500 Important Quantitative Aptitude & Reasoning Questions for KVS Teaching Posts

QUANTITATIVE APTITUDE

Q1. The Raw material and manufacturing cost formed individually 60% and 40% of the total cost and the profit 33.33% of the Raw Material. If the cost of raw material is increased 6.66% and cost of manufacture increased by 30% and the selling price is increased 60% then new profit percentage is.
(a) 58%
(b) 60%
(c) 65.5%
(d) 68.7%

Q2. A earns 54 Rs per hour and works for 7 hours. 'B' earns 42 Rs hour and works for 12hr. they donate 83.33% from their earning. what is the ratio of saving?
(a) 15: 4
(b) 17: 9
(c) 22: 15
(d) 9: 12

Q3. If 25% of P = x, then x% of 20 is equal to?
(a) 4% of P
(b) 5% of P
(c) 2% of P
(d) 8% of P

Q4. MP of a pen is 40 Rs. Atul gives 5% discount on MP and If he gets profit of 20% on whole transaction. Then what is the cost price of pen?
(a) 30 Rs
(b) 35 Rs
(c) 34.6 Rs
(d) 31.6 Rs

Q5. Raam could not decide between discount of 40% and two successive discount of 15% and 25% both given on a shopping of 3000 Rs. What is the difference between both the discount.?
(a) 110.5 Rs
(b) 112.5 Rs
(c) 117.5 Rs
(d) No difference.

Q6. A number first decreased by 83.33% and then increased by 37.5%. The number so obtained is 55.5 less than the original number. The original number is
(a) 70.2
(b) 72.0
(c) 76.0
(d) 66.8

Q7. Raam increase his speed to $\frac{8}{3}$ times of his original speed. By this he reaches at Dev's Room to drink beer, 34 minutes before the usual. How much time does he takes usually.?
(a) 52.6 minute
(b) 54.4 minute
(c) 56.8 minute
(d) 48.6 minute

Q8. 18000 Rs was invested by Atul and Amit together to start a business. They got profit of 3000 at the end of the year. Amit took his profit share of 800 Rs. How much did Atul invest.?
(a) 10,500
(b) 8000
(c) 13,200
(d) 9200

Q9. Pipe A can fill a tank in 18 minutes and Pipe B empties it in 27 minutes. If both pipes are opened together, after How many minutes should B be closed, so the tank is filled in 30 minutes.?
(a) 20 minutes
(b) 18 minutes
(c) 12 minutes
(d) 15 minutes

Q10. 2 Woman, 5 Men, 6 Children can complete a work in 9 days. A woman does three times the work a man does and a child does half the work of woman does. How many women alone can complete this work in 5 days.
(a) 10
(b) 12
(c) 8
(d) 14

Q11. For an article the profit is 120% of the cost price. If the cost price increases by 25% but selling price remains same. The change in profit percentage. (approx.)
(a) 40%
(b)37%
(c) 42%
(d)29%

Q12. What is the mean proportional of 80 and 405?
(a) 145
(b) 270
(c) 180
(d)360

Q13. The average of all prime number between. 10 to 100 approx.
(a) 45
(b) 47
(c) 50
(d) 53

Q14. Average of twelve numbers is 49. The average of first six numbers is 47. And average of last four numbers is 46. Find the Ratio of Average of Last four numbers to that of 7^{th} and 8^{th} numbers.
(a) 46: 59
(b) 59: 61
(c) 46: 61
(d)46: 63

Q15. Simple interest on a Certain sum at certain rate of interest is 576% of the sum. If the numbers represents rate percent and time in year be equal then the rate of interest is ?
(a) 23%
(b) 24%
(c) 25%
(d) 27%

Q16. A sum of money is divided among A, B and C in The ratio of 11: 15: 17 if C gets 2166rs more then B. then find total amount.
(a) 46500
(b) 46567
(c) 45569
(d)46569

Q17. If the amount on a certain principal in 3 years at16% rate of interest compounded annually is Rs 10500, what will be the amount after 4^{th} years?
(a) 12000
(b) 13000
(c) 12180
(d) 13120

Q18. A train start from Jaipur at 9:00 am and reaches Delhi at 3:00 pm. Another train start from Delhi at 11:00 am and reaches jaipur4:00 pm. Find the meeting time.
(a) 12: 40 pm
(b) 12: 20 pm
(c) 12:36 pm
(d) 12:49 pm

Q19. Mixture A contains 23% Acid and Mixture B contains 47% Acid. In what Ratio should mixture A be mixed with mixture B to obtain a mixture with 37% Acid?
(a) 3:4
(b) 8:11
(c) 13:15
(d) 5:7

Q20. Find the unit digit of 113×114×115×.....×123.
(a) 6
(b) 8
(c) 4
(d) 0

Q21. The ratio of milk and water in a mixture is 7:5. How much part of the mixture should be replaced by water so that ratio of milk and water is 2:3?
(a) $\frac{11}{35}$
(b) $\frac{11}{25}$
(c) $\frac{13}{24}$
(d) $\frac{13}{36}$

Q22. If the arithmetic mean of two numbers is 5 and geometric mean is 4. Then the numbers are?
(a) 4, 6
(b) 4, 7
(c) 3, 8
(d) 2, 8

Q23. A can do a piece of work in 40 days. He starts working, but having some other engagements he drops out after 5 days. Thereafter, B completes this work in 21 days. How many days would A & B take to complete this work working together?
(a) 16 days
(b) 15 days
(c) 17 days
(d) 11 days

Q24. A alone would take 8 h more to complete the job than if both A and B worked together. If B worked alone, he took 4 ½ hour more to complete the job than if A and B worked together. What time would they take if both A and B worked together?
(a) 8 hours
(b) 5 hours
(c) 2 hours
(d) 6 hours

Q25. Two pipes can fill a tank in 8 h and 12 h respectively whereas an escape pipe can empty it in 6 h. If the three pipes are opened at 1 pm, 2 pm and 3 pm respectively, at what time will the tank be filled ?
(a) 8 am
(b) 7 am
(c) 5 am
(d) 7.30 am

Q26. Construction of a road was entrusted to a civil engineer. He was to finish the work in 124 days for which he employed 120 workmen. Two-third of the work was completed in 64 days. How many workmen can be removed now without affecting the completion of the work on time ?
(a) 80
(b) 64
(c) 56
(d) 24

Q27. An express train travels 299 km between two cities. During the first 111 km of the trip, the train travelled through mountainous terrain. The train travelled 10 km/hr slower through mountainous terrain than through level terrain. If the total time to travel between two cities was 7 hour, what is this speed of the train on level terrain?
(a) 56 km/hr
(b) 55 km/hr
(c) 47 km/hr
(d) 88 km/hr

Q28. A train can travel 20% faster than a car. Both start from the point A at the same time and reach point B 75 km away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is
(a) 16 km/hr
(b) 56 km/hr
(c) 25 km/hr
(d) 60 km/hr

Q29. A boatman goes 2 km against the current in 1 hr and goes 1 km along the current in 10
min. How long will he take to go 5 km in stationary water?
(a) 1 hr 30 min
(b) 1 hr 15 min
(c) 1 hr
(d) 40 min

Q30. In a class with a certain number of students, if one new student weighing 50 kg is added, then the average weight of the class increased by 1 kg. If one more student weighing 50 kg is added, then the average weight of the class increases by 1.5 kg over the original average. What is the original average weight (in kg) of the class?
(a) 46
(b) 42
(c) 27
(d) 47

Q31. A started a business with Rs 30,000. After 4 months B joined them with Rs 40,000. C joined them after some more time with Rs 50,000. If C gets Rs 15,000 as his share at the end of the year out of total profit of Rs 49,000. How many months after B joined the business did C join?
(a) 2
(b) 4
(c) 6
(d) None of these

Q32. The average age of employees of a company is 35 yr. If 5 new persons with an average age of 32 years join the company, the average of the entire company becomes 34 years. How many people were there in the company initially?
(a) 10
(b) 12
(c) 8
(d) None of these

Q33. The bowling average of a cricketer was 12.4. He improves his bowling average by 0.2 points when he takes 4 wickets for 26 runs in his last match. The number of wickets taken by him before the last match was
(a) 125
(b) 150
(c) 175
(d) 114

Q34. Rs 600 are divided among A, B and C so that Rs 40 more than 2/5 of A's share, Rs 20 more than 2/7 of B's share and Rs 10 more than 9/17 of C's share are all equal. A's share is
(a) Rs 180
(b) Rs 160
(c) Rs 150
(d) Rs 140

Q35. The value of $\frac{(243)^{0.13}\times(243)^{0.07}}{(7)^{0.25}\times(49)^{0.075}\times(343)^{0.2}}$ is?
(a) $\frac{3}{7}$
(b) $\frac{7}{3}$
(c) $1\frac{3}{7}$
(d) $2\frac{2}{7}$

Q36. The ratio of the first and second class trains fares between two stations is 3 : 1 and that of the numbers of passengers travelling between the two stations by first and second classes is 1 : 50. If on a particular day, Rs 1,325 are collected from passengers travelling between the two stations, then the amount collected from the second classes passengers is
(a) Rs 1,250
(b) Rs 1,000
(c) Rs 850
(d) Rs 750

Q37. A man leaves Rs 8,600 to be divided among 5 sons, 4 daughters and 2 nephews. If each daughter receives four times as much as each nephew, and each son receives five times as much as each nephew, how much does each daughter receive?
(a) Rs 100
(b) Rs 600
(c) Rs 800
(d) Rs 1,000

Q38. The ratio, in which rice costing Rs 192 per kg is to be mixed with rice costing Rs 150 per kg so that the mixed rice when sold for Rs 194.40 per kg, gives a profit of 20%, is
(a) 2 : 5
(b) 3 : 5
(c) 5 : 3
(d) 5 : 2

Q39. While selling a shirt, a shopkeeper gives a discount of 7%. If he had given a discount of 9%, he would have got Rs 15 less as profit. The marked price of the shirt is
(a) Rs 750
(b) Rs 720
(c) Rs 712.50
(d) Rs 600

Q40. The compound interest on a certain sum for 2 years at 10% per annum is Rs 525. The simple interest on the same sum for double the time at half the rate percent per annum is:
(a) Rs 400
(b) Rs 600
(c) Rs 500
(d) Rs 800

Q41. The price of 2 sarees and 4 shirts is Rs 1600. With the same money one can buy 1 sarees and 6 shirts. If one wants to buy 12 shirts, how much shall one have to pay?
(a) Rs 2,400
(b) Rs 4,800
(c) Rs 1,200
(d) Rs 13,500

Q42. An article is sold at discount of 20% and an additional discount of 30% is allowed on cash payment. If Namrata purchased the article by paying Rs 2240 in cash, the marked price of the article was
(a) Rs 4000
(b) Rs 4368
(c) Rs 4400
(d) Rs 4480

Q43. On a certain sum, rate of interest per annum for the first two years is 4%. The rate of next four years is 6% and rate of interest for next three years is 8% the simple interest gain after end of 9 years is Rs. 1120, then the sum is?
(a) Rs. 1600
(b) Rs. 1800
(c) Rs. 2000
(d) Rs. 2240

Q44. A sum of Rs. 10000 is lent partly at 8% and remaining at 10% per annum. If the yearly interest on the average is 9.2%, the two parts are
(a) Rs. 4000, Rs. 6000
(b) Rs. 4500, Rs.5500
(c) Rs. 5000, Rs. 5000
(d) Rs. 5500, Rs. 4500

Q45. If a sum of money at simple interest becomes 17/14 times of itself in 13.5 years. In how much time it will becomes 29/21 times of itself at same rate of interest.
(a) 23.5 years
(b) 24 years
(c) 24.5 years
(d) 22.5 years

Q46. Ram invested an amount of 'x' rupees at compound interest in a bank for 2 years which gave 7% interest in first years and 8% interest in second year. The amount received after 2 years is Rs. 23112. What is the value of x?
(a) 21,500
(b) 23,000
(c) 20,000
(d) 15,000

Q47. Pankaj travels from Gurugram to Jaipur by his car at a constant speed. If his speed was increased by 10 km/hr, it would have been taken one hour lesser to cover the distance. It would have taken further 45 minutes lesser if the speed was further increased by 10 km/hr. the distance between Gurugram and Jaipur is—
(a) 540 km
(b) 420 km
(c) 600 km
(d) 620 km

Q48. A person can travel 900 m opposite to current by boat in 12 minutes and come back at starting point in 9 minutes. Find the speed of person in still water (in km/hr)?
(a) $4\frac{1}{2}$
(b) $5\frac{1}{4}$
(c) 5
(d) 6

Q49. Train A takes $2\frac{2}{3}$ hour more than train B to cover distance of 416 km. If speed of train 'A' doubles then it would take $1\frac{1}{3}$ hour less than train 'B'. Find the speed of train 'A' in (km/hr) ?
(a) 52
(b) 54
(c) 56
(d) 65

Q50. The average age of 120 students is 14.69 years. 35% of the total students are girls and remaining are boys. If Ratio of average age of boys to girls is 6 : 5, then find the average age of girls (in years).
(a) 11
(b) 15.4
(c) 13
(d) 12.6

Q51. Mean proportion of 3.6 and 0.9 is 'x' and third proportion of 4 and 8 is 'y'. find y – x = ?
(a) 0.18
(b) 14.2
(c) 16.18
(d) 15.18

Q52. Ram told Pankaj "I am thrice as old as you were when I was your age" if present age of Ram is 60 years. Then find present age of Pankaj?
(a) 30 years
(b) 50 years
(c) 20 years
(d) 40 years

Q53. John spends 75% of his salary. If his salary is increased by 21% and his saving is increased by 16% then by how much percentage his expenditure will increase.
(a) 21.9%
(b) 22.6%
(c) 20.2%
(d) 19.8%

Q54. A article is sold at 16% profit. If it was sold 105 Rs. less, then there would be 12% loss. If this article is sold at 350 Rs. then find profit or loss%.
(a) $2\frac{1}{2}$%, profit
(b) $6\frac{2}{3}$%, loss
(c) $6\frac{2}{3}$%, profit
(d) $2\frac{1}{2}$%, loss

Q55. If a student multiplied a number by $\frac{9}{13}$ instead of $\frac{11}{39}$. Find the percentage error in the calculation.
(a) 88.88%
(b) 111.11%
(c) 113.26%
(d) 145.45%

Q56. Tanu buys some toffees at 7 for a rupee and sells them at 5 for a rupee. Find her profit percentage?
(a) 28.57%
(b) 40%
(c) 50%
(d) 33.33%

Q57. Dev sells his goods to a customer at a profit of R% over CP. Besides it he gives 900gm instead of 1kg. His overall profit is 19% find the value of R?
(a) 7.54%
(b) 7.86%
(c) 7.10%
(d) 8.05%

Q58. Average of 17 numbers is 180. The average of first 9 number is 160 and average of last 7 numbers is 181. Find the 8^{th} number ?
(a) 287
(b) 353
(c) 327
(d) 357

Q59. Ram started working on a project. If his work-time per day is increased by 8% and salary per hour increased by 50%, then by how much percent his daily income would be increased?
(a) 58%
(b) 62%
(c) 63%
(d) 53%

Q60. 25 Men can do a work in 60 days. if they started working together, and after x days, 10 men left the work. Remaining work is completed in 80 days. Find value of x.
(a) 8
(b) 9
(c) 15
(d) 12

Q61. Two pipes A and B can fill a tank in 7 hour and 13 hours. With the help of third pipe 'c', they fill the tank in 3 hours. In now many hour pipe 'c' alone fill the tank empty?
(a) $8\frac{25}{31}$ *hours*
(b) $8\frac{6}{31}$ *hours*
(c) $7\frac{6}{62}$ *hours*
(d) $7\frac{25}{31}$ *hours*

Q62. In what ratio mixture A and B should be mixed to get 90% milk in the mixture if there are 40% water in mixture A and 95% milk in mixture 'B'.
(a) 6 : 5
(b) 6 : 1
(c) 1 : 6
(d) 5 : 6

Q63. Raam sold an article for Rs4000 and earn some profit. If the same article is sold for Rs. 3200, he suffers some amount of loss. If the ratio of profit and loss is 5 : 3. Find the Loss% or Profit% if Raam sells the article for Rs3000?
(a) 50% loss
(b) $14\frac{2}{7}$ % profit
(c) $14\frac{2}{7}$ % loss
(d) 10% loss

Q64. Amit buy some number of article for 5000. He sell $\frac{2}{5}$ of them at a Profit of 37%. At what % should he sell the remaining articles to makes profit of 19% on whole transaction?
(a) 10 %
(b) 7 %
(c) 15 %
(d) $14\frac{2}{7}$ %

Q65. In a town one male is married to one woman and vice-versa. If 60% male and 40% female are married. How much % people are unmarried?
(a) 48%
(b) 15%
(c) 52%
(d) all are married.

