53 \frac{1}{8}\%$ d) $52 \frac{1}{8}\%$ e) $50 \frac{2}{5}\%$

Directions (48-52): Study the following data to answer the questions that follow.

Pratap and Sathyam are running two companies, which sell Smart phones, LED TVs and Watches in 3 months May, June and July. The ratio of Smart phones, LED TVs and Watches sold by Pratap in May is 42 : 36 : 23 while ratio of Smart phones sold by Pratap in May, June and July are 14 : 23 : 27. Watches sold by Pratap in May are 230 less than Smart phones sold in June by Pratap.

In June 665 Smart phones, 400 LED TVs and 210 Watches were sold by two companies together.

Sathyam sold same number of smart phones in May and June. Number of LED TVs sold by Sathyam in June was equal to number of Smart phones sold by Pratap in May while number of Watches sold by Pratap in May and Sathyam in June were equal. Sathyam sold total 1025 smart phones in these three months together which was 480 more than total number of LED TVs sold by Pratap. Ratio of LED TVs sold by Pratap and Sathyam in May is 12 : 11 and in July is 35 : 38 respectively. Total number of items sold in May was 1075. Total number of Watches sold by Pratap in July was 35 less than Watches sold by Sathyam in July, while sum of Watches sold by Pratap and Sathyam in July is 205.

48. Total number of Smart phones sold by Sathyam in June and July is

- a) 750 b) 725 c) 705 d) 715 e) None of these

49. By what percent LED TVs sold by Pratap in Pratap are more than Watches sold by Sathyam in July?

- a) 40% b) 12% c) 25% d) 140% e) None of these

50. Find the difference in number of Smart phones sold by Pratap and Sathyam in May.

- a) 101 b) 120 c) 105 d) 110 e) 112

51. What is the ratio of number of LED TVs sold by Pratap in May to that of Sathyam in June?

- a) 7 : 6 b) 6 : 7 c) 12 : 13 d) 11 : 12 e) None of these

52. Find the number of Watches sold by Sathyam in July?

- a) 80 b) 120 c) 115 d) 95 e) 125

Directions (53-57): There are three coloured boxes Red, Green and Blue and contains four coloured balls in each box.

Ball -> Box	Red	Green	Blue	Yellow
Red	9	12	8	6
Green	11	3	5	7
Blue	6	9	10	8

53. What is the ratio of probability of getting two Blue balls from Green box to the probability of getting two green balls from blue box?
 a) 83 : 139 b) 123 : 125 c) 88 : 195 d) 77 : 97 e) none of these
54. What is the approximate percentage of probability of getting one yellow ball from Red box to that of probability of one green ball from Blue box?
 a) 86% b) 63% c) 95% d) 78% e) none of these
55. Find the probability of getting one red ball and one blue ball from Red box and one green ball and one yellow ball from Green box?
 a) $36/595$ and $21/650$ b) $33/650$ and $54/595$
 c) $48/595$ and $37/650$ d) $21/595$ and $36/650$
 e) none of these
56. What is the difference between the probability of picking up one red and one green ball from Blue box and probability of picking up a ball either green or blue ball from Red box?
 a) $58/81$ b) $113/85$ c) $77/96$ d) $82/77$ e) none of these
57. Find the sum of the probability of picking up either green ball or yellow ball from Green box and probability of picking up two balls from Blue box either one red and one blue or one

green and one yellow.

- a) 102/131 b) 97/135 c) 85/104 d) 59/113 e) none of these

Directions (58-63): Two quantities are given below as Quantity I and Quantity II. Compares the two quantities. Mark answer as:

- a. If the quantity in Quantity I is greater than the quantity in Quantity II.
- b. If the quantity in Quantity I is greater than or equal to the quantity in Quantity II.
- c. If the quantities are equal or relation cannot be established.
- d. If the quantity in Quantity II is greater than the quantity in Quantity I.
- e. If the quantity in Quantity II is greater than or equal to the quantity in Quantity I.

58. **Quantity I:** The average age of 4 members of a family 4 years ago is 27 and now the average age of a family including a baby is decreased by 2.6 years. The sum of age of the baby and their parents is 65. What is the sum of the ages of baby's mother and father?

Quantity II: The average height of 27 persons was recorded as 162 cm. If the height of Bhargav was excluded from the observation, the average height was reduced by 1 cm. What was Bhargav's height?

59. **Quantity I:** A truck can travel from city A to B, distance of 260 km in 390 minutes. How much time it will take for a car which has speed of 1.5 times more than a truck in hours?

Quantity II: Anil can row at a speed of 7 Km/hr in still water to a certain upstream point and back to the starting point in a river which flows at 3 km/hr. Find his average speed for total journey.

60. **Quantity I:** The CI occurred in 2 years on a principal of Rs. 18,000 is Rs. 5805. Find the approximate percentage of amount of interest for 3 years at same rate interest for same principle at simple interest is more/less than CI occurred for two years?

Quantity II: In 2015 the population of a village is 17500 and the percentage of increase in population for the last two years is 17% and 20% in 2016 and 2017 respectively. There are

$\frac{1}{4}$ th of the total population in 2017 are children the sum of the male and children in a village is 9828. Find the percentage of female in a village?

61. **Quantity I:** In a 180 litres mixture water and milk are in the ratio 8 : 7, the amount of milk to be added to make the ratio 8 : 11, is approximately what % of total milk in the solution.

Quantity II: A shopkeeper sells 25 articles at 45/- per article after giving 10% discount and gains 50% profit. If discount is not given, what is the approximate profit %?

62. **Quantity I:** Gopal went to a fruit market with certain amount of money. With this money he can buy either 50 oranges or 40 mangoes. He retains 10% of the money for taxi fare. If he buys 20 mangoes, then the how many numbers of oranges he can buy?

Quantity II: One girl or two boys or three women can do a piece of work in 88 days. One girl, one boy and one man can do it in 24 days. In how many days one man, one woman and two girls will complete the work?

63. **Quantity I:** A company reduces the number of his employees in the ratio 9:8 and increase their wages in the ratio 14:15. If the original wage bill was Rs. 18,900, find the percentage of the wage bill is decreased.

Quantity II: The ratio of the monthly income of John, Ali and Raghu is 141 : 172 : 123. If John's annual income is Rs.3,38,400, Raghu's annual income is what percent more than the income of Ali's half yearly?

Directions (64-68): A survey was done on some of the students of school A & B. Total selected students were 750. The ratio of students selected from school A & B are in the ratio 7:8. There is total 450 boys altogether. The ratio of boys & girls from school A are in the ratio of 3:2. $\frac{2}{3}$ of the boys from school A play cricket. Total 200 boys play cricket. $\frac{3}{5}$ of the girls from school A like volleyball. $\frac{1}{3}$ of the boys from school B like volleyball. Total 130 students from school A like volleyball. $\frac{1}{4}$ of the girls of school A play cricket. Total 100 students from school

B like volleyball. $\frac{2}{5}$ of the girls from school B play cricket. Rest of the students like to play kabaddi.

64. What is ratio of the difference between the no of students playing cricket from school A & no. of boys playing kabaddi from school B to the difference between the no. of girls who playing kabaddi in A and B?

- a) 3:2 b) 4:3 c) 5:3 d) 6:7 e) 15:11

65. What is the no of girls from school A who like volleyball and students from school B who like cricket?

- a) 144 b) 208 c) 214 d) 128 e) 224

66. Number of boys playing cricket from school A is how much percent more than the number of girls from school B who playing volleyball and kabaddi?

- a) 28.41% b) 37.73% c) 33.33 % d) 45.83% e) 66.66%

67. What is the average number of students playing kabaddi from school A & B and average number of students playing cricket playing from school A and B?

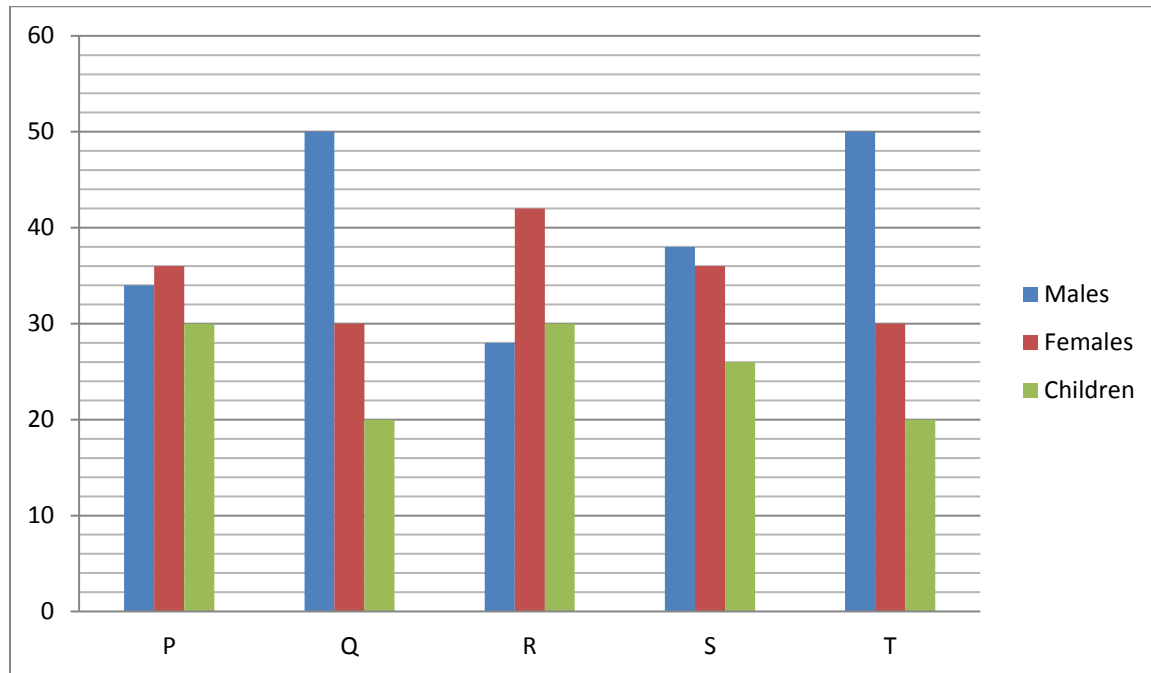
- a) 90, 137.5 b) 110, 123 c) 100.5, 98 d) 110.5, 149.5 e) 115.5, 74.5

68. Number of girls who like volleyball from the both the schools is approximately what percent of the number of students who playing cricket from the both the schools?

- a) 15% b) 20% c) 25% d) 30% e) 35%

Directions (69-73): Study the following graph and table carefully and answer the questions given below it.

Percentage of males, females, and children living in the Village



Total number of residents in various Villages

Villages	Residents
P	1250
Q	2050
R	1800
S	1150
T	1620

69. The number of Job holders (Male and Female) in villages P and Q are 72% and 65% respectively. Then find the number of non-job holders from village P is what percent less/more than the number of non-job holders from village Q?

- a) 37.51% b) 73.51% c) 35.71% d) 53.71% e) 57.31%

70. What is the difference between the number of males in the villages Q and S and the number of females in the villages Q and S?

- a) 458 b) 534 c) 386 d) 433 e) None of these

71. What is the approximate average number of children from all the villages together?

- a) 390 b) 270 c) 365 d) 427 e) None of these

72. The number of males in villages P and T are approximately what percent of the number of females in villages R, S and T?

- a) 92% b) 75% c) 61% d) 57% e) None of these

73. What is the ratio of the difference between the number of males and childrens in Village S to the difference between the number of females and males in the Village R?

- a) 27:47 b) 32:51 c) 23:42 d) 19:37 e) None of these

Directions (74-79): In the following question, two equations numbered I and II are given. You have to solve both the equations and answer the question.