Q66. A shopkeeper give a discount of 5% on Mark price of an article and sold it for Rs342. If he had not given the discount on mark price of the article he get profit of 12%. Find the cost price(in Rs) of the article?
(a) 321.4
(b) 330
(c) 320.5
(d) 319

Q67. Find the average of 1, 2, 2, 3, 3, 3, 4, 4, 4, 4, 5, 5, 5, 5, 5, 6, 6, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 7?
(a) 7
(b) 5
(c) 0
(d) 6

Q68. The average age A, B, C and D is 35 years Average age of A and B is 40 and average age of C and D is 30 years. What is the average age of B and C if age of A and D is 28 years and 42 years respectively.
(a) 30
(b) 35
(c) 40
(d) 45

Q69. $\frac{52}{55}$ Converted to percentage is?
(a) $92\frac{8}{11}$
(b) $93\frac{7}{11}$
(c) $94\frac{6}{11}$
(d) $98\frac{2}{11}$

Q70. The average of all prime number between 30 and 60.
(a) 44.42
(b) 46
(c) 46.5
(d) 48

Q71. A can finish a work in $12\frac{1}{2}$ days and B can finish the same work in 15 days. In how many days they can finish the work if they start working together.
(a) $7\frac{1}{2}$ days
(b) 9 days
(c) $6\frac{9}{11}$ days
(d) $8\frac{7}{11}$ days.

Q72. If A, B and C, share profit in the ratio of 4 : 5 : 9. If the profit for the year before charging 20% tax is 141642 Rs. What is B's share of profit (in Rs) after tax?
(a) 30476.2
(b) 31478.3
(c) 31476.0
(d) 31478.0

Q73. One tap filling a tank in 5 hours and a leak can empty the tank in 7 hours. If the tap and the leak which was half closed, were left open. How long will it take for the tank to fill?
(a) $6\frac{7}{9}$ hr
(b) $7\frac{7}{9}$ hr
(c) $8\frac{8}{9}$ hr
(d) $8\frac{3}{4}$ hr

Q74. A can do a work in $17\frac{2}{3}$ days and B can do same work is $6\frac{5}{8}$ days. After 4 days of working together. How much work will be left?
(a) $\frac{9}{53}$
(b) $\frac{7}{58}$
(c) $\frac{9}{57}$
(d) $\frac{4}{23}$

Q75. The compound interest on certain sum for 3 years at the rate $12\frac{1}{2}\%$ per annum compounded annually is 4340, then find how much compound interest is more than simple interest?
(a) Rs720
(b) Rs512
(c) Rs500
(d) Rs430

Q76. If the compound interest on a certain sum for 3 years at the rate of 16.66% per annum compounded annually is Rs 406.4 .Find the principle(in Rs).
(a) 712.3
(b) 691.2
(c) 669.6
(d) 734.4

Q77. In what time will a sum is three times of itself at the rate of 12% per annum on simple interest.
(a) $12\frac{1}{2}$ year
(b) $16\frac{2}{3}$ year
(c) $12\frac{2}{3}$ year
(d) 8 year

Q78. A runs twice as fast as C. B is 1.5 times faster than A. What will be the distance covered by B if the same distance is covered by A in $1\frac{3}{4}$hrs?
(a) 95 minutes
(b) 70 minutes
(c) 100 minutes
(d) 85 minutes

Q79. A boy goes to play ground at 10.5 km/h and return at a speed of 22.5 km/h. If he takes 144 minutes to travel whole journey. Find the distance from his house to play ground.
(a) 10.25 km
(b) 15.75 km
(c) 22.5 km
(d) 18.75 km

Q80. A, B and C alone can complete a work in 20 days, 30 days and 60 days respectively. A works alone, however on every third day,he takes the help of B and C. In how many days will the work be completed?
(a) 10
(b) 12
(c) 15
(d) 18

Q81. A road of 5 km length will be constructed in 100 days. So 280 workers were employed. But after 80 days it was found that only $3\frac{1}{2}$ km road was completed. Now how many more people were needed to finish the work in the specified time?
(a) 480
(b) 80
(c) 200
(d) 100

Q82. A contractor undertakes to make a road in 40 days and employs 25 men. After 24 days, he finds that only one-third of the road is made. How many extra men should he employ so that he is able to complete the work 4 days earlier?
(a) 100
(b) 60
(c) 75
(d) None of these

Q83. Two pipes can fill a tank with water in 15 and 12 hours respectively, and a third pipe can empty it in 4 hours. If the pipes be opened in order, at 8, 9 and 11 a.m. respectively, the tank will be emptied at
(a) 11 : 40 a.m.
(b) 12 : 40 p.m.
(c) 1 : 40 p.m.
(d) 2 : 40 p.m.

Q84. A and B undertook to do a piece of work for Rs. 4500. A alone could do it in 8 days and B alone in 12 days. With the assistance of C they finished the work in 4 days. Then C's share of the money is
(a)Rs. 2250
(b)Rs. 1500
(c)Rs. 750
(d)Rs. 375

Q85. A fruit – seller buys x guavas for Rs. Y and sells y guavas for Rs. x. If x> y, then he made
(a) $(x^2 - y^2)/xy$ % loss
(b) $(x^2 - y^2)/xy$ % gain
(c) $(x^2 - y^2)/y^2$ % loss
(d) $(x^2 - y^2)/y^2$ % gain

Q86. A Butter Milk mixture contains milk and water in the ratio 5 : 1. On adding 5 litres of water, the ratio of milk to water becomes 5 : 2. The quantity of milk in the mixture is:
(a) 22.75 litres
(b) 16 litres
(c) 32.5 litres
(d) 25 litres

Q87. A clothes Sewing machine is sold at a profit of 10%. Had it been sold for ` 80 less, there would have been a loss of 10%. The C.P. of the clothes Sewing machine is:
(a) 350
(b) 450
(c) 400
(d) 520

Q88. If on selling 12 notebooks any seller makes a profit equal to the selling price of 4 notebooks. What is his percent profit?
(a) 25%
(b) 50%
(c) $16\frac{1}{2}\%$
(d) None of these

Q89. The average age of a Career Power batch of 20 students is 20 years. If the teacher's age is included the average increased by 1. The age of the teacher is:
(a) 41 years
(b) 39 years
(c) 45 years
(d) 51 years

Q90. A person travels three equal distances at a speed of x km/hr, y km/hr and z km/hr respectively. Then one-third of the average speed during the whole journey is:
(a) $\frac{xyz}{xy+yz+zx}$
(b) $\frac{xy+yz+zx}{xyz}$
(c) $\frac{xy+yz+zx}{3xyz}$
(d) $\frac{3xyz}{xy+yz+zx}$

Q91. The average age of a husband-wife and their son was 42 years. The son got married and exactly after 1 year a child was born to them. When the child became 5 years old, the average age of the family became 36 years. What was the age of bride at the time of marriage?
(a) 26 years
(b) 25 years
(c) 24 years
(d) 23 years

Q92. If the speed of a driver be 5 km/h more than the original speed he would have covered a fixed distance 20 minutes earlier. If his speed was 3 km/h less than the original speed he would have taken 15 minutes more to cover that fixed distance. Calculate the original speed,
(a)35kmph
(b) 40kmph
(c)30 kmph
(d) 45kmph

Q93. A monkey climbing on a pole covers 4 m up in first minute but slides 1 meter down in next minute. Again the money climbs 4 m in third minutes and slides 1 meter down in fourth minute. If this sequence is continues then in what time will the monkey reach to the top of pole when length of poles are 44 m ?
(a) 28 min 30 sec.
(b) 39 min.
(c) 24 min 45 sec.
(d) 30 sec.

Q94. The downstream speed of a boat in is 50 km/h and speed upstream is 30 km/h. What is the speed of the stream?
(a) 5 km/hour
(b) 6 km/hour
(c) 10 km/hour
(d) 12 km/hour

Q95. There are 50 students in a class. One boy among them, whose weight is 51 kg leaves the class and a new boy admits in the class. Due to this the average weight of the class increases by 1/2 kg. The weight of newly admitted student is
(a) 73 kg
(b) 76 kg
(c) 74 kg
(d) 75 kg

Q96. A train covers a distance of 576 km at a certain speed. If the speed is decreased by 24 km/hr, it wil take 2 hours more to cover the same distance. Find $33\frac{1}{3}\%$ of original speed.
(a) 32 km/hr
(b) 24 km/hr
(c) 38 km/hr
(d) 28 km/hr

Q97. Four years ago, the ratio of ages of A and B was 3 : 5. Ten years from now, the ratio of the ages of A and B will be 5 : 6. Find the sum of present ages?
(a) 32 years
(b) 24 years
(c) 26 years
(d) 22 years

Q98. For an article, the profit is 220% of the cost price. If the cost price increases by 25% but selling price remains same. Then original profit percentage (approx.)?
(a) 22%
(b) 26%
(c) 29%
(d) 31%

Q99. The ratio of efficiencies of A, B, C is 4 : 6 : 7. Working together, they can complete working in 39 days A and C together can complete $88\frac{2}{3}\%$ of work in how many days? (approx.)
(a) 53.4 days
(b) 55.7 days
(c) 49 days
(d) 61.8 days

Q100. Find the compound interest on Rs 15625 if sum is compounded 8 monthly at 12% Rate of interest per annum for 2 years.
(a) 3600
(b) 3650
(c) 3949
(d) 4058

Q101. The successive discount of $16\frac{2}{3}\%$, $66\frac{2}{3}\%$ and 10% is equilent to a single discount of-
(a) 93.33%
(b) 87.66%
(c) 75%
(d) 72.33%

Q102. Pipes A and B can fill a tank in 9 hours and 12 hours and pipe C can empty the full tank in 18 hours All three pipes are opened together, but pipe A is closed after2 hours. In how many hours will the remaining part of the tank be filled?
(a) $5\frac{1}{5}$ hours
(b) 26 hours
(c) $6\frac{1}{4}$ hours
(d) 24 hours

Q103. What is the mean proportional of 135 and 540?
(a) 360
(b) 180
(c) 270
(d) 145

Q104. A number which, when increased by 123% becomes 3345. The number is—
(a) 1245
(b) 1575
(c) 1500
(d) 1775

Q105. The average of all prime numbers between 30 to 60 is—
(a) 45.53
(b) 41.42
(c) 44.43
(d) 44.90

Q106. A seller marks the products 32% above the cost price and allow a discount of 13%. If the cost price is Rs. 3267800, then the selling price is—
(a) 385431.23
(b) 3752741.52
(c) 3852741.74
(d) 335431.23

Q107. The average of twelve numbers is 47. The average of the first six numbers is 49 and that of the last three numbers is 45.5. The 7^{th} , 8^{th} and 9^{th} numbers are equal. Find the ratio of average of 7^{th} and 8^{th} number to that of 8^{th} and 9^{th} numbers.
(a) 4 : 7
(b) 7 : 4
(c) ⊥ : 1
(d) 2 : 3

Q108. Simple interest on a certain sum at certain rate of interest is 529% of the sum. If the number represents rate percent and time in years be equal then the rate of interest is—
(a) 24.5%
(b) 23%
(c) 23.12%
(d) 22.23%

Q109. A sum of Rs 56960 is divided among A, B and C such that A receives 10% more than B and B receives 12% less than C. What is C's share in the amount?
(a) 17600
(b) 9653.2
(c) 19360
(d) 20000

Q110. If A had worked alone he would have taken 63 hours to do the task. What is B's share, if A and B together on a task finishing it in 36 hours and they get paid Rs. 5,950 for it?
(a) 3600
(b) 3400
(c) 2750
(d) 2550

Q111. If it takes 42 days for a pond to get filled with rain water. If the level of water doubles each day. Then how long would it take to fill 1/16 of pond.
(a) 38 days
(b) 39 days
(c) 32 days
(d) 8 days

Q112. In what ratio should coffee costing Rs. 2800/kg be mixed with coffee costing Rs. 1750/kg so that the cost of the mixture is Rs. 2150/kg.
(a) 8 : 13
(b) 13 : 8
(c) 7 : 5
(d) 5 : 7

Q113. Ram and Pankaj started a partnership business investing in the ratio of 7 : 42. Atul joined them after 5 months with an amount equal to $\frac{2}{21}th$ of Pankaj. What was their profit (in Rs.) at the end of the year if Atul got Rs. 5060 as his share?
(a) 1, 10, 420
(b) 1, 11, 320
(c) 98,720
(d) 1,05,472

Q114. 12 persons working 8 hours a day can complete a work in 10 days. In how many days 18 persons working 7 hours day will complete 70% of work?
(a) 9 days
(b) $5\frac{1}{3}$ days
(c) $6\frac{1}{5}$ days
(d) $4\frac{1}{2}$ days

Q115. What is the ratio of mean proportion between 4.9 and 16.9 and third proportion between 3 and 7?
(a) 61 : 59
(b) 11 : 13
(c) 43 : 57
(d) 39 ; 70