74. I. $3x^2 + 5x + 18 = x + 17$

II. $8y^2 + 2y = -1 - 7y$

- a) $x \leq y$ b) $x > y$ c) $x \geq y$
d) $x < y$ e) $x = y$ or the relationship cannot be established

75. I. $5x + 15/x = -28$

II. $6y = 1 - (36 + 25/y)$

- a) $x = y$ or the relationship cannot be established b) $x > y$
c) $x \leq y$ d) $x < y$ e) $x \geq y$

76. I. $8y^2 - 32y + 30 = 0$

II. $7x^2 - 54x + 99 = 0$

a) $y \geq x$

b) $y \leq x$

c) $y = x$ or the relationship cannot be established

d) $y > x$

e) $y < x$

77. I. $x^2 - 24x + 108 = 0$

II. $y = \sqrt[3]{5832}$

a) $y > x$

b) $y \leq x$

c) $y = x$ or the relationship cannot be established

d) $y < x$

e) $y \geq x$

78. I. $x - 752/x + 31 = 0$

II. $y^2 - 31y - 816/y = 0$

a) $x > y$

b) $x \leq y$

c) $x = y$ or the relationship cannot be established

d) $x \geq y$

e) $x < y$

79. I. $2x + 6/x = 7$

II. $y + 2/y = 3$

a) $x < y$

b) $x > y$

c) $x \leq y$

d) $x \geq y$

e) $x = y$ or no relation can be established.

Directions (80-84): Six employees A, B, C, D, E and F are working in a company. They are working in 3 different departments HR, Marketing and Production.

A and D are working in HR.

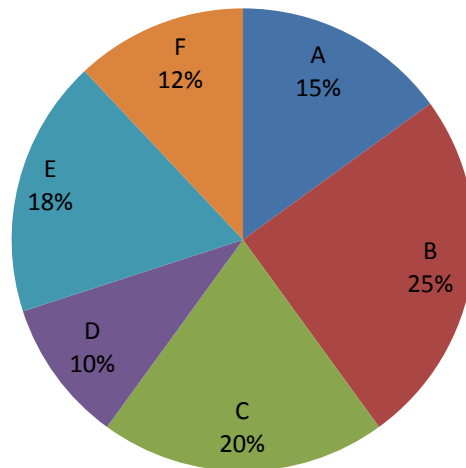
C and E are working in Marketing.

B and F are working in Production.

The sum of the salaries of the 6 employees is Rs. 260000.

Percentage wise distribution of their salaries are given in below Pie-chart.

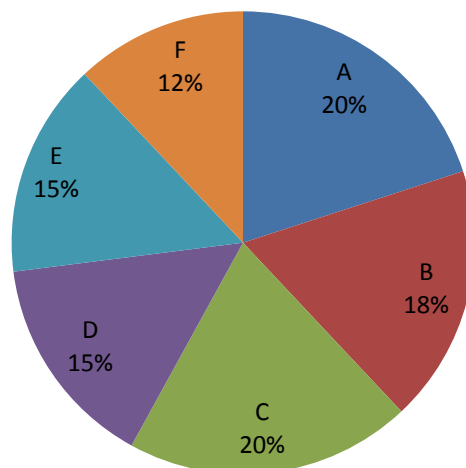
Percentage of Salaries of Employees



The sum of the savings of the 6 employees is Rs. 32000.

Percentage wise distribution of their savings are given in below Pie-chart.

Percentage of Savings of Employees



Two quantities are given below as Quantity I and Quantity II. compares the two quantities.

Mark answer as:

1. If the quantity in Quantity I is greater than the quantity in Quantity II.
 2. If the quantity in Quantity I is greater than or equal to the quantity in Quantity II.
 3. If the quantities are equal or relation cannot be established.
 4. If the quantity in Quantity II is greater than the quantity in Quantity I.
 5. If the quantity in Quantity II is greater than or equal to the quantity in Quantity I.
-
80. **Quantity I:** After savings, E spends 21%, 32% and 13% for house rent, school fees for his children and for household equipments respectively from the remaining amount. What amount he has spent for house rent, school fee and household equipments?
- Quantity II:** After savings, C spends 17% on house rent, 19% on shopping and 26% for car loan from the remaining amount. What is total amount he is spending on house rent, shopping and car loan?
-
81. **Quantity I:** What is the ratio of the percentage of the amount saved by A from his salary to that of C?
- Quantity II:** D spends 175% more than his saving on household expenses. What is ratio of the amount spends by him on household expenses and the amount invested in mutual funds, if he invests 15% of his salary in mutual funds.
-
82. **Quantity I:** A, B and E donated 12%, 14% and 15% of their salaries to the charity respectively and C and F donated 10% each. What is average amount donated by all?
- Quantity II:** F invests 8% of his salary in shares and B invests 16%. Find the average amount invested by both of them and the average amount saved by C, D and F?
-
83. **Quantity I:** C purchases a watch which costs 10% of his salary. Find the savings done by E is what percent more or less than the cost of the watch?
- Quantity II:** D spends 20% of his salary to purchase a A.C. Find the amount saved by D is what percent more/less than the amount which he used to by A.C.

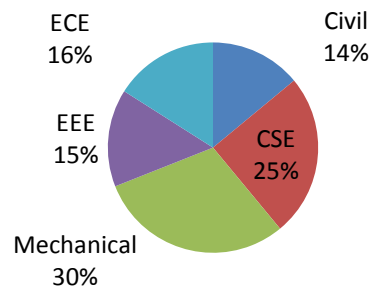
84. **Quantity I:** What is the difference between amount of salaries get by the Production and HR departments together and the amount of salaries get by the Marketing and Production departments together?

Quantity II: The employees in HR, Marketing and Production are invested 10%, 12% and 15% of their salaries in the company shares respectively. The amount invested by Marketing and Production departments exceeds by that of HR department is?

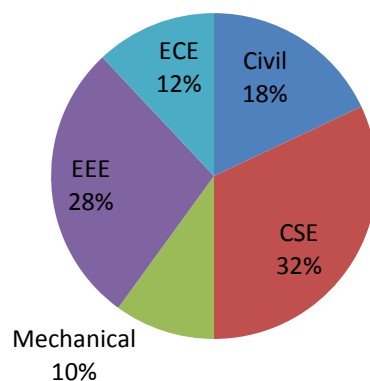
Directions (85-89): Study the pie-graph carefully and answer the related questions.

The pie-graph represents percentage of students participating in an interview from different streams and the other graph shows percentage of girls participating in an interview from different streams.

Total number of students = 6000



Total number of girls = 2500



85. Find the stream from which the lowest number of boys participated in the interview
a) ECE b) EEE c) CIVIL d) CSE e) Mechanical
86. The average number of boys participating from all the branches in the interview is approximately what percent more/less than number of boys from the CIVIL branch and number of girls from the CSE
a) 37% b) 41% c) 49% d) 53% e) None of these
87. Find the ratio of numbers of girls participating in the interview from EEE and number of boys from the ECE to the number of boys participating from the Mechanical and number of girls from Civil
a) 13 : 22 b) 17 : 25 c) 41 : 37 d) 27 : 32 e) None of these
88. Numbers of girls participating from the ECE and CIVIL branches together and number of boys from the CSE and EEE form what percent of total number of students participating from the all branches?
a) 32.7% b) 27.5% c) 19.7% d) 21.4% e) 17.3%
89. Find the difference between the number of boys participating from the Mechanical, ECE and Civil and number of girls participating from CSE, EEE and Mechanical.
a) 1260 b) 970 c) 1140 d) 850 e) None of these

Directions (90-92): The students belong to the different Schools of Prathibha, Navodaya, Santiniketan and Alphabet. The following table gives the number of students belonging to the four schools during the period 2011 – 16. Some data is missing which has to be calculated.

Year	Prathibha	Navodaya	Santiniketan	Alphabet	Total
2011	485	494	475	496	
2012	513		503	525	
2013		506			2022
2014					1991
2015	503		501		
2016	511	503	527	502	

In each of the following questions, a question followed by two statements numbered I and II are given. You have to read both the statements and then give answer as per following options.

- a) The data given in statement I alone is sufficient to answer the question, whereas the data given in statement II alone is not sufficient to answer the question.
- b) The data given in statement II alone is sufficient to answer the question whereas the data given in statement I alone is not sufficient to answer the question.
- c) The data given in either statement I alone or in statement II alone is sufficient to answer the question.
- d) The data given in both the statements I and II is not sufficient to answer the question.
- e) The data given in both the statements I and II is necessary to answer the question.

90. Find the number of students belonging to Navodaya school in 2012.

Statement I: The total number of students in 2012 increased by 6% from the previous year.

Statement II: The average of total number of students from the Navodaya all years together is 499.

91. What is the change in the number of students belonging to Prathibha school in 2013 as compared to 2012?

Statement I: In 2013 the number of students in Santiniketan school increased by 8% from 2011.

Statement II: The number of students in Alphabet school decrease by 4% from 2012.

92. What is the percentage increase in the number of students belonging to Santiniketan school from 2011 to 2014?

Statement I: The difference between the total number of students in the year 2016 all schools together and total number students in Santiniketan school over the all years together is 992.

Statement II: In 2014, the number of students in all the schools except the Santiniketan school is the same as that in the year 2011.

Directions (93-97): In the following questions you have to find out that which of the following statement/statements are redundant for determining the answer of given question or can be dispensed with.

93. A trader sells a homogeneous mixture of A and B in the ratio 3: 2 at the rate of Rs 62 per kg.

What is the profit earned by the trader?

I) He bought per kg of A at Rs 8 higher than the rate of B per kg

II) He bought A at the rate of Rs 34 per kg

III) He bought B at the rate of Rs 29 per kg

a) Only I and II

b) Only I and III

c) I, II and III together are not sufficient d) Either a or b

e) Any two of these

94. 12 men and 8 women can complete a piece of work in 10 days. How many days will it take for 15 men and 4 women to complete the same work?

I) 15 women can complete the work in 16 days

II) The amount of work done by a woman is three – fourth of the work done by a man in one day.

III) 15 men can complete the work in 12 days

a) Only I and II or III

b) Only II and III

c) Only III

d) Any two of the three

e) Only II

95. What will be the sum of the ages of father and the son after five years?

I) After ten years the ratio of father's age to the son's age will become 7 : 4.

II) Father's present age is twice son's present age.

III) The difference between the father's age and son's age was equal to the son's present age.

a) Only I or II

b) Only II or III

c) Only I or III

d) Only III

e) Any two of the three

96. What is the amount saved by Nutan per month from his salary?

I) Nutan spends 35% of his salary on food, 35% on medicine and education.

II) Nutan spends Rs 4000 per month on food and 35% on medicine and education and saves the remaining amount

III) Nutan spends Rs 2500 per month on medicine and education and saves the remaining amount.

a) Only II

b) Only III

c) Both II and III

d) Either II or III

e) None of these

97. A mixture contains alcohol and water. How much water is required to be mixed with 500 ml of alcohol?

- I) 100 ml of mixture contains 20 ml of water.
II) 400 ml of mixture contains 320 ml of alcohol.
III) The mixture contains alcohol and water in the ratio 4 : 1.
- a) Only (III) b) Any one of them c) Any two of them
d) All three of them e) Either (III) or (I) and (II)

Directions (98-102): In each of the following questions a number series is given which has only one wrong number. Find out the wrong number in the given series.

98. 11 13 29 90 369 1851

- a) 13 b) 90 c) 1851 d) 369 e) None of these

99. 21 11 12 22 41 105

- a) 105 b) 12 c) 22 d) 21 e) None of these

100. 121 122 125 143 191 291

- a) 143 b) 291 c) 125 d) 122 e) None of these

101. 426 435 443 452 466 482

- a) 435 b) 466 c) 482 d) 452 e) None of these

102. 9514 4761 1596 415 110 54

- a) 54 b) 415 c) 9514 d) 110 e) None of these

103. A person can complete a job in 120 days. He works alone on day 1. On Day 2, he is joined by another person who also can complete the job in exactly 120 days. On Day 3, they are joined by another person of equal efficiency. Like this, everyday a new person with the

same efficiency joins the work. How many days are required to complete the job?

- a) 29 b) 32 c) 15 d) 18 e) none of these

104. A man travels three-fifths of a distance A to B at a speed $3a$, and the remaining at a speed $2b$. If he goes from B to A and return at a speed $5c$ in the same time, then

- a) $1/a + 1/b = 1/c$ b) $a + b = c$ c) $1/a + 1/b = 2/c$
d) $1/a - 1/b = 1/c$ e) None of these

Directions (105-109): In each of the following questions a number series is given which has only one wrong number. Find out the wrong number in the given series.

105. 1680 1120 840 729 560 480

- a) 840 b) 560 c) 480 d) 1120 e) None of these

106. 2197 4913 6859 11267 24389

- a) 2197 b) 11267 c) 4913 d) 24389 e) None of these

107. 22 44 48 123 153 612 628

- a) 44 b) 22 c) 123 d) 153 e) None of these

108. 12 11 24 69 284 1395

- a) 24 b) 284 c) 12 d) 1395 e) None of these

109. 132 156 192 210 240 272

- a) 132 b) 156 c) 192 d) 210 e) None of these

Directions (110-114): Data given below shows marks obtained in 3 subjects Humanities, Creative Arts and Hospitality by three students. Study the data carefully and answer the following questions.

Student A → Total marks obtained by student 'A' is 250 marks out of which 120 marks are

obtained in Hospitality. Marks obtained in Humanities is 30 less than marks obtained in Creative arts.

Student B → Marks obtained in Creative arts by student 'A' and student 'B' is same. Marks obtained in Humanities by student B is 60% more than that of Humanities by Student 'A'.

Student C → Total marks obtained by all the three students in Creative Arts is 200 and marks obtained in Humanities and Creative arts is same for student 'C'. Marks obtained in Hospitality is 125% more than that in Humanities for this student. Total marks obtained in Hospitality by all the three students is 320.

110. Marks obtained by student 'B' in Creative arts is what percent more/less than the marks obtained by student 'C' in creative arts?

- a) 150% b) 200% c) 90% d) 50% e) 100%

111. If an average mark obtained in Hospitality by 3 students 'B', 'C' and 'D' is 120 units. Find the marks of student 'D' in Hospitality?

- a) 110 marks b) 160 marks c) 120 marks d) 140 marks e) None of the given options

112. Find the total marks obtained by student 'A' and 'C' together?

- a) 410 marks b) 400 marks c) 430 marks d) 420 marks e) 440 marks

113. Find the ratio of the marks obtained by student 'C' in Hospitality and Student 'A' in Creative arts?

- a) 8 : 9 b) 7 : 8 c) 8 : 7 d) 9 : 7 e) None of these

114. Total marks obtained by student 'C' in Humanities and Creative arts is what percent less than total marks obtained by student 'A' in Creative arts and Hospitality?

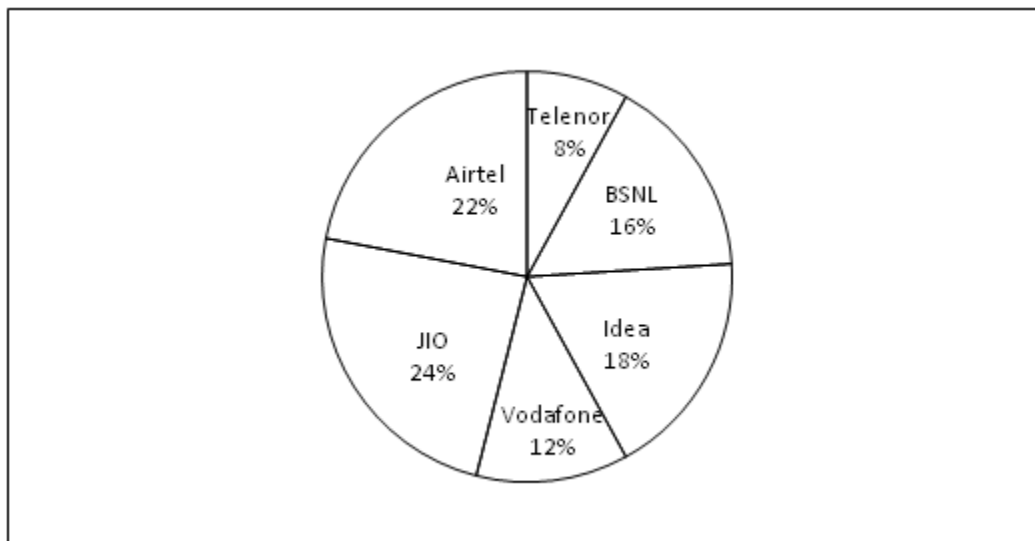
- a) 650% b) 50% c) 80% d) 70% e) 60%

Directions (115-119): Study the following graph carefully and answer the questions given below.

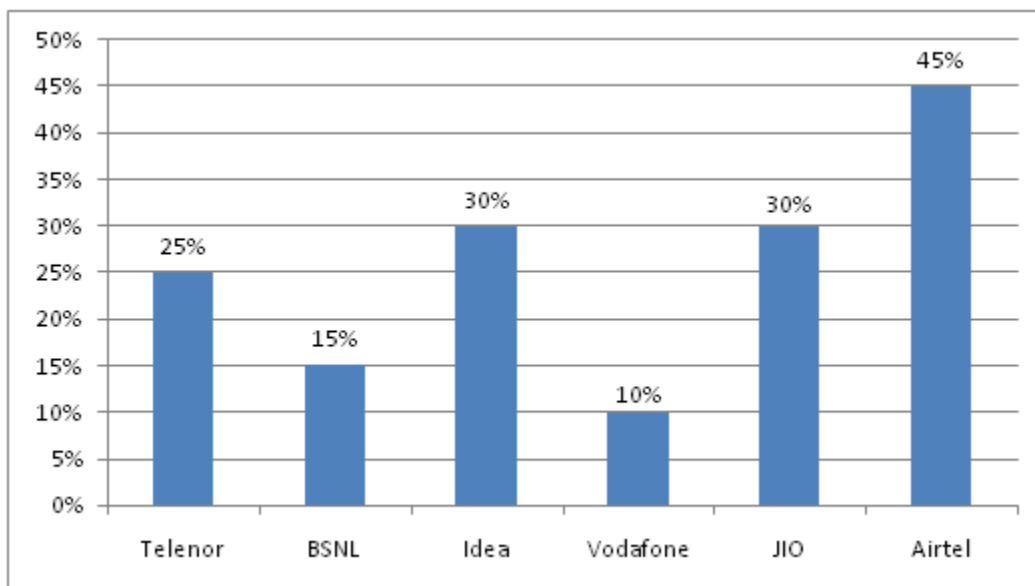
A Survey was conducted on the no. of telecom customers of different telecom service provider companies in a city in a year.

Total no. of telecom customers of the six telecom companies = 70000.

Percentage of telecom customers of 6 different telecom companies:



Percentage of postpaid customers in the six telecom companies in the same city



115. What is the total no. of postpaid customers of Idea and JIO together?

- a) 8340 b) 7575 c) 8264 d) 8820 e) None of these

116. The no. of postpaid customers of BSNL is what percent of the no. of prepaid customers of Airtel?

- a) 24 b) 20 c) 35 d) 15 e) 30

117. The average of postpaid customers of all six companies exceeds the postpaid customers for _____

- a) 2 companies b) 3 companies c) 4 companies
d) Only one company e) Cannot be determine

118. If the total no. of telecom customers of six companies is 90000 and the Percentage of postpaid customers of BSNL is increased by 5% and Percentage of postpaid customers of JIO is decreased by 5%, what is the ratio of the no. of postpaid customers of JIO to the prepaid customers of BSNL?

- a) 17 : 8 b) 13 : 17 c) 15 : 13 d) 15 : 32 e) None of these

119. What is the difference between the no. of postpaid customers and prepaid customers of Idea and Telenor together?

- a) 8820 b) 4200 c) 13020 d) 5180 e) 7840

Directions (120-124): In the following question, a number series is given, after the number series, a number and then A, B, C, D and E are given. Complete the number series starting from the given number based on the pattern of the original number series and choose correct option.

5	5.25	11.5	36.75	151	761.25
A	B	C	D	103	E

120. What will come in place of 'E'?

- a) 34.75 b) 24.75 c) 24.5 d) 521.25 e) None of these

121.

5	294	69	238	117	198
13	A	B	C	D	E

What will come in place of 'C'?

- a) 246 b) 206 c) 125 d) 302 e) 414

122.

18	22	38	74	138	238
121	A	B	C	D	E

What will come in place of 'C'?

- a) 141 b) 125 c) 341 d) 177 e) 241

123.

264	136	72	40	24	16
488	A	B	C	D	E

What will come in place of 'A'?

- a) 128 b) 248 c) 38 d) 23 e) 6

124.

575	552	533	518	507	500
225	A	B	C	D	E

What will come in place of 'E'?

- a) 150 b) 125 c) 455 d) 123 e) 320

125. 10 different letters of English alphabet are provided. A word is formed using 7 letters (with replacement) out of these. Find the probability that atleast one letter is repeated in the word.

- a) $[10^7 - ({}^{10}P_7)]/({}^{10}P_7)$ b) $1 - ({}^{10}P_7)$ c) $({}^{10}P_7)/10^7$
 d) $[10^7 - ({}^{10}P_7)]/10^7$ e) $[({}^{10}P_7) - 10^7]/10^7$

126. B is 20% efficient than A. B started the work & do it for x days. And then B is replaced by A. And A completed the remaining work in x+8 days. Ratio of work done by A & B is 3:2. In how many day A & B working together to complete the whole work?

- a) 120/12 b) 150/11 days c) 140/13 days
 d) 100/33 days e) 75/12 days

127. The time taken for covering 'D' Km by downstream is equal to 'D-18' by covering upstream. Upstream speed is 6 km/ hr less than that of downstream. If the speed of the boat in still water is 15 km/hr. What is the total time taken to go 'D + 18' km and return back.

- a) 5 hours b) 18 hours c) 8 hours d) 10 hours e) 22 hours

128. If an article is marked 40% above the cost price. If discount of x% is given on the marked price of the article then final profit of 12% is obtained. Now if CP of a new article is 120 Rs. and x% profit is desired after giving 20% discount on a marked price, then what percent

above CP of new article is marked?

- a) 40% b) 30% c) 50% d) 25% e) 45%

129. A, B and C started a business and invested in the ratio of 3:4:5. After 4 months, A withdrew $\frac{1}{12}$ th amount of what B and C invested. If the annual income was 9200, then what was the share of B?

- a) 13280 b) 3480 c) 3200 d) 3880 e) 4080

130. Srikanth and Srinidhi have two daughters by name Sravani and Sindhu. The ratio of the present ages of Srinidhi and Sravani is 3:1 and that of Sravani and Sindhu after two years is 3:2. Given that Sravani is six years elder to Sindhu. Find the average age of the family members after 4 years, if Srikanth age is $\frac{13}{16}$ th of the sum of ages of Srinidhi and Sravani.

- a) 28 years b) 31.2 years c) 24 years d) 35.5 years e) None of these

Directions (131-135): A batch of a college went for a feast. During the feast they distributed the work among them and did 6 actions. The following table gives the number of boys, girls and Lecturer employed in these actions.

	Boys	Girls	Lecturer
Action 1			
Action 2	8	12	6
Action 3	11	7	
Action 4	15	16	10
Action 5		9	11
Action 6	7	6	4

It is known that the efficiency of a boy, a girl and a lecturer is in the ratio = 6 : 5 : 3.

131. According to the person assigned, action 2 was to be completed in 18 days and action 6 in 12 days. But the groups of these actions got interchanged. Find the difference between the number of days of completion of actions 2 and 6 in this case.

- a) 21 days b) 8 days c) 12 days d) 15 days e) 19 days

132. Action 5 is $\frac{3}{4}$ of the times of action 4. If both the actions get completed in the same time, what is the number of Boys allotted to action 5?

- a) 11 b) 8 c) 15 d) 12 e) Cannot be determined

133. If girls contribute 28% in action 3, find the number of Lecturer in action 3.

- a) 6 b) 7 c) 8 d) 9 e) 10

134. Total number of girls and lecturers assigned for all the action together is 59 and 41 respectively and number of lecturers for action 3 is equal to the number of lecturers assigned for the action 6. If for action 1 no boy is involved, then how many days will take to complete the action 2 by the assigned person of action 1?

- a) 2 b) 1 c) 3 d) 1.5 e) none of these

135. If action 5 becomes twice the size of action 6, then how many boys needed to be assigned for action 5, if it has to be completed in a day?