Q116. In an examination, 33% passed in science and 57% failed in mathematics. If 41% failed in both subjects, what percentage passed in both subjects?
(a) 21%
(b) 23%
(c) 17%
(d) 27%

Q117. If a train runs with the speed of 78 km/hr, it reaches its destination late by 25 minutes. However, if its speed is 91 km/hr, it is late by 10 minutes only. The right time for the train to cover it journey is –
(a) 60 minutes
(b) 80 minutes
(c) 75 minutes
(d) 92 minutes

Q118. The efficiencies of A, B and C are in the ratio 7 : 6 : 9. Working together, they can complete a piece of work in 135 days. In how many days will, C alone be able to complete 65% of that work?
(a) $202\frac{3}{5}$ days
(b) $214\frac{1}{2}$ days
(c) $197\frac{1}{2}$ days
(d) 211 days

Q119. If the income of A is 27% less than income of B, then what percentage of B's income is more then that of A?
(a) 36.98%
(b) 42.85%
(c) 61.23%
(d) 49.27%

Q120. The price of sugar is increased by 12%. By what percentage, there should be decrease in consumption so then there is no change in expenditure?
(a) 10.7%
(b) 11.4%
(c) 13.2%
(d) 12.6%

Q121. Pipe A and B can fill a tank in 12 hrs and 36 hrs respectively whereas pipe C can empty the fill tank in 72 hrs all three pipes are opened together, but pipe A is closed after 6 hours. After how many hours, the remaining part of the tank will be filled?
(a) 28
(b) 30
(c) 26
(d) 22

Q122. A shopkeeper sold two articles for Rs. 6979 each. on one he gained 11% and on the other he lost 11%. What is the overall percentage gain or loss?
(a) 1.25% gain
(b) 1.21% gain
(c) 1.21% loss
(d) 1.25% loss

Q123. Two pipe A and B can fill a tank in 16 hours and 20 hours. Respectively. If they are opened alternatively for 1 hour each, starting with pipe B first, in how many hours will the empty tank be filled?
(a) $15\frac{1}{3}$ hours
(b) $16\frac{2}{3}$ hours
(c) $17\frac{4}{5}$ hours
(d) $19\frac{6}{7}$ hours

Q124. A shopkeeper marks the price of an article such that after giving a discount of 27%, he gains 19%. If the marked price of the article is Rs 423, what is the cost price of the article
(a) Rs 259.4
(b) Rs 267.4
(c) Rs 271.8
(d) Rs 212.3

Q125. The successive discounts of 25%, 20%, 15% is equivalent to a single discount of :
(a) 51%
(b) 49%
(c) 43%
(d)53%

Q126. In an alloy, Zinc and Copper are in the ratio 1 : 2. In the second alloy, the same elements are in the ratio 2 : 3. If there two alloys combined to form a new alloy in which two elements are in the ratio 5 : 8, the ratio of these two alloys in the new alloys is –
(a) 3 : 10
(b) 7 : 3
(c) 3 : 7
(d) 10 : 3

Q127. A jar contained a mixture for two liquids A and B in the ratio 4 : 1. When 10 L of the mixture was taken out and 10 L of liquid B was poured into the jar, this ratio becomes 2 : 3. The quantity of liquid A contained in the gas initially was –
(a) 4 L
(b) 12 L
(c) 8 L
(d) 16 L

Q128. A and B enter into a partnership by making investment in the ratio 1 :2, 5% of the total profit goes to charity. If B's share is Rs 760, then total profit is -
(a) Rs 2400
(b) Rs 1800
(c) Rs 1200
(d) Rs. 1560

Q129. The simple interest on a sum of money is $\frac{1}{9}$ of the principal and the number of years is equal to the rate percent per annum. Find Rate percent per annum –
(a) $\frac{100}{9}$%
(b) $\frac{10}{3}$%
(c) $\frac{5}{3}$%
(d) $\frac{13}{3}$%

Q130. A and B together can do a piece of work in 30 days, B and C together can do it in 20 days. A starts the work and works on it for 5 days, then B takes it up and works for 15 days. Finally C finishes the work in 18 days. In how many days can C do the work alone ?
(a) 40 days
(b) 24 days
(c) 120 days
(d) 60 days

Q131. A tank can be filled by pipe A in 2 hours and pipe B in 6 hours. At 10 A.M. pipe A was opened. At what time will the tank be filled if pipe B is opened at 11 A.M.?
(a) 12.45 A.M
(b) 5 P.M
(c) 11.45 A.M
(d) 12 P.M.

Q132. Two men undertake a job for Rs. 960. They can complete it in 16 days and 24 days respectively. They work along with a third man and take 8 days to complete it. Then the share of the third man should be
(a) Rs. 555
(b) Rs. 165
(c) Rs. 160
(d) Rs. 150

Q133. A man's pension on retirement from service is equal to half the average monthly salary during last 3 years of his service. His salary from 1-1-1983 is Rs. 380 per month with increment of Rs. 40 due on 1-10-83, 1-10-84 and 1-10-85, If he retires on 1-1-86, what pension does he draw?
(a) Rs. 205
(b) Rs. 215
(c) Rs. 225
(d) Rs. 230

Q134. A started a business with a capital of Rs. 1,00,000. One year later, B joined him with a capital of Rs. 2,00,000. At the end of 3 years from the start of the business, the profit earned was 84,000. The share of B in the profit exceeded the share of A by
(a) Rs. 10,000
(b) Rs. 12,000
(c) Rs. 14,000
(d) Rs. 15,000

Q135. A man ordered 4 pairs of black socks and some pairs of brown socks. The price of a black socks is double that of a brown pair. While preparing the bill the clerk interchanged the number of black and brown pairs by mistake which increased the bill by 50%. The ratio of the number of black and brown pairs of socks in the original order was :
(a) 2 : 1
(b) 1 : 4
(c) 1 : 2
(d) 4 : 1

Q136. Two vessels A and B contain mixtures of milk and water in the ratios 4 : 1 and 9 : 11 respectively. They are mixed in the ratio of 3 : 2. Find the ratio of milk and water in the resulting mixture.
(a) 12 : 25
(b) 15 : 37
(c) 17 : 19
(d) 33 : 17

Q137. A motorist and a cyclist start from A to B at the same time. AB is 18 km. The speed of motorist is 15 km per hr. more than the cyclist. After covering half the distance, the motorist rests for 30 minutes and there after his speed is reduced by 20%. If the motorist reaches the destination B, 15 minutes earlier than that of the cyclist, then find the speed of the cyclist.
(a) 16 kmph
(b) 12 kmph
(c) 14 kmph
(d) 15 kmph

Q138. A man covered a distance of 3990 km partly by air, partly by sea and remaining by land. The time spent in air, on sea and on land is in the ratio 1 : 16 : 2 and the ratio of average speeds is 20 : 1 : 3 respectively. If total average speed is 42 km per hr, find the distance covered by sea.
(a) 1720 km
(b) 1620 km
(c) 1520 km
(d) 1820 km

Q139. A person can row $7\frac{1}{2}$ km an hour in still water. He finds that it takes twice the time to row upstream than the time to row downstream. The speed of the stream is
(a) 2 km/hour
(b) 2.5 km/hour
(c) 3 km/hour
(d) 4 km/hour

Q140. In an examination, the average of marks was found to be 50. For deducting marks for computational errors, the marks of 100 candidates had to be changed from 90 to 60 each and so the average of marks came down to 45. The total number of candidates, who appeared at the examination, was
(a) 600
(b) 300
(c) 200
(d) 150

Q141. At the beginning of a partnership business, the capital of B was 3/2 times that of A. After 8 months B withdrew 1/2 of his capital and after 10 months A withdrew 1/4 th of his capital. At the end of the year, if the profit incurred is Rs. 53,000, find the amount received by A.
(a) Rs. 30,800
(b) Rs. 32,000
(c) Rs. 30,000
(d) Rs. 23,000

Q142. A dealer sold two coolers at Rs. 2,970 each. On selling one cooler, he gained 10%, on selling the other he lost 10%. Find the dealer's gain or loss per cent.
(a) 1% loss
(b) **1% gain**
(c) 2% loss
(d) **2% gain**

Q143. A man buys some quantity of wheat for Rs. 2400. He sells one third of it at profit of 5%. At what per cent gain should he sell the remaining two-third so as to make an overall profit of 10% on the whole transaction?
(a) 11.5%
(b) 12.5%
(c) 13%
(d) 13.5%

Q144. A person invests Rs. 12,000 as fixed deposit at a bank at the rate of 10% per annum simple interest. But due to some pressing needs he has to withdraw the entire money after 3 years, for which the bank allowed him a lower rate of interest. If he gets Rs. 3,320 less than what he would have got at the end of 5 years, the rate of interest allowed by the bank is
(a) $7\frac{5}{9}\%$
(b) $7\frac{4}{9}\%$
(c) $7\frac{8}{9}\%$
(d) $8\frac{7}{9}\%$

Q145. If the difference between CI and SI on a certain sum at 4% for 3 years is Rs. 608. Find the sum.
(a) Rs. 125000
(b) Rs. 120000
(c) Rs. 130000
(d) Rs. 122250

Q146. 6 litres of milk and water mixture has 75% milk in it. How much milk should be added to the mixture to make it 90% pure?
(a) 10 litre
(b) 8 litre
(c) 9 litre
(d) 12 litre

Q147. In two types of stainless steel, the ratio of chromium and steel are 2 : 11 and 5 : 21 respectively. In what proportion should the two types be mixed so that the ratio of chromium to steel in the mixed type becomes 7: 32?
(a) 2 : 3
(b) 3 : 4
(c) 1 : 2
(d) 1 : 3

Q148. A person X, walks from A to B at a speed of u km/h and an another person Y walks from B to A at the same time at a fixed speed. They take t_1 *and* t_2 hours respectively to reach their destinations after meeting some where in the way. What will be the disance from A to B?
(a) $u\sqrt{t_1}(\sqrt{t_1}+\sqrt{t_2})$
(b) $u\sqrt{t_2}(\sqrt{t_1}+\sqrt{t_2})$
(c) $u\sqrt{t_1}(\sqrt{t_1}-\sqrt{t_2})$
(d) $u\sqrt{t_2}(\sqrt{t_1}-\sqrt{t_2})$

Q149. An item is sold at 38% profit on the cost price after passing through two shopkeepers. If the first shopkeeper sold it at 20% profit then what is the percentage profit of the second shopkeeper?
(a) 15
(b) 12
(c) 10
(d) 5

Q150. A student is given 4 marks for each correct answer in an exam and for each wrong answer 2 marks is deducted. If a student answered all 75 questions and fetched 150 marks then the number of question he answer correctly was
(a) 45
(b) 50
(c) 55
(d) 48

Q151. A candidate, who gets 30% marks fails by 5 marks while an another candidate who gets 40% marks and thus gets 10 marks more than the pass marks. Minimum marks required to pass the examination is
(a) 50
(b) 70
(c) 100
(d) 150

Q152. A sum of money placed at compound interest triples itself in 9 year. In how many years will if amount to 243 times itself?
(a) 45 years
(b) 36 years
(c) 27 years
(d) 54 years

Q153. The average of 5 consecutive integers starting with 'M' is 'N'. What is the average of 6 consecutive integers stating with (m+2)?
(a) n+ 3
(b) n+2
(c) $\frac{2n+9}{2}$
(d) $\frac{2n+5}{2}$

Q154. Working together printer A and B would finish a task in 48 minutes A alone would finish the task in 120 minutes. How many pages does the task contains if printer B prints 10 page a minute more than printer A?
(a) 2800
(b) 2000
(c) 2400
(D) 1600

Q155. Two taps A and B can fill a tank in 48 minutes and 36 minutes. It both taps are opened together after how much time tap A is closed so that the whole tank fill in 25 min 30sec.
(a) 12 min
(b) 16 min
(c) 18 min
(d)14 min

Q156. In an examination Ram scored 25 mark less than Rohit. Rohit scored 45 more marks than Sam. Rohan scored 75 marks which is 10 more marks than Sam. Ravi's score is 50 less than maximum marks of the test. What approximate percentage of marks did Ravi score in the examination if gets 34 marks more than Ram?
(a) 60 %
(b) 80%
(c) 70 %
(d) 85%

Q157. 40% of the employees of a certain company are men and 75% of the men earn more than Rs 25000 per year. If 45% of the company's employees can more than Rs 25000 per year, what fraction of the women employed by the company earn less than or equal to Rs 25000 per year?
(a) $\frac{1}{2}$
(b) $\frac{3}{4}$
(c) $\frac{2}{3}$
(d) $\frac{4}{5}$

Q158. Working together A and B will complete a job in $\frac{15}{2}$ days. If A work alone and complete half the job and then B taken over and complete the remaining half of the job, they will complete the task in 20 days. How long will A alone take to do the job if B in more efficient than A?
(a) 25
(b) 30
(c) 20
(d) 35

Q159. Two vehicle are sold for Rs 1897 each. One in Sold at a profit of 42.84% and another at a loss of 6.25%. What in the net profit/loss?
(a) 14.65%
(b) 15.30%
(c) 13.20%
(d) 18.17%

Q160. The ratio of speed of a motorboat to that of the current of water is 55:7. The boat goes along with the current in 6 hours 24 minutes. It will come back in.
(a) 9.3 hours
(b) 7.3 hours
(c) 11.3 hours
(d) 8.2 hours

Q161. A person marks his goods x% above the cost price and allows a discount of 30% on the marked price. If his profit is 5%, then the value of x will be:
(a) 50
(b) 60
(c) 45
(d) 35

Q162. If A is 28% more than B and C is 25% less than the sum of A and B, then by what percent will C be more than A?
(a) 32.2%
(b) 28%
(c) 43%
(d) 33.6%

Q163. A and B can do a piece of work in 6 days and 8 days, respectively. With the help of C, they can complete the work in 3 days and earn Rs 1848. What was the share of C?
(a) Rs.231
(b) Rs.924
(c) Rs.462
(d) Rs.693

Q164. The distance between the two stations A and B is 800 km. Train X starts from A and moves towards B at 40km/hr and another train Y starts from B and moves towards A at 60km/hr. How far from A will they cross each other?
(a) 380 km
(b) 320 km
(c) 300 km
(d) 360 km

Q165. If a : b = 3 : 2 then (5a + 2b) : (3a + 4b) is equal to:
(a) 16 : 15
(b) 8 : 7
(c) 19 : 17
(d) 17 : 14

Q166. The average mark of 50 students in a class was found to be 64. If the marks of two students were incorrectly entered as 38 and 42 instead of 83 and 24, respectively, then what is the correct average?
(a) 61.24
(b) 64.54
(c) 62.32
(d) 61.86

Q167. An article is sold for Rs 642.60 after two successive discounts of 15% and 10%. What is the market price of the article?
(a) Rs.820
(b) Rs.800
(c) Rs.880
(d) Rs.840