- a) 12 b) 13 c) 14 d) 15 e) none of these

Directions (136-140): There are five trains: Avanthika Express, Ajantha Express, Agra Express, Amaravati Express and Amritha Express. The following information is known in the table regarding the number of coaches, the length of each of their coaches and the train speeds.

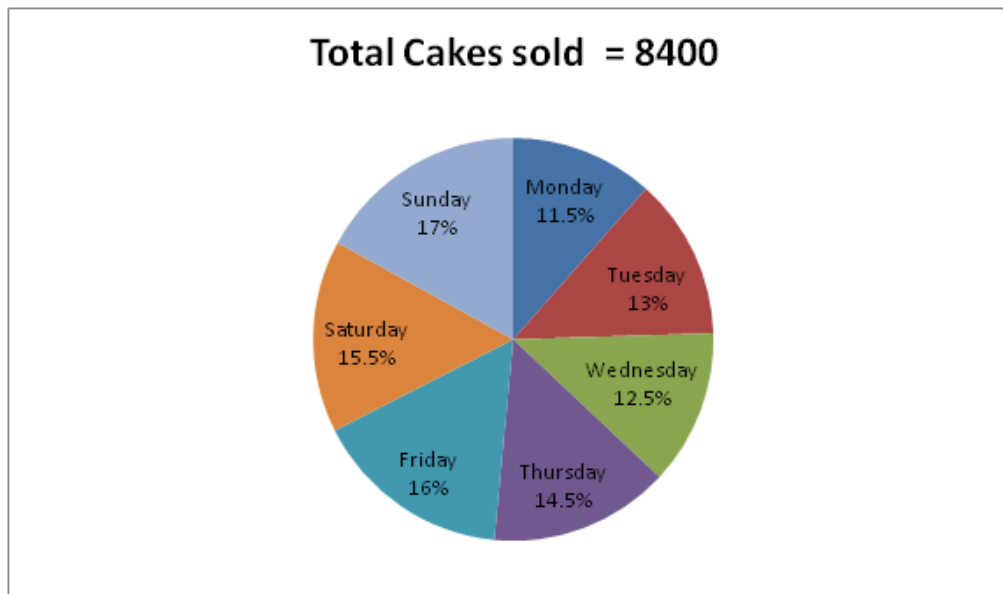
Train	No of coaches	Length of the coach (m)	Speed (Km/h)
Amritha Express	$3y/5$	$y/2$	144
Avanthika Express	19	20	72
Ajantha Express	x	21	126
Agra Express	22	22.5	90
Amaravati Express	15	24	108

136. If y is 1.5 times of length of the Avanthika Express coach, then how much time taken by Amritha Express to cross a platform of length $3y$?

- a) 8.5sec b) 7sec c) 8.25 d) 9sec e) none of these

137. If x is $\frac{4}{3}$ rd of the number coaches of Amaravati Express, then what is the difference between the time taken by Amaravati Express and Ajantha Express to cross a pole of 200m height?
- a) 10 b) 7 c) 8 d) 6 e) None of these
138. What is the time taken by train Agra Express to overtake train Avanthika Express?
- a) 3 min 15 sec b) 2 min 55 sec c) 1 min 45 sec
d) 2 min 30 sec e) 2 min 15 sec
139. If x is equal to the length of coach of Avanthika Express and Ajantha Express takes 15.6 seconds to across a bridge. What is the time taken by train Amaravati Express to cross the same bridge?
- a) 13.4 sec b) 14.3 sec c) 15 sec d) 15.9 sec e) 16.2 sec
140. What is the average time taken by the five trains to cross a pole, if x and y are 20 and 30 respectively?
- a) 15.7 sec b) 16.8 sec c) 13.91 sec d) 17.1 sec e) 14.6 sec
141. A raft is going at 10 km an hour in still water, it takes twice as long in going the same distance against the current comparison to direction of current. Find the rate of stream.
- a) $\frac{2}{5}$ km/h b) $\frac{3}{10}$ km/h c) $\frac{10}{3}$ km/h
d) $\frac{5}{2}$ km/h e) None of the above
142. The average age of workers in field and in documentation in a factory was 45 year. The average age of all the 16 documentation workers was 38 years and average age of field workers was 52 years. If 7 field workers were married then the number of unmarried field workers was:
- a) 5 b) 6 c) 7 d) 8 e) 9

Directions (143-147): Study the Pie Chart and answer the following questions.



Note: Cakes on Everyday day = No of Vanilla Cakes + No of Chocolate Cake

143. The ratio of Number of Vanilla Cakes Sold to Chocolate Cakes Sold is 2:1 of the total cakes sold on Monday and the ratio of the number of Vanilla Cakes Sold to Chocolate Cakes Sold is 3:2 in the total Cakes sold on Wednesday. Then difference of Vanilla Cakes Sold on Monday and Vanilla Cakes sold on Wednesday is?

- a) 13 b) 14 c) 15 d) 16 e) None of these

144. If the ratio of Vanilla Cakes Sold on Thursday to Vanilla Cakes sold on Saturday is 3:4, Number of Chocolate Cakes Sold on Thursday is equal to Number of Chocolate on Saturday then Number of Chocolate Cakes sold on Saturday is equal to total number of Cakes sold on which day?

- a) Monday b) Tuesday c) Wednesday d) Thursday e) Friday

145. If the average number of Vanilla Cakes Sold on Friday and Sunday are 858 and Number of Chocolate Cakes Sold on Sunday are 72 more than Number of Chocolate Cakes sold on Friday then Number of Chocolate Cakes sold on Friday is?
- a) 482 b) 492 c) 498 d) 512 e) None
146. Ratio of Vanilla Cakes Sold to Chocolate Cakes Sold is 46:45 on Tuesday then how many number of Vanilla Cakes are Sold on that day?
- a) 540 b) 546 c) 552 d) 562 e) None
147. If the ratio of Vanilla Cakes sold to Chocolate Cakes sold on Monday is 2:1 and the ratio of Selling Price of Vanilla Cake to Chocolate Cake is the 1:4, total amount earned by him on Monday is Rs.9660 then what is the rate of One Vanilla Cake?
- a) Rs 4 b) Rs 5 c) Rs 10 d) Rs 20 e) None
148. A has three kids: two boys and a girl. The birth dates of all the 3 kids are the same but the birth years differ from each other. The girl's age today is more than the sum of the two boys present ages. However, a year from now, the sum of the two boys ages will be equal to the girl's age. What will be the difference between the girl's age and the two boys combined ages, 3 years from now?
- a) 4 b) 1 c) 3 d) 2 e) None of these
149. Water is flowing through a rectangular tunnel having a cross section of 0.8 m x 0.65 m. if the water is flowing at a speed of 12 km/hr then what is the approximate volume of water in litres which is flowing through the tunnel in a second?
- a) 1700 liter b) 1734 liter c) 1762 liter d) 1680 liter e) 1500 liter

150. Apurva and Ahuti always work on alternate days, but none of them work on Saturday and Sunday. Working alone Apurva and Ahuti can finish the work in 20 days and 30 days respectively. If the work was started by Apurva on Monday then on which day work will be finished?

- | | | |
|------------|-------------|--------------|
| a) Tuesday | b) Monday | c) Wednesday |
| d) Friday | e) Thursday | |

Reasoning Ability

Directions (151-155): Study the information given below and answer the questions that follow. Eight participants P, Q, R, S, T, U, V and W are randomly selected for a TV program and they are born in different years after 1950. No one will have same age. P is 3 years younger to Q. Q's present age is the reverse of the last two digits of the year of the one who is 57 years old. Difference between the age of R and S is 3 years. S's age is reverse of the last two digits of the year in which T born. For example, If T is born on 1962 and S's age is reverse of the last two digits of the year in which T is born, which means S's age is 26 years. T born in a leap year before 2000 but after 1990. Sum of ages of W and U is 68 years. Difference between ages of W and U is 46 years. There is a gap of 7 years between the age of V and W. V is fourth youngest.

Note: All the age calculations are as per 2018.

151. What is the sum of ages of T and Q?

- a) 32 b) 42 c) 46 d) 36 e) None of these

152. Who is the oldest person?

- a) R b) S c) V d) W e) U

153. If another participant X, whose age is 21 years more than the difference between the ages of P and R, then find the age of X.

- a) 30 b) 35 c) 40 d) 43 e) 46

154. Who was born in 2000?

- a) V b) W c) R d) T e) None of the above

155. Which of the following is true?

- a) S is younger than T
- b) U is the second eldest person
- c) T was born in a leap year
- d) All are incorrect
- e) Both 1 and 2

Directions (156-160): Study the information given below and answer the questions that follow. Seven friends P, B, R, T, Q, N and G are studying different specializations IT, Civil, HR, Marketing, Finance, Journalism and Pharmacy not necessarily in the same order. They came for common entrance for higher education. The test has a series of three sets. Each one of them have liking for a different colour red, blue, green, yellow, pink, orange and grey but not necessarily in the same order. They take a series of three tests. Three of them are girls. G's specialization is in pharmacy. P likes yellow colour but does not study IT or HR. The one who studies Civil, likes grey colour and is a girl. Q, who is sister of N, studies Marketing and likes pink colour. T does not like red colour. N, the wife of R studies HR and likes green. B likes grey and R likes orange, the one who likes blue studies Finance. No two friends get same marks. R never scored the highest marks. P scores the lowest marks in two tests. R always scores more than N and N always scores more than P. Also, no two of them are in consecutive positions. G always remains in the bottom three ranks but in a progressive manner.

156. If B and T are in consecutive positions, which of the following cannot be true?

- a) B scores the highest marks
- b) G scores the lowest marks
- c) T scores the highest marks
- d) P scores the lowest marks
- e) None of these

157. If G and N are in not in consecutive positions and T scores the highest marks, which of the following must be true?
- a) T and Q are in alternate position in terms of rank
 - b) P and Q are in alternate positions in terms of rank
 - c) G scores the lowest marks
 - d) N lies exactly between B and Q in terms of rank
 - e) None of these
158. If Q secures the same rank in all the three cases but does not score the highest marks, what is his rank?
- a) 3
 - b) 4
 - c) 5
 - d) None of these
 - e) Can't be determined
159. If sister of Q ranks 5th in the test and persons who like Blue and Pink come alternately, then which of the following can be true?
- a) G stands on 4th rank
 - b) The person in Finance department scores the highest marks
 - c) Sister of N scores the highest marks
 - d) Both b & c
 - e) Cannot be determined
160. What is the rank of Q's brother-in-law, if N, G and P ranks consecutively?
- a) 2nd
 - b) 3rd
 - c) 7th
 - d) Cannot be determined
 - e) None of these

Directions (161-165): Study the information given below and answer the questions that follow.

Eight friends – E, F, G, H, J, K, L and M are sitting around a circular table facing the centre. Each of them is wearing dress of different brand i.e. Allen Solly, Pepe Jeans, Wrangler, Peter England, Fabindia, Adidas, W, Aurelia but not necessarily in the same order. F is sitting second to the left

of K. The one who is wearing dress of Aurelia brand is an immediate neighbour of K. There are only three people sits between the one who is wearing dress of Aurelia and E. Only one person sits between the one who is wearing dress of Peter England and E. The one who is wearing dress of Pepe Jeans is to the immediate right of the one who is wearing dress of Peter England. M is second to the right of K. H is wearing dress of Aurelia. G and J are immediate neighbours of each other. Neither G nor J is wearing dress of Peter England. The one who is wearing dress of Fabindia is to the immediate left of F. The one who is wearing dress of Adidas is second to the right of the one who is wearing dress of Pepe Jeans. The one who is wearing dress of W is an immediate neighbour of the one who is wearing dress of Peter England. G is second to the right of the one who is wearing dress of Allen Solly.

161. Who is sitting second to the right of E?

- a) The one who wearing dress of Adidas
- b) G
- c) The one who wearing dress of Peter England
- d) F
- e) K

162. Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of the following does not belong to group?

- | | | |
|--------------------|-----------------|----------------------|
| a) Allen Solly - H | b) M – Wrangler | c) J - Peter England |
| d) Fabindia- L | e) Adidas- K | |

163. What is the position of L with respect to the one who is wearing dress of Aurelia?

- | | | |
|-----------------------|------------------------|-----------------------|
| a) Third to the left | b) Second to the right | c) Second to the left |
| d) Third to the right | e) Immediate right | |

164. Which of the following statements is true according to the given sitting arrangement?

- a) The one who is wearing dress of Adidas sits second to the left of the one who is wearing

dress of Wrangler

- b) E is an immediate neighbour of the one who is wearing dress of Fabindia
- c) H sits exactly between F and the one who is wearing dress of Fabindia
- d) Only four people sit between the one who is wearing dress of Pepe Jeans and F
- e) All of the given statements are true

165. Who amongst the following is wearing dress of Allen Solly?

- a) E b) L c) M d) K e) None of these

Directions (166-171): Study the following information carefully and answer the given questions. Seven friends M, N, O, P, Q, R, and S are writing different number of mock tests on seven different days, starting from the day Monday to Sunday in a month of 30 days but not necessarily in consecutively dates. Exam starts and ends on an even number date. Numeric value of tests and dates are unique. Each friend has taken different number of tests i.e. 27, 24, 11, 12, 22, 16 and 26, but not necessarily in the same order. The one who has written 27 mock tests has taken on Saturday but not on odd date. S has taken 24 mock tests on Wednesday. N takes test immediately before Q. N does not write test on any of the days after S but the date of test is a perfect cube root. The one who has taken 11 mock tests does not write on any of the days on or before Friday. The one who has taken 26 mock tests has taken immediately after O. Q have not have taken 22 mock tests. The one who takes 16 mock tests does not write immediately after or before S. R does not take test on Sunday and does not take 26 mock tests. P does not write on any of the days before M.

166. R takes how many mock tests?

- a) 16 b) 12 c) 27 d) 24 e) 12

167. Four of the following five form a group as per the given arrangement. Which of the following does not belong to that group?

- a) O-19 b) M-20 c) R-28 d) S-18 e) N-17

168. Based on the given arrangement, which of the following is true?

- a) M writes 26 tests on Saturday b) Q writes 16 tests on 9th day of the month
c) O writes 22 tests on Thursday d) R writes on Monday
e) None of these

169. If S writes on an even date then how many persons are writing on a date, which is multiple of 5?

- a) 2 b) 3 c) 4 d) 5 e) None of these

170. Which of the following pair of date can be the date of the test taken by S and R?

- a) (8,17) b) (9,18) c) (10,20) d) (9,20) e) (17,19)

171. On which day of the week number of tests taken is a perfect cube?

- a) Monday b) Sunday c) Saturday d) Wednesday e) None of these

Directions (172-176): Study the following information carefully and answer the given questions:

Fourteen persons are sitting in two parallel rows such that seven persons are sitting in each row. T, U, V, W, X, Y, Z are sitting in row-1 facing north while H, I, J, K, L, M, N are sitting in row-2 facing south. Z sits third to the left of T and neither of them sits at an extreme end of the row. The one who faces T sits immediate right to L. Only one person sits between L and I. The one who faces I sits third to the right of X. K sits to the immediate left of N. K neither faces Z nor X. W is an immediate neighbour of the one who faces K. The one who faces V sits fifth to the left of H. U sits third to the left of Y.

172. Four of the following five are alike in a certain way so form a group which of the following does not belong to that group?

- a) M b) U c) J d) T e) H

173. How many persons sits between Y and V?

- a) One b) Two c) None d) Three e) More than three

174. Which of the following is not true regarding M?

- a) M is not at any extreme end of the row
- b) M does not sit third to the right of I
- c) K is not an immediate neighbour of M
- d) there are 3 persons between M and J
- e) Only two persons sit between M and K

175. What is the position of V with respect to T?

- a) Second to the left b) Third to the right c) Immediate to right
- d) Immediate left e) Second to the right

176. What is the position of U with respect to W?

- a) Third to the left b) Second to the left c) Forth to the left
- d) Third to the right e) Fifth to the right

Direction (177-179): Read the information carefully and answer the question:

Point M is 15m north of point P. Point R is 25m east of point P. Point U is 15m north of point M. Point Q lies between the points U and P in such a way that the distance between points U and Q, points P and Q is in the ratio of 1 : 2 respectively. Point T is 10m to the east of point U. Point S is 15m south of Point T and 15m west of Point L.

177. What is the approximate distance between point L and A, if a person moves from P 7m east and reaches at point A?

- a) 20m b) 25m c) 23m d) 22m e) 27m

178. In which direction is point T with respect to P?

- a) north-west b) south-west c) south-east
d) north-east e) none of these

179. Which of the following points are inline?

- a) P, R, S b) Q, M, L c) U, S, T d) M, S, L e) Q, S, L

Directions (180-184): Study the information below and answer the following question:

In a certain code language,

‘India won the asian cup’ is written as 5@12 5@19 9\$18 9\$23 5@6

‘Rohit scored highest runs’ is written as 9#19 13#19 7@13 11#9

‘Matches were held in Dubai’ is written as 7@15 3@13 9\$25 13#24 7#9

‘Bhuvi got the highest wickets’ is written as 5@12 13#16 13#19 9#6 5@19

180. The code for the word ‘Bhuvi’ is

- a) 9#6 b) 5@19 c) 5@12 d) 13#16 e) None of these

181. Find the code word for the word ‘Stump’?

- a) 9@6 b) 9#6 c) 6%3 d) 6&4 e) None of these

182. What is the code for ‘Rohit wickets’?

- a) 9#19 13#19 b) 13#19 13#16 c) 13#16 9#19
d) 13#24 7@13 e) None of these

183. What could be the code for 'lbw'?

- a) 5@25 b) 5#25 c) 5\$25 d) 5#12 e) 5%25

184. What is the code for 'test match'?

- a) 7@8 5@7 b) 3#9 11\$5 c) 7@8 9@7 d) 9@7 8#7 e) None of these

Directions (185-189): Read the following information carefully and answer the questions that follow

Twelve teams from different countries i.e South Africa, Australia, India, Bangladesh, Kenya, Zimbabwe, Pakistan, Sri Lanka, New Zealand, Afghanistan, England, West-Indies participated in a cricket tournament. Pre-Quarter finals has been held among these teams in 6 days starting from Monday to Sunday, one day being a break-day. Each team played only one match. India won the match played on Thursday. Bangladesh's match was held immediately after the day on which West Indies played and lost. Australia never played against Pakistan or South Africa. England won the match, which was held on Saturday. Three matches have been held between the match, which was won by New Zealand and played by Bangladesh. West Indies played the match immediately after the break-day. Kenya won the match. Afghanistan which lost the match never played with India, Sri Lanka and New Zealand. Bangladesh didn't play with Pakistan or South Africa. South Africa won the match that was played on a day immediately before the day on which New Zealand match was held. Sri Lanka's match was held immediately before Pakistan team played. Zimbabwe won the match against Afghanistan. Pakistan match was not held immediately after or immediately before the break-day. Australia's match was not held on Wednesday. Pakistan lost the match

185. Zimbabwe played against which team and on which day of the week?

- a) Australia, Friday b) Afghanistan, Wednesday
c) Bangladesh, Saturday d) Sri Lanka, Wednesday
e) None of these

- d) All tuitions are college. All colleges are classes. Some schools are tuitions.
- e) None of these

191. Conclusions:

- I. Some north are south.
- II. All south are east.

Statements:

- a) All north are south. Some east are north. Some south are west.
- b) All south are west. All west are east. Some north are east.
- c) Some north are south. No east is west. All south are west.
- d) All north are south. All south are west. All west are east.
- e) None of these

192. Conclusions:

- I. No Sunday is Monday.
- II. Some Tuesdays are Fridays.

Statements:

- a) Some Tuesdays are Monday. All Tuesdays are Friday. No Friday is Sunday.
- b) All Tuesdays are Friday. All Sundays are Friday. No Friday is Monday.
- c) All Sundays are Tuesday. Some Tuesdays are Monday. Some Mondays are Friday.
- d) All Sundays are Tuesdays. All Tuesdays are Mondays. No Monday is Friday.
- e) None of these.

193. Conclusions:

- I. Some sony are not apple.
- II. Some jio are airtel.

Statements:

- a) All sony are jio. No jio is apple. Some apple are airtel.
- b) Some sony are jio. All jio are airtel. Some airtel are apple.

- c) All jio are sony. All sony are airtel. No airtel is apple.
- d) Some jio are airtel. Some airtel are sony. Some apple are airtel.
- e) None of these.

Directions (194-198): Each question consists of two/three/four statements followed by three conclusions numbered I, II and III. Consider the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically does not follow from the given statements using all statements together.

194. Statements:

All cakes are biscuit

2% pastries are cake

99% biscuits are chips

Conclusions:

I. 97% pastries being chips is a possibility

II. 100% cake are definitely not chips.

III. 20% biscuits being pastries is a possibility

- a) If only conclusions I
- b) If only conclusions II
- c) If conclusion II and conclusion III
- d) If only conclusions III
- e) Other than the given option

195. Statements:

Half of blacks are greens

25% reds are black

All greens are whites

Conclusions:

I. 1% reds are neither black nor whites is a possibility

II. All greens are reds is a possibility

III. 60% greens are reds.

- | | |
|---------------------------------------|----------------------------|
| a) If only conclusions I | b) If only conclusions II |
| c) If conclusion I and conclusion III | d) If only conclusions III |
| e) Other than the given option | |

196. Statements:

All floor are roof

No window is roof

All windows are wall

Conclusions:

I. 20% roof which are wall are also floor.

II. No window is floor

III. Half of roof which are floor can be windows.

- | | |
|---------------------------------------|----------------------------|
| a) If only conclusions I | b) If only conclusions II |
| c) If conclusion I and conclusion III | d) If only conclusions III |
| e) Other than the given option | |

197. Statements:

All cakes are biscuit

2% pastries are cake

99% biscuits are chips

Conclusions:

I. Some biscuit which are pastries may also chips.

II. All chips if they are pastries then they must be cake.

III. Some chips are not cake.

- | | |
|---------------------------------------|--------------------------------------|
| a) If only conclusions I | b) If only conclusions III |
| c) If conclusion I and conclusion III | d) If conclusion I and conclusion II |
| e) Other than the given option | |

198. Statements:

Some blues are greens

Some reds are blues

All greens are whites

Conclusions:

I. Some whites are not reds

II. Some reds which are blues are white.

III. Some whites are greens.

- | | |
|--------------------------------------|----------------------------|
| a) If only conclusions I | b) If only conclusions II |
| c) If conclusion I and conclusion II | d) If only conclusions III |
| e) Other than the given option | |

Directions (199-203): In each question below some statements are followed by some conclusions, out of which one definitely does not logically follow from the given statements. That conclusion is your answer.

(Note: You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions definitely does not logically follow from the given statements disregarding commonly known facts.)

199. Statements:

Some painter are artist

Some student are banker

Some artist are not banker

Conclusions:

- a) Some painters are students is a possibility
- b) All artists can never be bankers
- c) All students being artists is a possibility
- d) Some bankers are artists
- e) None

200. Statements:

No sun is moon

Some galaxy are star

All star are sun

Conclusions:

- a) Some galaxy are sun.
- b) No moon is star.
- c) All galaxy being moon is a possibility.
- d) Some stars are not moon.
- e) All moon being galaxy is a possibility.

201. Statements:

Some lilies are mars

Some magnets are big

Some mars are big

Conclusions:

- a) Some lilies can be big.
- b) All magnets are mars is a possibility.
- c) Some mars are not lilies is a possibility.
- d) No big is lilly.
- e) None

202. Statements:

Some robots are machines

No machine is tutor

All tutors are trainee

Conclusions:

- a) Some robots are not tutors.

- b) No trainee is machine.
- c) Some trainee are tutor.
- d) Some trainee which are tutor are machine.
- e) All tutors are robot is a possibility.

203. **Statements:**

Some laptops are not dell.