Q168. A and B can do a work in 15 days and 20 days respectively. A and B work together for 4 days and the remaining work is done by C in 8 days. If they are paid Rs. 6000 for this work then find the daily income of each.
(a) 600, 300, 400
(b) 400, 300, 300
(c) 400, 300, 400
(d) 300, 400, 400

Q169. The total income of A, B and C is Rs. 5160. They spend 60%, 80% and 75% of their income respectively and the ratio of their saving is 8 : 6 : 9. Find the income of A.
(a) 1200
(b) 1500
(c) 980
(d) 1140

Q170. A invests 1/6 part of total capital for 1/3 time. B invests 1/3 part of the total capital for 1/4 time and C invests the rest capital for the full time. If the total profit is Rs. 69000 then find the share of B.
(a) 12000
(b) 10000
(c) 9000
(d) 3000

Q171. Two taps A and B can fill a tank in 15 hours and 12 hours respectively. There is an outlet tap C. If all the taps are opened together then the tank will be filled in 60 hours. In how many hours tap C can alone empty the tank?
(a) 60/7
(b) 20/3
(c) 15/2
(d) 30/7

Q172. If a student scores 30% marks, he failed by 240 marks. But if he scores 55% marks, he is passed with 350 marks. Find the passing marks.
(a) 946
(b) 948
(c) 840
(d) 942

Q173. The sum and difference of HCF and LCM of the two numbers is 666 and 518. Find both the numbers if the sum of these two numbers is 444.
(a) 296, 148
(b) 74, 296
(c) 122, 244
(d) 122, 183

Q174. A shopkeeper bought two cycles at Rs. 1700. If he sold the first cycle at 30% profit and the second at 20% profit, he earns a certain profit. If he sold the first cycle at 20% profit and the second at 30% profit then he gets Rs. 30 Less. The price of both cycles is:
(a) 1200, 500
(b) 900, 800
(c) 1000, 700
(d) 1050, 650

Q175. The ratio of water and wine in two different containers is 2 : 3 and 4 : 5. In what ratio we are required to mix the mixture of two containers in order to get the new mixture in which the ratio of wine and water be 7 : 5 ?
(a) 3 : 5
(b) 7 : 3
(c) 5 : 3
(d) 3 : 7

Q176. A man covers a distance from his house to office at 20km/hr and gets 10 min late. But if he covers the distance at 40km/hr then the reach his office 5 min earlier. Find the distance from his house to the office.
(a) 15 km
(b) 18 km
(c) 20 km
(d) 10 km

Q177. A batsman scores 80 runs in his 17^{th} inning due to which his average increased by 3 runs. Find his current average.
(a) 30
(b) 32
(c) 38
(d) 36

Q178. The compound interest on a certain sum for 3 years at 15% per annum is Rs. 4167. What is the simple interest on the same sum in 4⅘ years at the same rate?
(a) Rs. 6144
(b) Rs. 6000
(c) Rs. 4800
(d) Rs. 5760

Q179. The cost price of an article is Rs 425. A shopkeeper gives a discount of 20% and still gains 16%. What is the marked price of the article?
(a) Rs 605.75
(b) Rs 620.50
(c) Rs 624.50
(d) Rs 616.25

Q180. A, B and C alone can do a piece of work in 9, 12 and 18 days respectively. They all started the work together, but A left after 3 days. In how many days, was the remaining work completed?
(a) 2
(b) 5/2
(c) 11/4
(d) 9/5

Q181. The average of a series of 21 numbers is equal to 43. The average of the first eleven of them is 33. The average of the last eleven numbers is 53. The eleventh number of the series is:
(a) 43
(b) 47
(c) 33
(d) 46

Q182. A person covers 40% of a distance with a speed of 60 km/hr and the remaining with a speed of 40km/hr. What is his average speed for the whole journey in km/hr?
(a) 500/11
(b) 600/13
(c) 500/13
(d) 600/11

Q183. The ratio of the square of a number to the reciprocal of its cube is 243/16807. What is the number?
(a) 2/7
(b) 7/3
(c) 3/7
(d) 5/7

Q184. Two numbers are in the ratio of 3 : 4. On increasing each of them by 30 the ratio becomes 9 : 10. The numbers are:
(a) 30, 40
(b) 15, 20
(c) 12, 16
(d) 18, 24

Q185. A sum of Rs10000 amounts to Rs 11664 in 2 years at a certain rate percent per annum, when the interest is compounded yearly. What will be the simple interest on the same for 5⅖ years at the same rate?
(a) Rs 4320
(b) Rs 4160
(c) Rs 3840
(d) Rs 4040

Q186. The ratio of copper to zinc in alloys A and B are 3 : 4 and 5 : 9 respectively. A and B are taken in the ratio 2 : 3 and melted to form a new alloy C. What is the ratio of copper to zinc in C?
(a) 8 : 13
(b) 3 : 5
(c) 9 : 10
(d) 27 : 43

Q187. What is the H.C.F of 4/5, 6/8, 8/25?
(a) 1/200
(b) 1/100
(c) 1/5
(d) 1/50

Q188. Pipe A, B and C together can fill a cistern in 12 hours. All three pipes are opened together for 4 hours and then C is closed. A and B together take 10 hours to fill the remaining part of the cistern. C alone will fill two – thirds of the cistern in:
(a) 50 hours
(b) 60 hours
(c) 40 hours
(d) 48 hours

Q189. If A's income is 40% of B's income and B's income is 24% more than C's income, then by what percentage is C's income more than A's income?
(a) 104.2
(b) 75.6
(c) 50.4
(d) 101.6

Q190. The marked price of an article is Rs. 530. After two successive discounts, it is sold for Rs.396.44. If the first discount is 15% and the second discount is x%, then what is the value of x?
(a) 10
(b) 10.5
(c) 12
(d) 12.5

Q191. In a test consisting of 140 questions, a candidate correctly answered 70% of the first 80 questions. What percentage of the remaining questions does the candidate need to correctly answer to score 60% in the test?
(a) 40%
(b) 45⅓%
(c) 46⅔%
(d) 35%

Q192. The average of n observations is 40. If one observation of value 80 is added, then the average of all the observations is 41. What is the value of n?
(a) 43
(b) 38
(c) 40
(d) 39

Q193. A train of length 212m is running at 45 km/hr. In what time (in seconds) will it cross a platform of length 188m?
(a) 36
(b) 42
(c) 32
(d) 40

Q194. If 66⅔% of 75% of one – eighth of a certain number is 179. Then 33⅓% of three – fourth of that number is:
(a) 537
(b) 716
(c) 787.6
(d) 859.2

Q195. Surbhi spends 75% of her income. If her income increases by 20% and savings decrease by 1%, then the percentage increase in her expenditure is:
(a) 27 %
(b) 2.2 %
(c) 22 %
(d) 2.7 %

Q196. A, B and C enter into a partnership with capitals in the ratio $\frac{2}{3} : \frac{3}{5} : \frac{5}{6}$ after 8 months A increases his share of capital by 25% . If at the end of the year the total profit earned is Rs 5820. Then the share of C in the profit is:
(a) Rs 2050
(b) Rs 2350
(c) Rs 2250
(d) Rs 2450

Q197. An article was said for Rs 98496 after providing three successive discounts of 10%, 5%, and 4%, respectively on the marked price. What was the marked price of the article?
(a) Rs. 120000
(b) Rs. 110700
(c) Rs. 120200
(d) Rs. 120500

Q198. If x is subtracted from each of the numbers 20, 37, 54 and 105, then the number so obtained in this order are in proportion. What is the mean proportional between (7x-5) and (x+1) ?
(a) 8
(b) 9
(c) 12
(d) 6

Q199. How many natural numbers less than 1000 are divisible by 5 or 7 but Not by 35 ?
(a) 285
(b) 312
(c) 313
(d) 243

Q200. Working 7 hours a day, 18 persons can complete a certain work in 32 days. In how many days would 14 persons complete the same work, working 8 hours a day?
(a) 35 days
(b) 30 days
(c) 42 days
(d) 36 days

Q201. The ratio of the efficiencies of A, B and C is 4 : 5 : 3 working together, they can complete that work in 25 days. A and C together will complete 35% of that work in:
(a) 12 days
(b) 10 days
(c) 18 days
(d) 15 days

Q202. The average marks of 40 students were found to be 68. If the marks of two students were incorrectly entered as 48 and 64 instead of 84 and 46 respectively then what is the correct average?
(a) 68.25
(b) 68.15
(c) 68.45
(d) 68.35

Q203. The difference between the compound interest and simple interest on 8% per annum for 2 years is Rs 19.20 What is the principal amount?
(a) 2500
(b) 3200
(c) 2800
(d) 3000

Q204. A sum of rupees was distributed between four partners A, B, C and D in the ratio $\frac{1}{9}:\frac{1}{6}:\frac{2}{27}$ and $\frac{1}{18}$. If the sum of shares of A and C is Rs.1200. Then find the total amount.
(a) Rs.2640
(b) Rs.2600
(c) Rs.2840
(d) Rs.2550

Q205. A Laptop was marked 25% above the Cost Price and a discount of 40% was given to the customer. If the customer gives Rs.30000 then find the MRP of Laptop.
(a) Rs.55000
(b) Rs.45000
(c) Rs.48000
(d) Rs.50000

Q206. Rohit invests Rs. 30000 in a bank for 2 years and gets 6000 as simple interest. Find the Principal amount which is invested by Rohit's friend Payal for 4 years at the same rate and gets Rs.5000 as simple interest
(a) Rs.12500
(b) Rs.11500
(c) Rs.10500
(d) Rs.13500

Q207. The sum of the speed of boat upstream and downstream is 80km/hr and the distance covered by the boat upstream and downstream is 150km. Find the difference between the time taken by boat to travel upstream and downstream if the speed of the stream is 10km/hr.
(a) 1hr
(b) 3hr
(c) 2hr
(d) 6hr

Q208. Rohit can do 4/9 part of the work in 20 days. Parul can do 2/9 part of the work in 8 days, and Rahul can do the rest work in 20 days. In how many days all three can complete the whole work together?
(a) 12 days
(b) 13 days
(c) 15 days
(d) 16 days

Q209. Saurabh takes 5 hours to travel from office to home at 18km/hr. By what % did he increase his speed to reduce the time by 20% to cover the same distance from the office to home?
(a) 35%
(b) 25%
(c) 20%
(d) 22%

Q210. Among three numbers A, B and C written in increasing order(A<B<C). The average of the first two is less than the third number by 8. The average of the last two numbers is greater than the first by 10. Then, find the difference between the largest and smallest number.
(a) 9
(b) 12
(c) 15
(d) 18

Q211. Ram calculates the percentage profit on buying price and Rahul calculates the % profit on the selling price. When both sell a T.V at the same rate then the difference between their profits was Rs. 560 and both of them claim that they made 20% profit. What is the cost price of T.V for each?
(a) Rs.14000 and Rs.13500
(b) Rs.14000 and Rs.13440
(c) Rs.14500 and Rs.12800
(d) Rs.14800 and Rs.12440

Q212. Ramesh's mother was 35 years of age when he was born while his father was 42 years old when his sister 3 years younger than him was born. What is the difference between the ages of Ramesh's parents?
(a) 4 years
(b) 3 years
(c) 6 years
(d) 8 years

Q213. 3000 return gifts were distributed equally among friends of Kavita on her birthday party in such a way that the number of gifts received by each friend is 30% of the total number of friends. So, how many gifts each friend received?
(a) 25
(b) 30
(c) 60
(d) 20

Q214. Which least number must be subtracted from 15,17, 35 and 41 to make them proportional?
(a) 5
(b) 6
(c) 7
(d) 8

Q215. I purchase 100kg of tea and sell it for a profit to the extent of what I would have paid for 40kg. What is my profit percentage?
(a) 40%
(b) 25%
(c) 30%
(d) 20%

Q216. If 60% of (x – y) = 45% (x + y) and y = k% of x, then 21% of k is equal to:
(a) 1
(b) 6
(c) 7
(d) 3

Q217. A can do 2/5 of the work in 6 days and B can do 2/3 of the same work in 12 days. A and B worked together for 6 days, C alone completed the remaining work in 8 days. A and C working together will complete the same work in:
(a) 10 days
(b) 8 days
(c) 12 days
(d) 9 days

Q218. The ratio of the ages of A and B, four years ago was 4 : 5. Eight years from now, the ratio of the ages of A and B will be 11 : 13. What is the sum of their present ages?
(a) 80 years
(b) 96 years
(c) 72 years
(d) 76 years

Q219. If x is subtracted from each of 23, 39, 32 and 56, the number so obtained, in this order, are in proportion. What is the mean proportional between (x + 4) and (3x + 1)?
(a) 15
(b) 10
(c) 12
(d) 14

Q220. The compound interest on a certain sum in 2 ½ years at 10% p.a. interest compound yearly is 1623. The sum is:
(a) 5000
(b) 6000
(c) 6500
(d) 7200

Q221. Renu bought an article for Rs. 1240 and sold it at a loss of 25% with this amount, she bought another article and sold it at a gain of 40%. Her overall percentage profit is:
(a) 12
(b) 6⅔
(c) 5
(d) 15

Q222. The average weight of a certain number of students in a class is 68.5kg. If 4 new students having weight 72.2kg, 70.8kg, 70.3kg and 66.7kg join the class, then the average weight of all the students increases by 300g. The number of students in the class, initially is:
(a) 21
(b) 16
(c) 14
(d) 26

Q223. A and B are traveling towards each other from the points P and Q respectively. After crossing each other, A and B take $6\frac{1}{8}$ hours and 8 hours, respectively, to reach their destinations Q and P. If the speed of B is 16.8 km/hr then the speed of A is:
(a) 20.8 km/hr
(b) 19.8 km/hr
(c) 19.2 km/hr
(d) 20.4 km/hr

Q224. In a school 60% of the number of students are boys and the rest are girls. If 20% of the number of boys failed and 65% of the number of girls passed the examination, then the percentage of the total number of students who passed is:
(a) 78
(b) 68
(c) 72
(d) 74

Q225. A is 40% more than B and B is 60% less than C. If C is 60% more than D. Then which of the following is true?
(a) D is 10.4% more than A
(b) A is 54% more than C
(c) B is 36% less than D
(d) C is 60% more than B

Q226. Seven years ago the ages of A and B were in the ratio 4 : 5 and 7 years Hence, their ages will be in the ratio 5 : 6. What will be the ratio of their ages 5 years from now?
(a) 34 : 41
(b) 33 : 40
(c) 31 : 33
(d) 33 : 34

Q227. Marked price of 8 shirts is Rs 9600 and a discount of 15% is given on these shirts. How many shirts can be purchased in the amount of Rs 5100?
(a) 3
(b) 6
(c) 4
(d) 5

Q228. Vivek can complete a definite work in 14 days. Vishal is 75% more efficient than Vivek. In how many days, can Vishal complete this work alone?
(a) 8 days
(b) 6 days
(c) 9 days
(d) 10 days

Q229. Two pipes A and B can fill a tank in 18 and 24 minutes respectively. If both the pipes are opened together, then at what time should pipe B be closed so that the tank is completely filled in 12 minutes?
(a) 6 minutes
(b) 9 minutes
(c) 5 minutes
(d) 8 minutes

Q230. The speed of train is $2\frac{1}{6}$ times the speed of a car. The car can cover a distance of 486 km in 9 hours. Find out the distance that the train can cover in 6 hours.
(a) 712 km
(b) 702 km
(c) 612 km
(d) 732 km

Q231. Twice the salary of A is five times the salary of B, and four times the salary of B is equal to twice the salary of C. If the salary of C is Rs 1600, then the salary of A is:
(a) Rs. 2000
(b) Rs. 3000
(c) Rs. 2500
(d) Rs. 2600

Q232. HCF and LCM of two numbers is 8 and 48 respectively. If the ratio of two numbers is 2 : 3, then the larger of the two numbers is:
(a) 16
(b) 48
(c) 18
(d) 24

Q233. The compound interest on a certain sum invested for 2 years at 10% per annum is Rs. 1522.50, the interest being compound yearly. The sum is:
(a) Rs 7250
(b) Rs 7200
(c) Rs 7500
(d) Rs 7400

Q234. There are 90 students in a class, out of which 70% are from village A and others are from village B. The average score of students from village B in a test is 20% more than that from village A. If the average score of all students is 53, then what is the average score of the students from village B?
(a) 54
(b) 60
(c) 64
(d) 50

Q235. What is the compound interest on a sum of Rs 4096 at 15% p.a. for 2 ½ years, if the interest is compounded 10-monthly?
(a) Rs 1726
(b) Rs 1736
(c) Rs 1636
(d) Rs 1763

Q236. A vendor bought 40 dozen of fruits for Rs 2400 out of these 30 fruits were rotten and thrown away. At what rate per dozen should he sell the remaining fruits to make a profit of 25%?
(a) Rs 84
(b) Rs 72
(c) Rs 90
(d) Rs 80

Q237. The ratio of the efficiencies of A, B and C is 3 : 5 : 1. Working together, they can complete a piece of work in 5 days. A and B work together for 3 days. The remaining work will be completed by C alone in how many days?
(a) 18 days
(b) 24 days
(c) 21 days
(d) 15 days

Q238. The income of A is 40% more than that of B. If A got a 25% rise in his income and B got a 40% rise in his income, then the percentage increase in the combined incomes of A and B is:
(a) 31.25
(b) 34.5
(c) 28.25
(d) 24.5

Q239. What is the ratio of the mean proportional between 4.8 and 10.8 and the third proportional to 0.4 and 2.4?
(a) 2 : 1
(b) 3 : 2
(c) 1 : 2
(d) 2 : 3

Q240. A train without stoppage travels with an average speed of 70 km/hr and with the stoppage, it travels with an average speed of 56 km/h. How many minutes, does the train stop on an average per hour?
(a) 12
(b) 14
(c) 16
(d) 15

Q241. If a : b = 5 : 8 and c : b = 4 : 3 then a : b : c is equal to:
(a) 15 : 24 : 32
(b) 15 : 24 : 28
(c) 5 : 6 : 8
(d) 5 : 8 : 6

Q242. An article is sold for Rs 535.50 after two successive discounts of 25% and 15%. What is the marked price of the article?
(a) Rs 820
(b) Rs 800
(c) Rs 840
(d) Rs 830

Q243. Two numbers are in the ratio of 7 : 5. On diminishing each of them by 40, the ratio becomes 27 : 17. The sum of the numbers is:
(a) 300
(b) 240
(c) 325
(d) 275

Q244. A dealer buys an article marked at Rs 20000 with two successive discounts of 20% and 5%. He spends Rs 1000 for its repair and sells it for Rs 20000. What is his profit/loss percent?
(a) 19% Profit/लाभ
(b) 23.64% Loss/हानि
(c) 23.46% Profit/लाभ
(d) 25.64% Loss/हानि

Q245. A and B can complete a piece of work in 15 days and 10 days respectively. They got a contract to complete the work for Rs 35000. The share of A in the contracted money will be:
(a) Rs 15000
(b) Rs 14000
(c) Rs 21000
(d) Rs 7000

Q246. The compound interest on a certain sum of money at 11% for 2 years is Rs 6963. Its simple interest at the same rate and for the same period is:
(a) Rs 6500
(b) Rs 6000
(c) Rs 6600
(d) Rs 6750

Q247. The sum of the salaries of A and B together is Rs 45000. A spends 85% of his salary and B, 70% of his salary. If now their saving are the same, what is B's salary ?
(a) 30000
(b) 18000
(c) 12600
(d) 15000

Q248. Two items are sold for Rs 18602 each. On one there has been a gain of 31% and on the second item a loss of 29%. What was the overall loss or gain in the transaction?
(a) 7.91% Loss/हानि
(b) 8.25% Loss/हानि
(c) 8.25% Profit/लाभ
(d) 7.91% Profit/लाभ

Q249. Ram sold an article for 180 after allowing a 20% discount on its marked price. Had he not allowed any discount, he would have gained 20%. What is the cost price of the article?
(a) Rs 190.40
(b) Rs 192.80
(c) Rs 188.60
(d) Rs 187.50

Q250. A man spends ⅔rd of his income. His income increases by 14% and the expenditure increases by 20% then the percentage increase in his savings will be:
(a) 1%
(b) 2%
(c) 4%
(d) 6%

REASONING ABILITY

Q251. In the following question, select the related word from the given alternatives.
state : country: : union territory : ?
(a) District
(b) City
(c) Country
(d) Village

Q252. In the following question, select the related letters from the given alternatives.
WATER:XYWAW::TEST:?
(a) UBVP
(b) UCWP
(c) UCVQ
(d) UCVP

Q253. In the following question, select the related number from the given alternatives.
15 : 3374 : : 16 : ?
(a) 1024
(b) 4096
(c) 4095
(d) 4063

Q254. In the following question, select the odd word pair from the given alternatives.
(a) vitamin A : Loss of vision
(b) Vitamin B : Beriberi
(c) Vitamin K: Haemorrage
(d) Vitamin D: paralysis

Q255. In the following question, select the odd letters from the given alternatives.
(a) AZBY
(b) HSGT
(c) MNOP
(d) MNNM

Q256. In the following question, select the odd number pair from the given alternatives.
(a) 19 – 360
(b) 23 – 529
(c) 21 – 440
(d) 29– 840

Q257. Arrange the given words in the sequence in which they occur in the dictionary.
1. Pragmatic 2. Protect
3. Pastel 4. Postal
5. Pebble
(a) 43521
(b) 35412
(c) 34512
(d) 43512

Q258. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
Y, W, T, P, ?
(a) M
(b) L
(c) K
(d) J

Q259. In the following question, select the missing number from the given series.
7, 13 , 25, 43, 67, ?
(a) 97
(b) 115
(c) 102
(d) 124

Q260. A is brother of C. D is wife of M who is only son of N. C is daughter of D. How N is related to A?
(a) Father
(b) Grandfather
(c) Uncle
(d) Can't be determined

Q261. Twelve years later, age of Tanu will be equal to the present age of Sakhsam. Sum of Sakhsam's age 5 years later and Tanu's age 7 years later is 84. If age of Raam is 60% of the present age of Tanu, then what will be Raam's age (in years) after 10 years?
(a) 32
(b) 28
(c) 24
(d) 31

Q262. In the following question, from the given alternative words, select the word which cannot be formed using the letters of the given word.
MOLECULES
(a) SOLE
(b) LEMONE
(c) SUE
(d) COME

Q263. In a certain code language, "LIGHT" is written as "MKJLY" and "DAY" is written as "ECB". How is "RAAM" written in that code language?
(a) SCDQ
(b) SCEQ
(c) SDEQ
(d) SDER

Q264. In the following question, correct the equation by interchanging two signs.
6 x 12 ÷ 3 + 5 = 26
(a) = and +
(b) x and =
(c) ÷ and x
(d) x and +

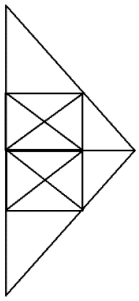
Q265. If 5 # 4 % 12 = 15 and 16 % 5 # 4 = 20, then
4 % 24 # 48 = ?
(a) 2
(b) 3
(c) 5
(d) 6

Q266. In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

4	5	6
3	7	9
5	9	8
60	315	?

(a) 464
(b) 432
(c) 386
(d) 344

Q267. How many triangle are there in the given figure?

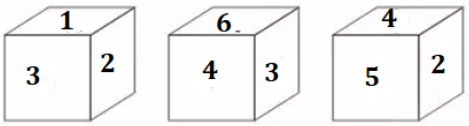


(a) 27
(b) 28
(c) 29
(d) 30

Q268. In each of the following question below are given some statements followed by some conclusions. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusion logically follows the given statements.

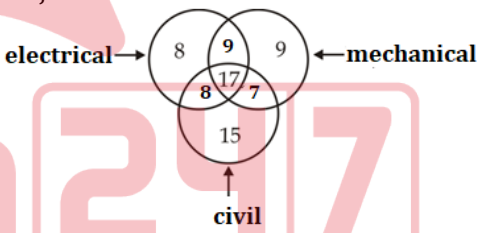
Statements:
I. Some boys are hardworking.
II. No intelligent are boys.
Conclusions:
I. Some hardworking are not intelligent.
II. All hardworking are intelligent.
III. Some intelligent are not hardworking.
(a) Only conclusion (I) follows.
(b) Only conclusion (I) and (III) follow.
(c) All conclusions follow.
(d) No conclusion follows.

Q269. Three positions of a cube are shown below. What will come opposite to face containing '3'?



(a) 2
(b) 5
(c) 4
(d) 6

Q270. In the given figure, how many people study only 2 subjects?



(a) 24
(b) 23
(c) 12
(d) 40

Q271. Which answer figure will complete the pattern in the question figure?

(a)

(b)

(c)

(d)

Q272. From the given answer figure, select the one in which the question figure is hidden/embedded.

(a)

(b)

(c)

(d)

Q273. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

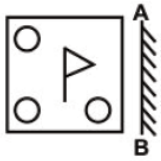
(a)

(b)

(c)

(d)

Q274. If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?



(a)

(b)

(c)

(d)

Q275.
(a) 108,081
(b) 444,444
(c) 202,022
(d) 451,541

Q276.
(a) ios
(b) android
(c) Chrome
(d) windows

Q277.
(a) jaipur
(b) Kota
(c) Pokhran
(d) chandigarh

Q278.
(a) 6859
(b) 2199
(c) 5832
(d) 343

Q279. In a certain code language 'RAMNIWAS' is written as 'QBLOHXZT' then how 'VISHNOI' coded in that code language.
(a) UJRINPH
(b) UJRIMPH
(c) UJQIMPH
(d) None of these

Q280. If 'coffee' is called 'tea', 'tea' is called 'drink', 'drink' is called 'day', 'day' is called 'beverage'. which of the following is antonym of night.
(a) Day
(b) drink
(c) beverage
(d) Tea

Q281. 'Pointing to a lady' A man said, "The son of her only brother is the brother of my wife. How is lady related to that man."
(a) Mother's Sister
(b) Grand mother
(c) Mother-in-law
(d) Sister of father-in-law

Q282. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?
B C D C D E F D E F G H _ _ _ _ _ _
(a) EFGHIJ
(b) FGHIJK
(c) DFGHIJK
(d) KLMNOP

Q283. Find the next term in the following series?
Y2C , W3F , U8I , S27L , Q112O , ?
(a) O565R
(b) O565S
(c) P1165R
(d) P1165S

Q284. Find the next term in following number series-
0 , 6 , 20 , 42 , 72 , ?
(a) 148
(b) 144
(c) 110
(d) 136

Q285. Find the correct set of numbers from the given alternatives.
(1, 2, 3), (1, 4, 9), (1, 16, 81),
(1, ? , ?)
(a) 256 , 6561
(b) 128 , 5251
(c) 190, 2012
(d) 543, 4533

Q286. A GANGA river flows north to south and on the way turns left and goes in a quarter-circle round a hillock and then turns right at a right angle. In which direction in the river finally flowing?
(a) West
(b) East
(c) North
(d) South

Q287. Arrange the following words in the same order in which they occur in dictionary.
(1) Acorn (2) Acoustic
(3) Acquaint (4) Acquired
(5) Aconitine
(a) 34512
(b) 43512
(c) 51432
(d) 51234

Q288. Find the missing number

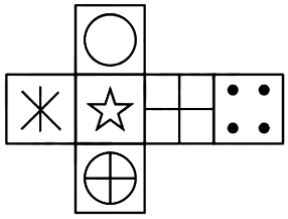
31	17	58	87
68	19	61	56
91	22	70	50
10	142	11	?

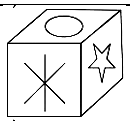
(a) 3
(b) 6
(c) 7
(d) 9

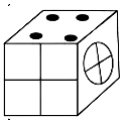
Q289. A statement is given followed by two conclusions. You have to consider the statement to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statement.
Statements :
A friend in need is a friend indeed.
Conclusions :
I. All are friends in good times.
II. Enemies in bad times are not friends.
(a) Only conclusion I follows
(b) Only conclusion II follows
(c) Both conclusion I and II follow
(d) Neither conclusion I nor II follows

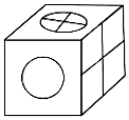
Q290. Jaipur is in the North-east of jodhpur.Alwar is in the south of Jaipur and in the south-east of jodhpur. Jalore is in the west of alwar and in the line with Jaipur -jodhpur. In which direction Jaipur is located with respect to jalore?
(a) North
(b) East
(c) South-West
(d) North-East

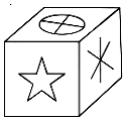
Q291. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?



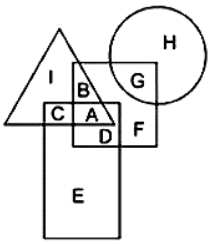
(a) 

(b) 

(c) 

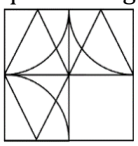
(d) 

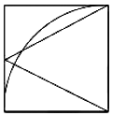
Q292. In the following figure, square represents Teachers, triangle represents swimmers, circle represents Nurses and rectangle represents Women. Which set of letters represents Teachers who are either swimmers or nurses?

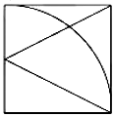


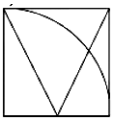
(a) D,F
(b) A,B,D,F,G
(c) A,B,G
(d) I,C,H

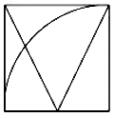
Q293. Which answer figure will complete the pattern in the question figure?



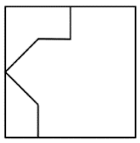
(a) 

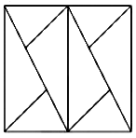
(b) 

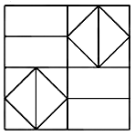
(c) 

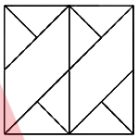
(d) 

Q294. From the given answer figures, select the one in which the question figure is hidden/embedded.