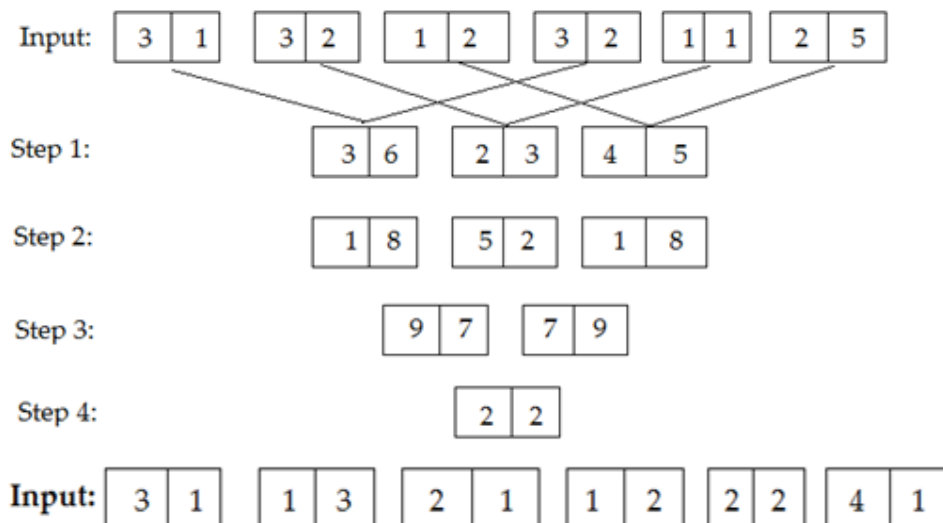
Some dell are storage.

All storage are memory.

Conclusions:

- a) All dell are laptops is a possibility.
- b) Some dell are memory.
- c) All storage are dell is a possibility.
- d) Some laptops are not storage.
- e) Some storage is not memory.

Directions (204-208): A number arrangement machine arranges two digit numbers in typical manner. They are obtained by applying certain logic. Each step is a resultant of previous step.



204. If the final output is multiplied by '5', then what will be the resultant value?

- a) 195 b) 170 c) 175 d) 180 e) 190

205. What is sum of the numbers in step III?

- a) 60 b) 65 c) 70 d) 6 e) None of these

206. What is the sum of the digits in II?

- a) 23 b) 32 c) 5 d) 34 e) 28

207. Which of the following represents the difference between the two numbers in Step III of the given input?

- a) 20 b) 22 c) 23 d) 24 e) 25

208. If in the first step if the sum of the first digit of every number is multiplied by 3, then which of the following will be the resultant value?

- a) 22 b) 33 c) 36 d) 45 e) 48

Directions (209-213): Study the given below information and answer the questions that follow.

There are 12 people – M, N, O, P, Q, R, S, T, U, V, W and X sitting in 3 rows such that 4 people are in each row. All of them are facing north. Row 1 is in front of row 2 and row 2 is in front of row 3. The people in 1st row (front) are Politicians, middle row are Engineers and third row are Doctors. V is in the left corner in 3rd row. Q sits in front of U who is next to N. P is sitting to the immediate right of T and both of them are Politicians. S is a Doctor and he is on the 2nd seat from right in the row. X sits behind W and they sit on the right corners of their respective rows. R sits on the left corner and he is an Engineer. M is neither in a column of N or U nor at extreme left.

209. Who is the immediate neighbour of the one who sits in front of O?

- a) W b) R c) S d) T e) P

210. If M is not a doctor, then what is the position of N with respect to one who sits at extreme right of the 2nd row?

- a) Immediate right b) Second to the left c) Second to the right
d) Immediate left e) None of these

211. If W is politician, then who among the following represents a group of doctors?

- a) M, R, T, P b) R, U, N, W c) V, Q, T, P
d) V, O, S, M e) None of these

212. Who sits behind M, if X is a doctor?

- a) N b) M c) W d) O e) Either O or M

213. Four of the following five are alike in a certain way so form a group which of the following does not belong to that group?

- a) Q, U b) N, O c) P, X d) R, V e) V, S

Directions (214-218): Study the following information carefully and answer the given questions.

There are certain number of persons is sitting in a row facing north. Andrea sits 4th to the right of Aradhana. Five persons sit between Andrea and Ali. Alma sits at one of the positions left to Aradhana. The number of persons sitting between Andrea and Aadhya are same as between Aradhana and Alma. Aasika is 2nd from one of the extreme ends. Four persons sit between Aradhana and Aadhya. No one sits to the right of Aashita, who is immediate right to Asita. Ali is 3rd left to Asita. Not more than two persons sit between Aasika and Aadhya.

214. How many persons are sitting in the row?

- a) 17 b) 20 c) 24 d) 26 e) 27

215. How many persons are sitting between Aradhana and Alma?

- a) seven b) six c) five d) four e) eight

216. What is the position of Aadhya from the left end?

- a) 6th b) 5th c) 4th d) 2nd e) 3rd

217. How many persons are sitting between Aasika and Andrea?

- a) seven b) eleven c) ten d) nine e) eight

218. Which of the following represents the person sitting at extreme end?

- a) Andrea b) Aadhya c) Ali d) Ambika e) Alma

Directions (219-223): Consider the following steps for given input and read the instructions to reach to the last step.

Instruction:

Step-I: Interchange the element in input as arrows mentioned.

Step-II: (i) If both letters are consonant and the number is more than or equal to 2, then consonants change to next letter in English Alphabetical series and number becomes double.

(ii) If there is one vowel and one consonant, then subtract 2 from the number and drop the consonant.

(iii) If there is a single consonant, then add 2 to the number and consonant changes to previous letter in English Alphabetical series.

(iv) If there is a single vowel, then subtract 3 from the number and vowel changes to next vowel in English Alphabetical series.

Step-III: has been derived repeating Step II again.

INPUT:

F5	E9	JI7
N3		K6
OQ4	SH2	GF3

219. What is the sum of the all the numbers of the third row in step II?

- a) 13 b) 18 c) 21 d) 15 e) 22

220. Which of the following represent the first element in 3rd row in step III?

- a) IH₁₀ b) T₂ c) O₂ d) I₅ e) PM₂

221. What is the sum of all the numbers of 3rd column in step III?

- a) 14 b) 9 c) 25 d) 18 e) 10

222. How many distinct vowels are there in step II?

- a) 2 b) 4 c) 5 d) 1 e) 3

223. What is the sum of all the numbers in Step III?

- a) 41 b) 39 c) 44 d) 35 e) None of these

Directions (224-228): Study the information and answer the following questions:

In a certain code language

“The court granted them” is written as “7F4% 4S13@ 3S5\$ 5B20#”

“Members of outlawed communist” is written as “9B20@ 2N6# 7L19\$ 8N4%”

“Joining conspiracy against party” is written as “10B25# 7I7\$ 5O25@ 7Z20% ”

224. "Till now many prefer radio" what is the code for 'Radio' in the given sentence according to the code language?

- a) 5Q15& b) 5S15% c) 5Q15\$ d) 5R15# e) None of these

225. What is the code for the word 'Rising Normal' in the given code language?

- a) 6S6\$ 6O11# b) 5M11\$ 6Q7# c) 6M12% 6Q7\$
d) 6S7@ 5M12! e) None of these

226. If the code for the words 'they forward _____' is coded as '4S25\$ 5R5% 7E4#' in the coded language then what could be the missing word?

- a) Smoke b) Mount c) Stone d) Climb e) Both a and c

227. What is the position and actual word in a sentence, if the code for that word given as '7D20@'?

- a) 3rdand Enigmatic b) 4thand Engross c) 4thand Doctors
d) 4thand Elegant e) Elephant

228. If "Joining conspiracy against party is risky" has been coded as "5Q25! 10B25# 7I7\$ 2H19& 5O25% 7Z20@", then what is the code for the sentence "I rushed to the exam centre"?

- a) 2S20# 3S5@ 6Q4# 1H9\$ 4D13& 6B5!
b) 2S20# 3S5@ 6Q4# 1H9\$ 4D13! 6B5&
c) 3S5@ 6Q4# 1H9\$ 4D13# 6B5& 2S20!
d) 2S20! 3S5@ 6Q4# 1H9\$ 6Q4# 1H9\$
e) None of these

Directions (229-233): Study the following information carefully and answer the questions given below:

'#' – Either the hour or minute hand of clock on 8

'\$' – Either the hour or minute hand of clock on 6

'%' – Either the hour or minute hand of clock on 4

'@' – Either the hour or minute hand of clock on 5

'+' – Either the hour or minute hand of clock on 3

'&' – Either the hour or minute hand of clock on 9

Example: Time '#%' represents 4:40AM. All the times are in AM. The first symbol represents minutes and second symbol represents hours

229. Due to heavy traffic, Aisha who was supposed to come at '% @' got delayed by '%%'. Then at what time she reached her destination?

- a) ++ b) @@ c) @# d) #+ e) #&

230. Scheduled departure time of a train from a station A to B is '\$@' and arrival time at B is '@\$'. But the train is running late by 2 hours. At what time the train has reached the station?

- a) @# b) @% c) %@ d) @# e) \$+

231. Sona went for a movie named X released yesterday. The show started at '@\$' and ends at '\$#'. At What time was the interval, if the interval was given after 1hour 50 minutes of the show?

- a) #@ b) @# c) ## d) #% e) + #

232. What is the time in watch now, if before 25 minutes it was '+@'?

- a) #@ b) @# c) #@ d) #+ e) + #

233. A program was scheduled at '@\$'. Delegates reached the venue 70 minutes before the program's scheduled time. At what time delegates reached the venue?

- a) @# b) @% c) +@ d) %# e) \$+

Directions (234-238): Study the following information carefully and answer the questions given below:

7 friends P, Q, R, S, T, U & V are made to stand in a row facing north to play Kho Kho & distance between 2 adjacent friends increases from left to right, in consecutive integral multiples of 6. Distance between S & R is 72 m and only 2 friends stand between them. U sits immediate left of R. P sits somewhere to the right of R and distance between them is in multiple of thirteen. Distance between Q and R is 54 m. V is at one of the extreme ends and also not a neighbour of P.

- P starts moving towards east, after moving 12m, it turns to its right and walked 20m. Again it turns right and moves 90m. From there after turning to its left and walking for a distance of 15 m, it comes to halt at a point X.
- U, moves in north direction for a distance of 20 m and then turn to its left and moves 30 m. After taking one more turn to its left it stops at a point Y after walking 10 m.
- S, walks south and travel 10 m before turning to its left. After 42 m it takes right turn and walks 25 m.

234. What is the distance between final position of S and X?

- a) 75m b) 66m c) 30m d) 36 e) None of these

235. What is the distance of Y with respect to R, if R started moving towards west of 30m and then right turn with another 30m followed by a left move of same distance?

- a) 20m b) 5m c) 15 m d) 30m e) None of these

236. In which direction is Y with respect to S, if T has interchanged his position with S?

- a) East b) South c) North d) North-west e) South-East

237. If V and R interchange their position, then what is the distance between S and V?

- a) 72m b) 54m c) 66m d) 78m e) None of these

238. Four of the following five are alike in a certain way so form a group which of the following does not belong to that group?

- a) QR b) SQ c) RT d) UT e) VU

Directions (239-243): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input:

Input: 49 28 31 63 53 72 94 14

Step I: 05 49 28 31 63 53 72 05

Step II: 10 05 49 31 63 53 05 05

Step III: 04 10 05 49 53 05 05 03

Step IV : 13 04 10 05 05 05 03 02 and Step IV is the last step of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

Input: 78 92 13 49 27 84 79 35

239. Which of the following will be the 2nd to the right of 3rd element from left of the penultimate step for the given input?

- a) 11 b) 78 c) 49 d) 08 e) None of these

240. Which of the following number would be at the seventh position from the right in Step 2, if all the numbers of the step I are reduced by 2?