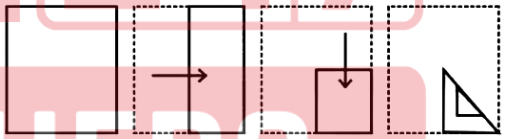
(a) 

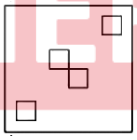
(b) 

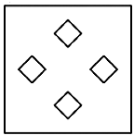
(c) 

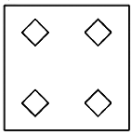
(d) 

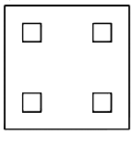
Q295. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.



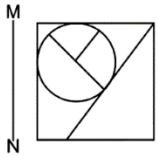
(a) 

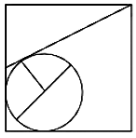
(b) 

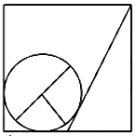
(c) 

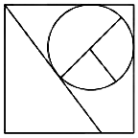
(d) 

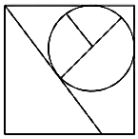
Q296. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



(a) 

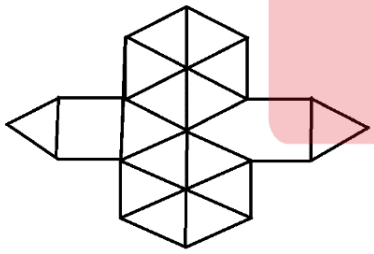
(b) 

(c) 

(d) 

Q297. Find the next term in following number series-
6 ,3 , 3, 6 , 24 , ?
(a) 180
(b) 192
(c) 38
(d) 42

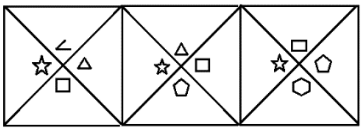
Q298. Find number of triangles in given figure?



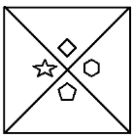
(a) 18
(b) 14
(c) 16
(d) 20

Q299. In the following question, select the odd number pair from the given alternatives.
(a) UPS
(b) MOUSE
(c) DATA CABLE
(d) WINDOWS 07

Q300. Find the next figure in following series-



(a) 

(b) 

(c) 

(d) 

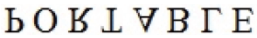
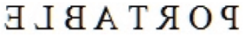
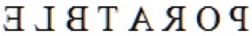
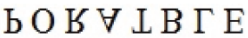
Q301. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.
DASY, ECRW, HGOS,?
(a) NMJM
(b) MMJM
(c) MNNJ
(d) MMJN

Q302. Three different positions of the same dice are shown. Select the letter/number that will be on the face opposite to the face having the letter '@'.

(a) &
(b) +
(c) %
(d) #

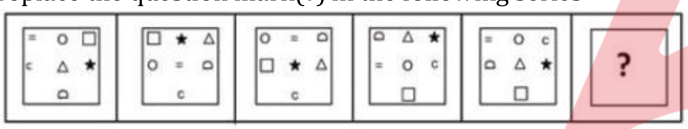
Q303. Select the option that is related to the third word in the same way as the second word is related to the first word.
Delay: Advance :: Enrich:?
(a) Shrewed
(b) Deplete
(c) Vast
(d) Supreme

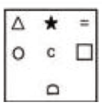
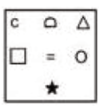
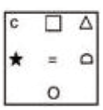
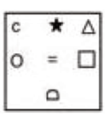
Q304. Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown.

(a) 
(b) 
(c) 
(d) 

Q305. Select the option that is related to the fourth number in the same way as the first number is related to the second number and the fifth number is related to the sixth number.
9: 108::? : 130 :: 13:208
(a) 11
(b) 14
(c) 10
(d) 12

Q306. Select the figure from among the given options that can replace the question mark(?) in the following series

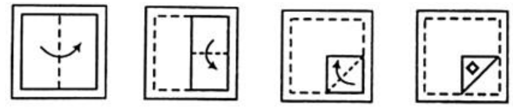


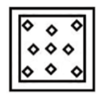
(a) 
(b) 
(c) 
(d) 

Q307. In a certain code language, 'QSPNPUF' is written as 'RUSPHWR'. How will 'PROMOTE' be written in that language?
(a) RQTSGVQ
(b) QTROGVQ
(c) QTROHVP
(d) RTRSGVP

Q308. Select the number from among the given options that can replace the question mark (?) in the following series.
57, 62, 31, 36,18 ,?
(a) 18
(b) 16
(c) 26
(d) 23

Q309. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?

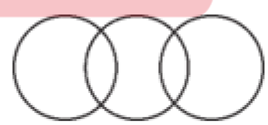


(a) 
(b) 
(c) 
(d) 

Q310. Aastik's age is twice the age of his daughter Riya. If ten years ago Aastik's age was three times to the age of Riya, then what is the present age of Riya?
(a) 8 years
(b) 18 years
(c) 12 years
(d) 20 years

Q311. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
_PR_ _WN_RT_WN_ _TV_N_R_VW
(a) N,T,V,P,V,P,R,W,P,T
(b) P,N,V,P,N,P,R,W,P,N
(c) N,T,W,P,R,P,W,R,P,T
(d) P,T,V,R,V,P,R,W,P,N

Q312. Select the set of classes, the relationship among which is best illustrated by the following Venn diagram.



(a) Yamuna, Rivers, Kaveri
(b) Girls, Intelligent, Boys
(c) Vegetarian, Woman, Sisters
(d) Stationary, Pencil, Stapler

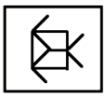
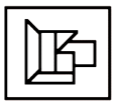
Q313. Select the option in which the numbers are related in the same way as are the numbers of the following set.
(7, 63,79)
(a) (5, 35, 47)
(b) (6,30, 44)
(c) (7, 34, 48)
(d) (8, 72, 96)

Q314. How many triangles are there in the given figure?

(a) 28
(b) 26
(c) 30
(d) 24

Q315. In a certain code language, 'FINGER' is coded as '1523211223' and 'MARKET' is coded as '1419291625'. How will 'MILTON' be coded in that language?
(a) 2221323529
(b) 2212235329
(c) 2222213355
(d) 2122323952

Q316. Select the option that is embedded in the given figure (rotation is NOT allowed).

(a) 
(b) 
(c) 
(d) 

Q317. Select the option in which the words share the same relationship as that shared by the given pair of words.
Pain : Algophobia ::? : Heliophobia
(a) Stars
(b) Moon
(c) Sunlight
(d) Night

Q318. 'X # Y' means 'X is the brother of Y'.
'X @ Y' means 'X is the son of Y'.
'X & Y' means 'X is the brother of Y'.
'X % Y' means 'X is the wife of Y'.
If 'M @ R % K # G @ N & T', then how M is related to N?
(a) Son
(b) Grandson
(c) Nephew
(d) Brother

Q319. Which two numbers should be interchanged to make the given equation correct?
731 ÷ 13 + 450 – 25 × 43 = 142
(a) 13 and 25
(b) 450 and 25
(c) 13 and 43
(d) 731 and 45

Q320. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

15	28	60
34	27	63
36	94	?

(a) 78
(b) 81
(c) 99
(d) 94

Q321. Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different.
(a) 11: 119
(b) 12: 135
(c) 21: 440
(d) 15: 228

Q322. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
All Teachers are Researchers.
No Researchers is Unemployed.
Conclusions:
I. Some Unemployed are Teachers.
II. No Teacher is Unemployed.
III. Some Teachers are Unemployed.
(a) Only conclusion II follows.
(b) Only conclusions I follows.
(c) Only conclusion III follows.
(d) Both conclusions I and II follow.

Q323. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
1. Mass
2. Master
3. Market
4. Mistake
5. Month
6. Margin
(a) 6, 5, 4, 2, 1, 3
(b) 6, 3, 1, 2, 4, 5
(c) 5, 6, 4, 3, 1, 2
(d) 6, 4, 5, 3, 2, 1

Q324. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
(a) CEGI
(b) UWYA
(c) FHJL
(d) QSVX

Q325. Select the correct combination of mathematical signs that can sequentially replace the * signs and balance the equation.
55 * 5 * 44 * 4 * 108 * 79
(a) ÷, +, ×, =, –
(b) ÷, +, ×, –, =
(c) +, ÷, ×, =, –
(d) ÷, ×, +, –, =

Q326. Select the option that is related to the third term in the same way as the second term is related to the first term.
ELICOD : NCEGFM : : ROUABL :?
(a) NPSCNZ
(b) QPCSNZ
(c) ZNSCPN
(d) QPCSNS

Q327. Select the option do not follow the same Logic/Rule/Relation as the numbers given in below set.
(57, 10, 43)
(a) (100, 12,44)
(b) (94, 14, 102)
(c) (96 15, 95)
(d) (98, 13, 71)

Q328. In a certain code language, HBLEAX is written as ABEHLX. How will INDERH be written in that language?
(a) DEHINR
(b) DEIHNR
(c) RDEIHN
(d) DREIHX

Q329. Select the option in which the numbers are related in the same way as are the numbers of the following set.
{6, 16, 8}
(a) {5, 15, 9}
(b) {4, 5, 3}
(c) {7, 14, 16}
(d) {9, 13, 40}

Q330. Four numbers have been given, out of which three are alike in some manner and one is different. Select the number that is different.
(a) 59
(b) 76
(c) 95
(d) 117

Q331. Select the option in which the numbers share the same relationship as that shared by the given pair of numbers.
7 : 32
(a) 9 : 50
(b) 5 : 26
(c) 11 : 64
(d) 8 : 42

Q332. Select the number from among the given options that can replace the question mark (?) in the following series.
7, 9, 17, 19, 35, 37,?
(a) 61
(b) 69
(c) 59
(d) 39

Q333. Select the combination of letters that when sequentially placed in the blanks of the
given letter series will complete the series.
_ pdfe _ _ df _ c _ d _ e
(a) ccpefp
(b) ccppef
(c) cpcpef
(d) ccpepf

Q334. Select the correct combination of mathematical signs that can sequentially replace the
* signs and balance the given equation.
550 * 128 * 16 * 12 * 443 = 203
(a) +, ×, -, ÷
(b) +, -, ×, ÷
(c) +, ÷, ×, -
(d) +, ×, ÷, -

Q335. The difference between the digits of a two - digit number is 5 and the number obtained by interchanging both digits is 45 less than the original number. What is the original number?
(a) 94
(b) 49
(c) 72
(d) 27

Q336. Four letter - clusters have been given, out of which three are alike in some manner and one is different. Select the letter - cluster that is different.
(a) PRNJ
(b) HJLH
(c) BDEB
(d) XZUQ

Q337. In a certain code language, SON is coded as 21 and DAUGHTER is coded as 39. How will FATHER be coded in that language?
(a) 41
(b) 31
(c) 37
(d) 35

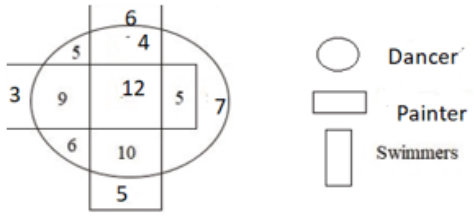
Q338. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
All black are pink.
Some black are green.
Conclusions:
I. No black is a pink.
II. Some green are black.
(a) Both conclusions I and II follow
(b) Only conclusion II follows
(c) Only conclusion I follows
(d) Neither conclusion I nor II

Q339. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.
(a) Obstacle
(b) Interference
(c) Progress
(d) Hindrance

Q340. Arrange the following words as per order in the dictionary.
1.Pick
2. Pith
3.Pile
4. Perk
5.pour
(a) 4,1,2,3,5
(b) 4,1,3,2,5
(c) 4,3,2,1,5
(d) 5,4,3,2,1

Q341. Arrange the following in a logical order.
1. Square
2. Triangle
3. Hexagon
4. Octagon
5. Line
(a) 5,3,2,1,4
(b) 5,4,3,2,1
(c) 5,2,1,3,4
(d) 4,3,5,1,2

Q342. In the given diagram, the shape indicates the categories of persons. The numbers given in the different segments represent the number of persons in that category.
How many Dancer are either swimmers or Painter but NOT both?

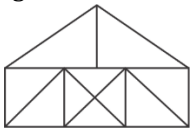


(a) 28
(b) 26
(c) 24
(d) 30

Q343. Death is related to 'Illness' in the same way as 'Success' is related to
'____'.
(a) Weak
(b) slack
(c) Hard-work
(d) Careless

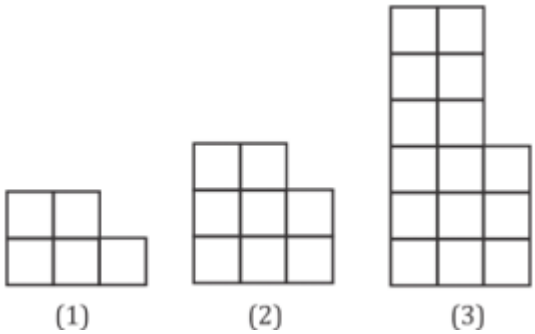
Q344. Select the number from among the given options that can replace the question mark (?) in the following series.
3, 16, 65,196,?, 394
(a) 393
(b) 390
(c) 395
(d) 39

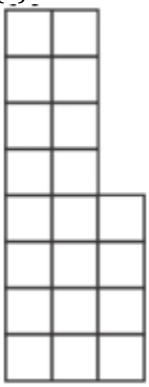
Q345. How many triangles are there in the following figure

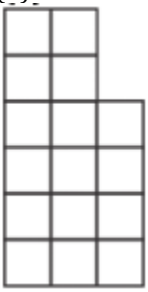


(a) 19
(b) 17
(c) 21
(d) 20

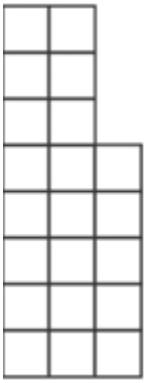
Q346. Select the figure that will come next in the following series.



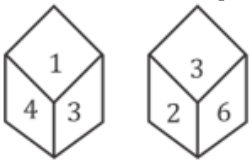
(a)


(b)


(c)


(d)


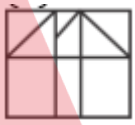
Q347. Two different positions of the same dice are shown. Select the number that will be at the top if 4 is at the bottom.



(a) 3
(b) 1
(c) 2
(d) 6

Q348. Select the option is which the given figure is embedded (rotation is NOT allowed).

(a)


(b)


(c)


(d)

Q349. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?

(a)


(b)


(c)


(d)

Q350. Select correct mirror image of the given combination when the mirror is placed at Right.