- a) 04 b) 09 c) 47 d) 49 e) 02

241. What is the difference between the last number of input and highest number at Step III?

- a) 32 b) 43 c) 14 d) 25 e) None of these

242. What is the sum of the numbers at Step IV?

- a) 168 b) 37 c) 178 d) 125 e) None of these

243. How many numbers are in Step II which are prime numbers?

- a) One b) Two c) Three d) Five e) None of these

Directions: (244-248): Study the following information carefully and answer the given questions:

A group of 7 friends prepared a study plan for upcoming IBPS exam. Subjects like Quantitative Aptitude, English, Reasoning Ability, General Awareness, Current Affairs, practicing on numbers and Newspaper reading are considered for the study plan. Each activity was given a definite and continuous time slots. (i.e. there is no gap between two consecutive subjects. In a day a total 15-hour class was scheduled.

- An activity can start its slot from a whole hour or half hour only (i.e. a subject can start from 4 pm, 4:30 pm but it cannot start from 4:13 pm, 4:03 pm)
- Quantitative Aptitude takes place from 11 am to 12:30 pm. Only one activity took place between Quantitative Aptitude and General Awareness.
- Time slot of General Awareness is twice the time slot of Quantitative Aptitude.
- Reasoning Ability took place between Quantitative Aptitude and Current Affairs, but it did not take place immediately after or before Current Affairs.
- Total slot time of English and reading newspaper is 4.5 hours.

- Number of classes that took place between reading Newspaper and reading Current Affairs is same as the number of classes between Reasoning Ability and reading Newspaper.
- Time slot of Reasoning Ability is 1 hour less than the time slot of General Awareness.
- Current Affairs reading starts from 5:30 pm. Practice of the day ends up with practicing on numbers.

244. According to the study plan how much time has given for reading newspaper?

- a) 1.5 hours b) 3 hours c) 1 hour d) 2 hours e) none of these

245. How many slots are there between Quantitative Aptitude and Current affairs in the study plan?

- a) One b) Two c) Nil d) Four e) None of these

246. Which of the following activity is in the slot immediately after reading newspaper?

- a) Practicing on numbers b) Reasoning Ability
c) Quantitative Aptitude d) English
e) None of these

247. What is the difference between the duration of Quantitative Aptitude and Reasoning Ability?

- a) 1 hour b) 2 hour c) 1.5 hour d) 0.5 hour e) None of these

248. Four of the following five form a group as per the given arrangement. Which of the following does not belong to that group?

- a) General Awareness b) English
c) Quantitative Aptitude d) Reading News Paper
e) Practice on Numbers

Directions (249-253): In each of the following questions, a question is followed by information given in three statements. You have to study the question alone with the statements and decide the information given in which statement is/are sufficient to answer the question.

249. Is Dream coded as?

I. "Never Give Up Your Dream" means "PO YO KU NO KO" and "Chase Your Dream" means 'SO KU KO'.

II. "Hard Work Always Gives Chance" means "JO KI KA YO NA" and "Give Chance to Your Dream" means "YO NA TU KU KO".

III. "Your Labour Will Work" coded as "LA KU NI JO" and "Dream always comes true" coded as "PE KU NO FI".

- a) If the data in Statement I alone is sufficient to answer the question
- b) If the data in Statement II alone is sufficient to answer the question.
- c) If the data either in Statement III alone or in Statement II alone is sufficient to answer the question.
- d) If the data in both the Statements I and III together are sufficient to answer the question.
- e) If the data in both the statements I and II together are necessary to answer the question

250. Ten family members P, Q, R, S, T, U, V, W, X and Y are linked to each other in a particular relation. What is the relation of person Q with respect to person P?

Statement 1: V is the father of P. P is married to U. U is the daughter of R. R is the grandfather of Q. T is married to X.

Statement 2: Y is the wife of X. X is the brother of P. Q is the son of R. R is married to S and the couple has two daughters.

Statement 3: The person T is the mother of Q. U and T are children of S. U is the daughter-in-law of V. V is the father of X.

- a) The statements I and III taken together are sufficient to answer the question

- b) The statements I and II taken together are sufficient to answer the question
- c) Any of the two statements taken at a time are sufficient to answer the question
- d) Neither of the statement is sufficient to answer the question
- e) All of the statements taken together are sufficient to answer the question

251. Eight friends A, B, C, D, E, F, G and H are sitting in a straight line facing north. Who is sitting at the extreme right end of the row?

I. H is fourth to the right of D, who is the immediate neighbor of C. A is the second to the left of C, who is third to the left of F.

II. A is fourth to the left of D and sits at an end of the row. C is fourth to the right of H, who is not an immediate neighbor of D.

III. No one is sitting to the left of A. B is third to the left of G, who is immediate neighbour of D and F. F is second to the left of H.

- 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 III 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.

252. Among Goutam, Harish, Sona, Tony and Mouni, is Sona smaller than Tony?

I. Harish is either greater than or equal to Sona, who is either smaller than or equal to Goutam. Goutam is greater than Tony, who is equal to Mouni.

II. Goutam is greater than Sona and either smaller than or equal to Harish, who is equal to Tony, and Mouni is greater than Tony.

III. Sona is either greater than or equal to Goutam, who is equal to Tony. Harish is smaller

than Gautam, who is equal to Mouni.

- a) If the data in statement II alone are sufficient to answer the question, while the data other statements are not sufficient to answer the question.
- b) If the data in either statement II alone or statement III 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 III 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

253. Eight family members A, B, C, D, E, F, G and H are sitting around a circular dining table facing the centre. Who sits third to the left of C?

Statement 1. F sits second to the left of C, who sits second to left of E. A sits facing H, who is not a neighbour of D. B sits second to left of H and G sits immediate right of C.

Statement 2. D sits second to right of E, who sits third to left of B. H sits second to left of G, who sits third to right of F. H sits second to right of B, who sits opposite of G.

Statement 3. E is third to the left of G, who is on the immediate right of B, who is third to the left of A. H is second to the right of F, who is not an immediate neighbor of E. D is not an immediate neighbor of B.

- a) The statements I and III taken together are sufficient to answer the question
- b) The statements I or II alone is sufficient to answer the question
- c) Any of the two statements taken at a time are sufficient to answer the question
- d) Neither of the statement is sufficient to answer the question
- e) All of the statements taken together are sufficient to answer the question

Directions (254-258): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearrange them following a particular rule in each step. The

following is an illustration of input rearrangement.

Input: 241 5 4 identical 137 rack 25 16 11 mental 9 abandon

Step-1: 25 241 5 4 identical 137 rack 16 11 mental 9 abandon

Step-2: 25 241 identical 5 4 137 rack 16 11 mental 9 abandon

Step-3: 25 241 identical 16 5 4 137 rack 11 mental 9 abandon

Step-4: 25 241 identical 16 137 5 4 rack 11 mental 9 abandon

Step-5: 25 241 identical 16 137 abandon 5 4 rack 11 mental 9

Step-6: 25 241 identical 16 137 abandon 9 5 4 rack 11 mental

Step-7: 25 241 identical 16 137 abandon 9 11 5 4 rack mental

Step-8: 25 241 identical 16 137 abandon 9 11 mental 5 4 rack

Step-9: 25 241 identical 16 137 abandon 9 11 mental 4 5 rack

Step-9 is the last step of the given input. Answer the following questions for the below input.

Input - 25 53 Padle 9 16 sabbatic media 109 179 36 Unabbreviated 139

254. In step – 5 how many words are there between '109' and '16'?

- a) Two b) Three c) Zero d) One e) Four

255. How many steps are required to arrange the given input?

- a) Five b) Six c) Seven d) Eight e) Nine

256. In which step do we get following order?

36 179 Unabbreviated 25 139 media 16 109 Padle 53 9 sabbatic.

- a) There is no such step b) Six c) Five
d) Seven e) Eight

257. If the digits of second element from the left in step-3 and the eighth element from right in step-4, are arranged in descending order, then, find the difference between the numbers formed after rearrangement?

- a) 70 b) 50 c) 30 d) 40 e) 60

258. Which of the following is 2nd to the right of 3 element from the right in Step 3?

- a) Sabbatic b) 16 c) Padle d) 6 e) 9

Directions (259-263): In each of the following questions you have to find out that which of the following statement/statements is/are redundant for determining the answer of given question or can be dispensed with.

259. Who among P, Q, R, S and T got the minimum marks?

I. T got less marks than P and R but more than S and Q. R did not get the highest marks and S did not get the minimum marks.

II. Q got more marks than S and R, and P got more marks than T and Q.

III. T scores less marks only from 2 persons and Q got more marks than T and S.

- a) Only I and II b) Only I and III c) Both II and III
d) Either I or II e) None of these

260. Eight students O, P, Q, R, S, T, U and V sit in a row facing north. How many students sit between S and U?

I. O sits second to the left of P, who sits third to left of V. T sits second to the right of S, who is immediate left of P. O sits second to the right of Q.

II. Q and V sit at extreme ends. Q sits third to the left of S, who sits second to the left of T. P sits third to the left of V, who sits at the extreme right end. O is immediate neighbour of R, who sits third to the left of P.

III. S sits second to the right of U, who does not sit at the extreme ends of the line. O is sixth to the left of S. P is the immediate neighbour of Q and R. T sits on the immediate right of U. S is an immediate neighbour of T. P is not the immediate neighbour of U. V is sixth to the right of Q.

- a) Only I and II b) Only I and III c) Both II and III
d) Either II or III and I e) None of these

261. Is D the uncle of H?

I. E is married to C, who is the father of I. B is the mother-in-law of A, who is married to D. G is a brother of F, who is a son of A. C is the brother-in-law of D and H is a daughter of E.

II. B is mother of D, who is brother-in-law of C. C is son-in-law of B, who has four grand children. G is brother of F and child of A. G is cousin of H who is son of E. E is not the wife of D.

III. I is a brother of H who is a son of E. A is a son-in-law of B, who is the mother of E. G is a son of D, who is married to A and C is a sister-in-law of D. B has only two children. G is a brother of F.

- | | | |
|---------------------------|-------------------|---------------------------|
| a) Either II or III and I | b) Only I and III | c) Either II or I and III |
| d) Only II | e) None of these | |

262. All the persons who are sitting in a row facing north direction. Who sits immediate to the left of Ranjith, who is sitting in row?

I. There are only three persons sit between Sudeep and Kavya. More than four persons sit to the left of Kavya.

II. Not more than 8 persons can sit in a row. Ranjith sits second to the left of Sudeep. Divya sits 7 places away from Kavya.

III. 8 persons are sitting in the row. Divya and Kavya are at two extreme position.

- | | | |
|---------------------------|-------------------|---------------------------|
| a) Either II or III and I | b) Only I and III | c) Either II or I and III |
| d) Either II or III | e) None of these | |

263. Towards which direction is village J from village W?

Statement I. Village R is to the west of Village W and to the north of Village T.

Statement II. Village Z is to the east of Village J and to the south of village T.

Statement III. Village M is to the north east of Village J and north of Village Z.

- | | | |
|---------------------|------------------|-------------|
| a) Only II | b) Only I and II | c) Only III |
| d) Either II or III | e) None of these | |

Directions (264-268): Study the following information carefully and answer the given questions:

Eight members of a family P, Q, R, S, T, U, V and W are seated around a circular table facing the centre. Everyone is related to P in some manner: father, mother, wife, daughter, son, sister and brother not necessarily in the same order.

- V's neighbours, is 2nd to the left of P's daughter
- 3 persons are seated between P's daughter and R who is a female
- Q is 2nd to the right of U whose neighbour is 2nd to the left of P's sister
- S's father is seated to the immediate right of V
- U's brother is seated opposite to W who is Q's neighbour
- V's mother is seated opposite to P
- Q is not P's mother

264. How is Q related to V's mother?

- | | | |
|------------------|------------|------------------|
| a) Daughter | b) Son | c) Father-in-law |
| d) Mother-in-law | e) Husband | |

265. What is the position of W with respect to P's sister?

- | | | |
|------------------------|-----------------------|--------------------|
| a) Immediate left | b) Second to the left | c) Immediate right |
| d) Second to the right | e) Opposite | |

266. Who among the following is seated to the immediate right of P's wife?

- | | | |
|---------------|-----------------|----------------|
| a) P's mother | b) P's father | c) P's brother |
| d) P's son | e) P's daughter | |

267. In which of the following groups is the third person seated in between the first and the second person?

- a) RQW b) VPT c) TSU d) RPV e) SUW

268. Who among the following is P's daughter?

- a) V b) U c) S d) R e) Q

Directions (269-272): Study the following information carefully and answer the given questions:

Ten persons A, B, C, D, E, F, G, H, I and J are seated in two rows. Five of them are seated in row 1 facing south and other five persons are seated in row 2 facing north. They like different colours red, purple, blue, white, green, yellow, brown, pink, black and orange not necessarily in the same order.