MALAYALAM

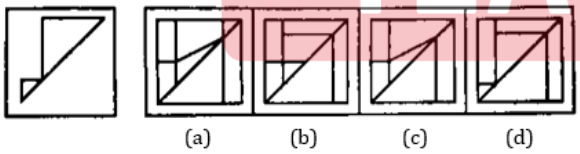
(a) MAJAYALAM
(b) MAJAYALAM.
(c) MAJAYAJAM
(d) MAΓAYAΓAM

Q351. Select the correct combination of mathematical signs that can sequentially replace the signs balance the given equations
65 * 5 * 45 * 2 * 30 * 73
(a) ÷, ×, +, -, =
(b) +, ÷, ×, =, -
(c) ÷, +, ×, =, -
(d) ÷, +, ×, -, =

Q352. Select the option in which the number one related in the same way as are the numbers of the following set.
(36, 10, 1352)
(a) (29, 8, 882)
(b) (13, 4, 552)
(c) (14, 3, 293)
(d) (39, 8, 1661)

Q353. Four number-pars have been given, out of which three are alike in some manner and one is different. Select the number pair that is different.
(a) 15 : 675
(b) 13 : 507
(c) 9 : 244
(d) 11 : 363

Q354. Select the option figure that is embedded in the given figure



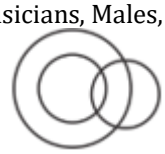
(a) a
(b) b
(c) c
(d) d

Q355. Read the given statements and conclusion carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion logically follow from the statements.

Statement :
All teachers are students.
No Students is Principal.
All Engineers are teachers.

Conclusion :
No Engineer is Principal.
Some Student are Engineers.
No teacher is a Principal.
(a) All the conclusion follows.
(b) Only conclusion I and II follow.
(c) Only conclusion III and II follow.
(d) Only conclusion II follow.

Q356. Select the Venn diagram that best illustrates the relationship among following classes.
Musicians, Males, Sons.

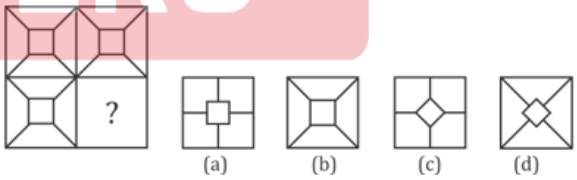
(a)

(b)

(c)

(d)


Q357. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series,
f _ ma _ e _ e _ _ le _ em _ l _ f _ m _ le
(a) e, l, f, m, a, f, a, e, a
(b) e, l, f, m, a, f, a, e, e, a
(c) f, l, m, a, f, e, a, m, l, e
(d) e, l, f, m, a, f, a, e, a, e

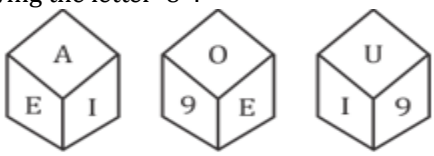
Q358. Select the figure among the given options that can replace the questions marks (?) in the following series.



(a) a
(b) b
(c) c
(d) d

Q359. Select the option that is related to the fourth number in the same ways as the first number is related to the second number and the fifth number is related to the sixth number.
18 : 328 : :? : 445 : : 22 : 488
(a) 21
(b) 20
(c) 28
(d) 24

Q360. Three different positions of the same dice are shown. Select the letter / number that will be on the face opposite to the face having the letter 'U' :



(a) I
(b) A
(c) E
(d) 9

Q361. Select the number from among the given options that can replace the question mark(?) in the following series.
8.5, 19, 36, 74?
(a) 154
(b) 146
(c) 152
(d) 160

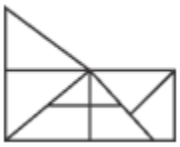
Q362. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
Painkiller
Parking
Passion
Positivity
Pancreas
(a) 2, 5, 1, 4, 3
(b) 1, 5, 2, 4, 3
(c) 1, 5, 4, 3, 2
(d) 1, 5, 2, 3, 4

Q363. In a certain code language, 'COOMEN' is coded as '291' and 'FIX' is coded as '42'. How will 'PROFANE' be coded in that language.
(a) 342
(b) 345
(c) 329
(d) 333

Q364. There of the following four words are alike in a certain way and one is different. Pick the odd one out.
(a) Dispur
(b) Thiruvananthapuram
(c) Kerala
(d) Amaravati

Q365. Select the option that is related to the third word in the same way as the second word is related to the first word.
Insomnia: Sleep :: Depression:?
(a) Mood
(b) Night
(c) Thinking
(d) Dream

Q366. How many triangles are there in the given figure?

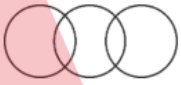


(a) 13
(b) 16
(c) 12
(d) 11

Q367. Select the letter-cluster from among the given options that can replace question mark(?) in the following series.
HLLA, JNNE, LPPI, NRRM,?
(a) PTTQ
(b) XWWV
(c) RUUT
(d) RTTU

Q368. Select the venn diagram that best illustrates the relationship among following classes.
Men, Researchers, Introverts.

(a)



(b)

(c)

(d)

Q369. Study the given pattern carefully and select the number that can replace the question mark(?) in it.

5	9	6
17	?	21
60	45	75

(a) 19
(b) 20
(c) 18
(d) 14

Q370. Four number-pars have been given, out of which three are alike in some manner and one is different. Select the number pair that is different.
(a) 7: 392
(b) 8: 576
(c) 3: 36
(d) 4 : 84

Q371. Select the option in which the number one related in the same way as are the numbers of the following set.
(23, 16, 184)
(a) (27, 28, 378)
(b) (25, 16, 250)
(c) (16, 20, 170)
(d) (19, 9, 102)

Q372. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series,
S _ A R _ A _ H _ R M _ S _ _ R M _
(a) H M S A A A A H
(b) H M S A A H A A
(c) M S H A A H A A
(d) H A A A A S H M

Q373. In a certain code language 'SAJIT' is coded as 1652343614 and FIX is coded as '42366'. How will 'PLASTIC' be coded in that language?
(a) 223052141664836
(b) 22305216143648
(c) 364816520322
(d) 22305216143684

Q374. Four words have been given, out of which three are alike in some manner and one is different. Select the world that is different.
(a) Intelligent
(b) Aptitude
(c) Memory
(d) Love

Q375. in a certain code language 'INERTIA' is written as OMYIZRU. How will 'PANCHAL' be written in that language?
(a) VZHXNZF
(b) UZHXNZR
(c) VZHXZFZ
(d) VZHXZFZ

Q376. Choose the correct alternative that will continue the same pattern and replace the question mark (?)
RE : 198 :: ST :?
(a) 90
(b) 56
(c) 59
(d) 62

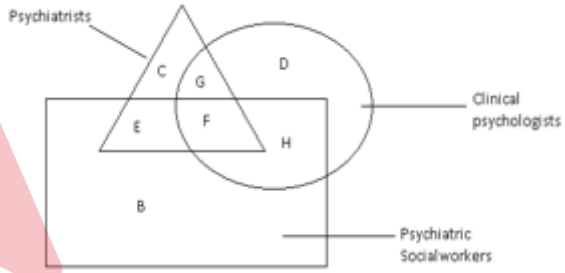
Q377. Select the option that is related to the third word in the same way as the second word is related to the first word.
Scotophobia : Darkness :: Stygiophobia :?
(a) Heaven
(b) Hell
(c) Stars
(d) Speed

Q378. In the following questions, select the number which can be replaced the sign of the questions mark (?) from the given alternatives.

43	48	41
42	44	46
47	?	45

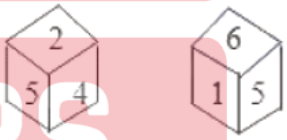
(a) 46
(b) 40
(c) 49
(d) 45

Q379. In the given figure, which letter represents Psychiatrists who are Clinical Psychologists, but not Psychiatric Social Workers?



(a) G
(b) F
(c) H
(d) E

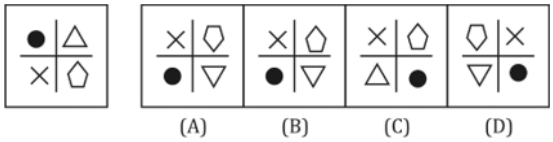
Q380. Two positions of the same dice are given. Which number will be at the top if '6' is at the bottom?



(a) 2
(b) 3
(c) 1
(d) 4

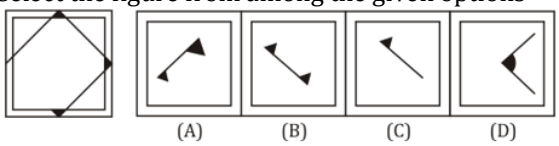
Q381. A set of sequence is given. Select the option which shows similar relationship.
AA23 : CC25 ; PP61 : RR63 ; TT52 :?
(a) UV54
(b) VV51
(c) UU53
(d) VV54

Q382. In the following figure there is a problem figure which is followed by four answer figures one of the answer figures is the water image of the problem figure, find the water image.



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

Q383. Select the figure from among the given options



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

Q384. In a certain code language, the word BREAKDOWN is written as DQGCJFQVP. How will the word MENSTRUAL be written in that code language?
(a) ODPRVQWZN
(b) ODPUSTWZN
(c) OPDUSTWZN
(d) None of these

Q385. Pointing to Harbhajan, Sonakshi says, "He is the paternal grandfather of my eldest son Mukesh". How is Harbhajan related to Sonakshi?
(a) Father
(b) Uncle
(c) Brother – in – law
(d) Father – in – law

Q386. In the following question, four words are alike in some manner, and make a group. Choose the one which does not fit in the given group.
(a) 7200
(b) 5040
(c) 4032
(d) 5240

Q387. Which one set of letters when sequentially placed at the gaps in sequentially placed at the gaps in the given letter series shall complete it?
G_JG_IJGGI_GG_JG
(a) IGJI
(b) GIGI
(c) IGIJ
(d) GJGJ

Q388. A set of sequence is given. Select the option which shows similar relationship.
5026 : 6205 ; 5197 : 7915 ; 8322 :?
(a) 2723
(b) 2328
(c) 2238
(d) 2732

Q389. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
Unanimous
Umbrella
Ultimate
Unaltered
Umbilical
(a) 3, 5, 2, 4, 1
(b) 3, 5, 2, 1, 4
(c) 3, 5, 4, 2, 1
(d) 5, 2, 3, 4, 1

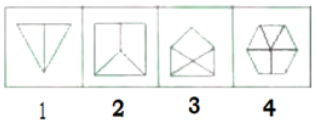
Q390. Select the option that is related to the third word in the same way as the second word is related to the firs word.
Nyctophobia : Dark :: Aquaphobia
(a) Width
(b) Water
(c) Loss
(d) Fall

Q391. In a certain language, 'MORBID' is written as 'INGWTR'. How will 'VASHU' so written in that language?
(a) ZMXAF
(b) ZMXAE
(c) ZMXFA
(d) MZXAF

Q392. Four number – pairs have been given, out of which three are alike some manner and one is different. Select the number – pair that is different.
(a) 225 : 24
(b) 324 : 63
(c) 196 : 65
(d) 169 : 34

Q393. Introducing Vijay to a guest, 'Abhishek said, "He is the only son of my father's daughter – in – law." How is Abhishek related to Vijay?
(a) Paternal Grandfather
(b) Maternal Grandfather
(c) Brother
(d) Either Father or uncle.

Q394. Select the figure that will come next in the following figure series



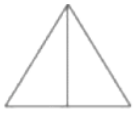
(a) 

(b) 

(c) 

(d) 

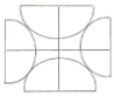
Q395. Select the option in which the given figure is embedded.



(a) 

(b) 

(c) 

(d) 

Q396. How many triangles are there in the following figure?

(a) 30
(b) 26
(c) 28
(d) 24

Q397. Select option in which the words share the same relationship as that shared by the given pair word.
Vir Bhumi : Rajiv Gandhi
(a) Ray Ghat : Mahatma Gandhi
(b) Shanti Vana : Lal Bahadur Shastri
(c) Shakti Sthal : Sanjay Gandhi
(d) Vijay Ghat : Atal Bihari Vajpayee

Q398. Study the given pattern carefully and select the number that can replace the question mark(?) in it.

22	34	9
16	29	3
36	25	?

(a) 49
(b) 34
(c) 36
(d) 39

Q399. Two statements are given, followed by three conclusions numbered I, II, III, Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow (s) from the statements.

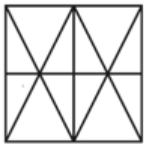
Statements -
All rice are curd.
All white are curd.
Conclusion -
I. Some rice are curd
II. Some curd are not rice
III. Some curd are white
(a) All follows
(b) Only conclusion I & II follows
(c) Only conclusion III follows
(d) None follows

Q400. Radhika goes towards East from a point P and then turns left. She walks some distance then turns her right. Which direction is she facing now?
(a) North
(b) East
(c) West
(d) South.

Q401. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
1. Appeal
2. Appearance
3. Apprehend
4. Appellant
5. Apprentice
(a) 5, 4, 3, 2, 1
(b) 4, 5 ,2 , 3, 1
(c) 2, 4, 5, 1, 3
(d) 1, 2, 4, 3, 5

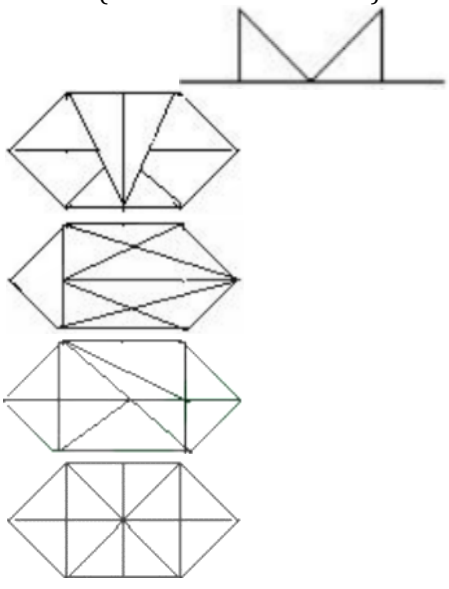
Q402. In a certain code language, 'MANGO' is coded as 26 - 2 - 28 - 14 - 30 and 'DARK' is coded as 8 - 2 - 36 - 22. How will 'TIGER' be coded in that language?
(a) 25 – 25 – 72 – 12 – 18
(b) 40 – 18 – 14 – 10 – 36
(c) 15 – 18 – 17 – 29 – 10
(d) 18 – 36 – 40 – 29 – 27

Q403. How many triangles are there in the given figure?



(a) 26
(b) 30
(c) 24
(d) 28

Q404. Select the option in which the given figure is embedded. (Rotation is not allowed)



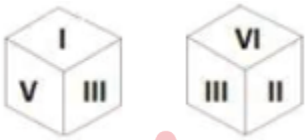
(a)

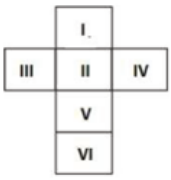
(b)

(c)

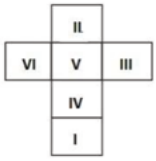
(d)

Q405. Two orientations of a dice are shown. This dice can be obtained by folding which of the option figures along the lines?