- J faces the one who is 3rd to the left of the one who likes red.
- 2 persons are seated between the one who likes red and G.
- B's neighbour faces G
- There is a gap of one person between the one who likes black and B.
- One who faces the person who likes black is third to the right of the one who likes blue.
- C does not like orange
- A sits opposite to D's neighbor
- A and H are seated at a gap of 2 persons
- D faces south and is opposite to the one who is 3rd to the left of the one who likes green.
- The one who likes purple is 2nd to the left of the one who likes yellow.
- One who likes pink faces E.
- One who likes brown is seated to the right of I.
- C faces the one who likes yellow.

269. Who among the following likes white?

- a) A b) B c) C d) D e) E

270. Who is seated exactly opposite to the one who likes brown?

- a) A b) B c) C d) D e) E

271. Which of the following colours does the person likes who is to the immediate right of the one who likes white?

- a) Yellow b) Blue c) Red d) Green e) Orange

272. In which of the following groups is the third person seated exactly in between the first and the second person?

- a) DEB b) BJF c) ECH d) BHJ e) BID

Directions (273-277): Study the following information carefully and answer the given questions:

In a row of 36 people, A, B, P, Q, R and S are sitting at some distance from each other. None of them are sitting together. B is sitting at a position from the left end which is exactly half the number of people in the row. P and Q are sitting to the right end of B and there are five people sitting between P and Q. the number of people sitting between P and R is the same as the number of people sitting between P and Q. The number of people sitting between B and S is three times the number of people sitting between B and Q. A is sitting second from the left end while R is sitting third from the right end. S sits to the left of P.

273. What is the position of S from the left end of the row?

- a) Seventh b) Eighth c) Ninth d) Tenth e) Can't be determined

274. How many person (s) are sitting between A and S?

- a) Four b) Three c) Six d) Five e) More than Six

275. What is the position of Q from the right end of the row?

- | | | |
|------------------------|------------------|--------------------|
| a) Fifteenth | b) Fourteenth | c) Twenty - Second |
| d) Can't be determined | e) None of these | |

276. What is the position of P with respect to B?

- | | | |
|------------------------|----------------------|-----------------------|
| a) Ninth to the right | b) Tenth to the left | c) Tenth to the right |
| d) Can't be determined | e) None of these | |

277. If Z is sitting exactly between S and B then what will be his position from the left end of the row?

- | | | |
|-------------|---------------|---------------|
| a) Twelfth | b) Thirteenth | c) Fourteenth |
| d) Eleventh | e) Fifteenth | |

Directions (278-282): Study the following information carefully and answer the given questions:

Six games Squash, Badminton, Table Tennis, Chess, Carrom, and Billiards are packed and then stacked in six boxes numbered 1-6 from bottom to top not necessarily in the same order. The boxes are covered in different coloured covers pink, yellow, blue, red, green and white.

- The topmost box is covered with the blue coloured paper.
- 3 games are arranged between Billiards and the game that is covered with white paper.
- Badminton and Chess are kept in consecutive boxes.
- Carrom is wrapped with a green cover
- The box covered with yellow cover and the box with Chess has 3 boxes in between.
- Badminton is not covered with the white paper
- Not more than 2 games are stacked above Table Tennis.
- The red covered box is kept just above the pink covered box.
- Squash is not packed with the pink cover.

278. Which of the following games is kept in box number 5?

- | | | |
|-----------------|--------------|-----------|
| a) Table Tennis | b) Billiards | c) Carrom |
| d) Squash | e) Chess | |

279. Which of the following games is covered with the white paper?

- | | | |
|-----------------|--------------|----------|
| a) Table Tennis | b) Billiards | c) Carom |
| d) Squash | e) Chess | |

280. How many games are arranged between Badminton and the box covered with yellow paper?

- | | | | | |
|---------|--------|--------|----------|--------------------|
| a) None | b) One | c) Two | d) Three | e) More than three |
|---------|--------|--------|----------|--------------------|

281. Which of the following games it kept just below Squash?

- | | | | | |
|----------|--------------|----------|--------------|-----------------|
| a) Chess | b) Badminton | c) Carom | d) Billiards | e) Table Tennis |
|----------|--------------|----------|--------------|-----------------|

282. In which of the following box number is carom kept?

- | | | |
|-----------------|-----------------|-----------------|
| a) Box number 1 | b) Box number 2 | c) Box number 3 |
| d) Box number 4 | e) Box number 5 | |

Directions (283-287): Study the information given below and answer the questions based on it. Each of the five students - A, B, C, D, and E - students 5 topics - Percentages, Mensuration, Simplification, Profit & Loss and Time and Distance - in a week starting on Monday, and ending on Friday. Exactly five topics were studied on each of the five days, no two of which were same. No student studied more than one topic on any of the five days. C studied Simplification on Tuesday. D studied Time and Distance on Wednesday. He did not study Percentages on Thursday. E studied Profit & Loss on Monday. A studied the same Topic on Monday which D studied on Friday. The Topic was not Simplification. B studied Percentages, Mensuration and Profit & Loss on Monday, Wednesday and Friday respectively. C studied the same Topic on Monday which A studied on Friday.

283. Which Topic did A study on Tuesday?

- a) Profit & Loss b) Time and Distance c) Simplification
d) Percentages e) Mensuration

284. Who studied Percentages on Wednesday?

- a) B b) E c) A d) C e) D

285. What did E study on Friday?

- a) Percentages b) Time and Distance c) Simplification
d) Mensuration e) Profit and Loss

286. Who studied Profit & Loss on Wednesday?

- a) A b) B c) D d) C e) E

287. What did C study on Thursday?

- a) Profit and Loss b) Time and Distance c) Simplification
d) Percentages e) Mensuration

288. Which of the following expression has $E > G$ and $C > F$ definitely true?

- a) $A < E \geq B > D > F = G < C$ b) $B \leq A < C < D > E > F > G$
c) $A \leq C \geq B \geq D < G \geq E > F$ d) $D \leq G > E \geq F > C \leq A \leq B$
e) $C \geq A > D \geq B \geq E = G > F$

289. Which of the following should replace the question mark so that $C > D$ is definitely true?

$C = B ? A \geq D \leq G > F < E$

- a) = b) > c) \leq d) \geq e) <

290. Which of the following order of letters (from left to right) in the blanks makes the expression, $D < C$ is definitely true?

____ < ____ ≤ ____ = ____ > ____

- a) B, C, D, E, A b) C, A, D, B, E c) D, B, A, C, E
d) E, C, A, B, D e) A, B, C, D, E

Directions (291-295): In a certain number system there are only two notation to represent numbers: \$ and %

0 is represented by \$ and 1 by %. The subsequent numbers are represented in the following manner:

2 is manner as %\$

3 is manner as %%

4 is manner as %\$\$

5 is manner as %\$% and so on

Based on this coded language, answer the following questions.

291. Find the remainder when %\$%\$% is divided %%

- a) \$ b) % c) %\$ d) %% e) %\$%

292. What is 30% of %\$%\$%\$%\$?

- a) %\$%\$%\$ b) %\$%\$%\$% c) %\$%\$%\$%\$ d) %\$%\$%\$%\$ e) None of these

293. What is the product of %%% and %\$%\$%\$%\$?

- a) %%%\$%\$%\$%\$ b) %%%\$%\$%\$%\$ c) %%%\$%\$%\$%\$% d)
%%\$%\$%\$%\$%\$ e) None of these

294. What is the sum of %\$%\$%\$%\$ and %\$%\$%\$%\$?

- a) %\$%\$%\$%\$%\$ b) %\$%\$%\$%\$%\$ c) %\$%\$%\$%\$%\$
d) %\$%\$%\$%\$%\$ e) None of these

295. Which of the following is the lowest?

- a) %%%\$%\$ b) %\$%\$%\$ c) %\$\$\$%\$% d) %%%%%% e) %\$%\$%\$%

Directions (296-298): Study the information given below and answer the questions that follow. Each student Anglo, Rustham, Chavan, Sreesha and Palakh took different number of shots and has different heights.

2. Rustham shot more than Palakh and Sreesha but taller than Anglo.
3. Rustham has not shot the highest among them but is the tallest among them.
4. Either Anglo shot the highest and Palakh is the shortest or Chavan shot the highest and Palakh is in middle of Chavan and Sreesha in heights.

296. If Chavan is taller than Sreesha but is shorter than Anglo, then who are placed at same position shot-wise and height-wise?

- A. Anglo
B. Sreesha
C. Palakh

- a) A and C only b) B and C only c) A and B only
d) None of these e) cannot be determined

297. Who amongst the five of them is at middle position height-wise if Anglo is shortest among all?

- a) Anglo b) Sreesha c) Palakh
d) Data Inadequate e) None of these

298. If Chavan is at middle position shot-wise and height-wise, then which of the following pair is the combination of tallest and shortest position?

- A. Anglo
B. Sreesha
C. Palakh

Answer Key

1-d	2-e	3-c	4-d	5-a	6-c	7-a	8-c	9-d	10-a
11-d	12-d	13-c	14-b	15-b	16-d	17-d	18-a	19-a	20-e
21-c	22-b	23-d	24-e	25-a	26-b	27-c	28-a	29-d	30-b
31-a	32-b	33-d	34-c	35-d	36-d	37-a	38-e	39-e	40-e
41-e	42-b	43-c	44-a	45-b	46-d	47-c	48-c	49-a	50-d
51-b	52-c	53-c	54-b	55-d	56-d	57-c	58-d	59-a	60-c
61-d	62-a	63-d	64-e	65-b	66-d	67-d	68-e	69-e	70-b
71-a	72-b	73-c	74-e	75-a	76-e	77-e	78-c	79-e	80-d
81-d	82-c	83-c	84-a	85-b	86-b	87-b	88-b	89-e	90-a
91-e	92-b	93-c	94-d	95-b	96-d	97-c	98-b	99-c	100-d
101-c	102-d	103-c	104-a	105-e	106-b	107-c	108-b	109-c	110-e
111-b	112-d	113-e	114-e	115-d	116-b	117-b	118-d	119-e	120-d
121-a	122-d	123-b	124-a	125-d	126-b	127-d	128-c	129-c	130-d
131-e	132-d	133-c	134-b	135-d	136-d	137-e	138-b	139-e	140-c
141-c	142-e	143-b	144-a	145-b	146-c	147-b	148-d	149-b	150-e
151-b	152-e	153-c	154-a	155-c	156-b	157-d	158-a	159-d	160-d
161-b	162-c	163-b	164-a	165-a	166-c	167-e	168-c	169-a	170-c
171-c	172-e	173-b	174-e	175-c	176-c	177-c	178-d	179-d	180-a
181-a	182-c	183-e	184-e	185-b	186-c	187-c	188-e	189-e	190-d
191-d	192-b	193-c	194-c	195-c	196-c	197-e	198-c	199-e	200-c
201-e	202-d	203-e	204-e	205-a	206-b	207-b	208-b	209-b	210-b
211-d	212-c	213-e	214-c	215-e	216-b	217-b	218-e	219-b	220-c
221-e	222-e	223-b	224-a	225-e	226-e	227-d	228-a	229-e	230-d
231-e	232-a	233-c	234-c	235-a	236-d	237-a	238-d	239-c	240-e
24-b	242-e	243-b	244-b	245-b	246-e	247-d	248-b	249-d	250-e

251-c	252-b	253-b	254-d	255-e	256-e	257-d	258-b	259-c	260-d
261-d	262-d	263-c	264-c	265-b	266-b	267-d	268-c	269-c	270-a
271-b	272-d	273-b	274-d	275-a	276-c	277-b	278-b	279-e	280-c
281-b	282-d	283-a	284-b	285-c	286-d	287-e	288-a	289-b	290-c
291-b	292-b	293-a	294-c	295-e	296-e	297-c	298-c	299-c	300-e