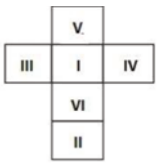




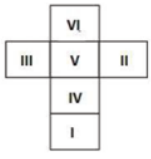
(a)



(b)



(c)



(d)

Q406. Select the letter - cluster from among the given options that can replace the question mark (?) in the following series.
RTSP, OXNU, LBIZ, IFDE,? , CNTO
(a) NUPA
(b) FJYJ
(c) KGAT
(d) UTAQ

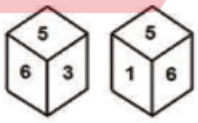
Q407. Select the option that is related to the third number in the same way as the second number is related to the first number.
36 : 900 :: 18 :?
(a) 125
(b) 169
(c) 144
(d) 196

Q408. In a certain code language, "FRIEND" is written as 'GSOIOE', and 'AKASH' is written as 'ELETI'. How will 'PRINCIPLE' be written in that language?
(a) QSOODOQMI
(b) UTAQPAGSA
(c) YTQIBAHAU
(d) IUUATWAO

Q409. Select the number from among the given options that can replace the question mark (?) in the following series.
25,? , 54, 324, 332
(a) 28
(b) 57
(c) 98
(d) 50

Q410. In a certain code language, I love table' is written as 'cuz duz ruz', 'I am Officer' is written as 'guz ruz buz', and 'love your life' is written as 'cuz kuz buz'. How will table be written in that language?
(a) duz
(b) uak
(c) cuz
(d) guz

Q411. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. Select the number that will be on the face opposite to the face having the number '1'.



(a) 3
(b) 2
(c) 4
(d) 6

Q412. Select the option that is related to the third term in the same way as the second term is related to the first term.
MATVR : XVTOC :: RTANP :?
(a) TYARB
(b) NHKAL
(c) TYARA
(d) VTRPC

Q413. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

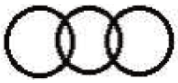
Statements:
All Students are Aspirants.
Some Students are Doctors.
Some Doctors are scientists.

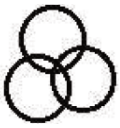
Conclusions:
I. No Doctors is a scientist.
II. Some Scientists are Doctors.
(a) Only conclusion I follows.
(b) Both the conclusions follow.
(c) Only conclusion II follows.
(d) Either conclusion I or II follows.

Q414. Select the Venn diagram that best illustrates the relationship between the following classes.
Cricketer, Girls, Students

(a) 

(b) 

(c) 

(d) 

Q415. Which letter will replace the question mark (?) in the following letter series?
R, X, S, W, T,?
(a) O
(b) P
(c) V
(d) R

Q416. Pointing towards a woman, Anita said, "She is the only daughter of my father - in - law."
How is the woman related to Anita?
(a) Daughter
(b) Sister - in - law
(c) Sister
(d) Mother

Q417. Study the given pattern carefully and select the number from among the given options that can replace the question mark (?) in it.

14	115	9
25	184	21
17	120	?

(a) 16
(b) 13
(c) 19
(d) 27

Q418. Five friends, S, T, U, V and W, are top rank holders of a Ramanujan college. The rank of S is just above the rank of V and just below the rank of W. T is at the top rank and U is not at the lowest rank. Who among them is at the lowest rank?
(a) W
(b) V
(c) S
(d) U

Q419. Which two signs need to be interchanged to make the following equation correct?
96 × 16 ÷ 5 + 30 - 24 = 36
(a) ÷ and ×
(b) + and -
(c) ÷ and +
(d) - and ×

Q420. Four letter - clusters have been given, out of which three are alike in some manner and one is different. Select the letter - cluster that is different.
(a) TOUN
(b) EZFW
(c) HCIB
(d) KFLE

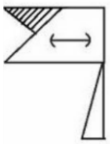
Q421. Which two signs should be interchanged to make the given equation correct?
35 ÷ 7 + 5 - 30 ÷ 6 ×18 = 38
(a) + and -
(b) - and ×
(c) + and ÷
(d) + and ×

Q422. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
H _ N _ _ A N _ H _ _ D
(a) UATALS
(b) YUARAK
(c) OAWAKL
(d) ADHDAN

Q423. Ankit started running from his house towards the north. After 30 meters he turned left and ran for 65 meters. He then turned right and ran for 30 meters, and again turned right to run 65 meters. In which direction was he running finally?
(a) East
(b) West
(c) South
(d) North

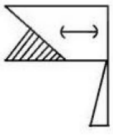
Q424. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter cluster.
Kerala : Kochi :: Haryana :?
(a) Hissar
(b) Chandigarh
(c) Maneswar
(d) Karnal

Q425. Select the correct mirror image of the given figure when the mirror is placed on the right of the figure.

(a) 

(b) 

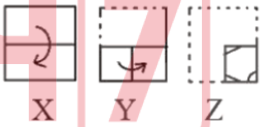
(c) 

(d) 

Q426. Which two numbers should be interchanged to make the given equation correct?
20 × 21 ÷ 7 - (122 + 44) + 36 + (37 + 8) = 7
(a) 36 and 20
(b) 7 and 21
(c) 20 and 37
(d) 7 and 20

Q427. Read the given statements and conclusions carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow from the statements.
Statement :
No house is a cinema hall.
All cinema hall is a Logistic factory.
Conclusion :
No house is a Logistic factory.
No Logistic factory is a house.
Some Logistic factory are cinema hall.
All the Logistic factory is cinema hall.
(a) Only conclusion I follow.
(b) Both conclusion I and II follow.
(c) Only conclusion I, II and III follow.
(d) Only conclusion IV follow.

Q428. The sequence of folding a piece of square paper and the manner in which the folded paper has been cut is shown in the figures X. Y and Z. How would this paper look when unfolded?



(a) 

(b) 

(c) 

(d) 

Q429. Four words have been given, out of which three are like in some manner and one is different. Select the word that is different.
(a) Treason
(b) Disillusion
(c) Undeceive
(d) Oink

Q430. Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown

5P87SY9
P
|
Q

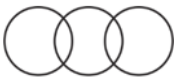
(a) ϱΥ2ϒ8ϥ2
(b) ϱΥ2ϒ8P2
(c) ϱΥ278ϥ2
(d) ϱΥ278P2

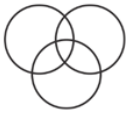
Q431. Study the given pattern carefully and select the number that can replace the question mark(?) in it.

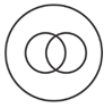
15	9	25
18	4	81
21	?	63

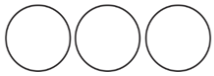
(a) 8
(b) 6
(c) 7
(d) 9

Q432. Select the Venn diagram that best illustrates the relationship among following classes.
Reptiles, Mammals, Insects

(a)


(b)


(c)


(d)


Q433. Select the number from among the given options that can replace the question mark(?) in the following series.
8, 17, 27, 29, 58, 23,?
(a) 105
(b) 103
(c) 134
(d) 113

Q434. In a certain code language, 'ROMAN' is written as 'SZRLW'. How will 'PRINT' be written in that language.
(a) YMNIT
(b) YMNIU
(c) YMNJU
(d) YNMJU

Q435. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
Sodium
Solution
Satire
Sarcastic
Sophisticate
(a) 4, 3, 1, 2, 5
(b) 4, 3, 2, 1, 5
(c) 4, 3, 2, 5, 2
(d) 4, 2, 3, 5, 2

Q436. Select the option in which the words share the same relationship as shared by the given pair of words.
World cancer day : 4 February :?
(a) World Education day : 24 January
(b) World Poverty day : 11 July
(c) World Population day : 17 October
(d) World migrant day : 20 December

Q437. Select the letter-cluster from among the given options that can replace question mark(?) in the following series
LIGHT, LIGHG, LIGSG,? LRTSG, ORTSG.
(a) LITSH
(b) LITGS
(c) LIISG
(d) LITSG

Q438. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.
(a) Animate
(b) Energetic
(c) Mettlesome
(d) Lethargic

Q439. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
(a) EJOT
(b) CIOT
(c) XFIH
(d) POLD

Q440. Find the number of Squares in the given figure.

(a) 12
(b) 10
(c) 15
(d) 8

Q441. Select the option in which the given figure is embedded. (Rotation is not allowed)

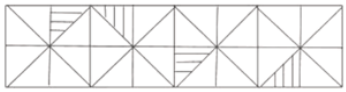
(a) 

(b) 

(c) 

(d) 

Q442. Select the figure that will come next in the following figure series.



1 2 3 4

(a) 

(b) 

(c) 

(d) 

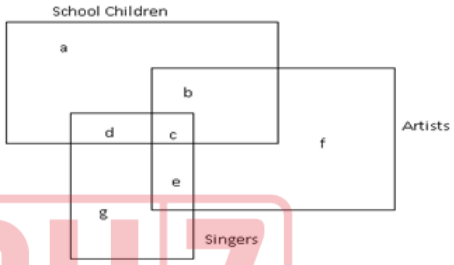
Q443. Select the option in which the number one related in the same way as are the numbers of the following set.
(9, 36, 72)
(a) (8, 32, 72)
(b) (7, 28, 63)
(c) (11, 44, 88)
(d) (5, 20, 45)

Q444. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series
V _ _ B _ L _ E _ B _ L V E R _ A _
(a) E A R V A R L B
(b) E R A V R A B L
(c) L B A R V A R E
(d) E R A V R B A L

Q445. P is a number which is multiplied by its next number, the product 552 is obtained. When number P is added to another number Q, a total of 88 is obtained. What would be the value of Q.
(a) 70
(b) 65
(c) 63
(d) 71

Q446. Arrange the given words in the sequence in which they occur in the dictionary.
1. Ratio
2. Raise
3. Rapid
4. Robin
5. Royal
(a) 2, 3, 1 ,4, 5
(b) 3, 2, 5, 4, 1
(c) 2, 1, 4, 3, 5
(d) 2, 5, 4, 3, 1

Q447.



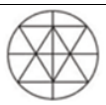
Above diagram represents school children, artists and singers. Study the diagram and identify the region which represents those school children who are artists and not singers.
(a) a
(b) b
(c) f
(d) e

Q448. 5 years ago, my friend's age was 5 times of my age, now it is 3 times only. What is my friend's present age (in years)?
(a) 30
(b) 25
(c) 20
(d) 15

Q449. Select the option in which the given figure is embedded. (Rotation is not allowed)

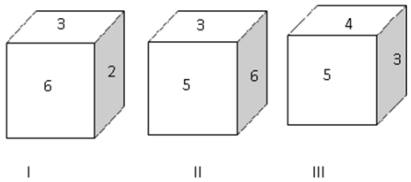
(a) 

(b) 

(c) 

(d) 

Q450. What will be the digit opposite to 2?



I II III

(a) 1
(b) 2
(c) 5
(d) 6

Q451. In a certain code language, 'MAGIC' is written as 'OCIKE', how will 'VISHVASH' be written in that language?
(a) XKUJXCUJ
(b) XKUJSAUP
(c) XKUSJTAUP
(d) XKUJKMUJ

Q452. Which two signs need to be interchanged to make the following equation correct?
28 + 64 ÷ 16 - 4 × 6 = 38
(a) ÷ and −
(b) − and +
(c) + and ×
(d) − and ×

Q453. Which of the option figures when rotated 270° anticlockwise and then 45° clockwise will result in the given question figure?

(a) 

(b) 

(c) 

(d) 

Q454. Seven friends, Kushi, Vishal, Mahesh, Vikash, Sharadha, Lucky and Guddu, are sitting around a circular table with their backs towards the center. Kushi is sitting to the immediate right of Vishal. Gudu and Lucky are not sitting to the immediate left or right of Vikash. Vikash is sitting third to the left of Vishal. Sharadha is sitting to the immediate right of Vikash. Who is sitting third to the right of Vishal?
(a) Gudu
(b) Lucky
(c) Mahesh
(d) Sharadha

Q455. Study the given pattern carefully and select the number from among the given options that can replace the question mark (?) in it.

45	66	87
35	75	55
25	27	76
55	?	66

(a) 120
(b) 88
(c) 112
(d) 114

Q456. Four letter-clusters have been given, out of which three are alike in same manner and one is different. Select the letter-cluster that is different.
(a) MTAI
(b) SZGN
(c) TAHO
(d) CJQX

Q457. In a certain code language, 'DEAR' is coded as '3749', and 'CARE' is coded as '5497'. How will 'RARE' be coded in that language?
(a) 9497
(b) 7642
(c) 6724
(d) 7624

Q458. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow from the statements.
Statements:
1. All Mangoes are White.
2. All whites are Honest.
3. No Honest is yellow.
Conclusions:
I. No Yellow is a Mango.
II. No Yellow is a white.
III. Some honest are Mango.
IV. Some Honest are yellow.
(a) Only conclusions I and III follow
(b) Only conclusions I, III and IV follow
(c) Only conclusions I, II and, III follow
(d) All conclusions I, II, III and IV follow

Q459. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
A V _ S H _ _ E _ H _ V E _ H
(a) E K H L U T
(b) E A V S A S
(c) K D A O Q P
(d) C H N L T P

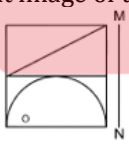
Q460. Select the option that is related to the third term in the same way as the second term related to first.
Dog : Canis lupus :: Deer :?
(a) Cervidae
(b) Homo sapiens
(c) Loxodonta
(d) Cerebrum

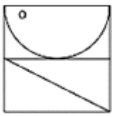
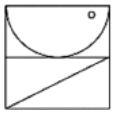
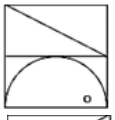
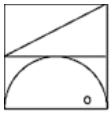
Q461. A cube of side 100 cm is painted Red on all the faces and then cut into smaller cubes of sides 10 cm each. Find the number of smaller cubes having all the three faces painted.
(a) 32
(b) 64
(c) 28
(d) 8

Q462. Select the number from among the given options that can replace the question mark (?) in the following series.
82, 105, 136, 177, 224, 283,?
(a) 349
(b) 412
(c) 320
(d) 350

Q463. There are seven members, P, Q, R, S, T, U and V, in a family. V is the only daughter-in-law of R. S is the sister of Q. Q is the only son of T, who is the wife of R. P and U are the sons of V. How is U related to T?
(a) Grandson
(b) Brother
(c) Son
(d) Father

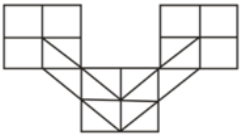
Q464. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



(a) 
(b) 
(c) 
(d) 

Q465. Arrange the following words as per the dictionary.
1. Metrology
2. Membership
3. Mentorship
4. Mention
5. Movement
(a) 2, 4, 3, 1, 5
(b) 5, 2, 1, 3, 4
(c) 4, 3, 5, 1, 2
(d) 5, 1, 2, 3, 4

Q466. Find the number of Quadrilateral the given figure below.



(a) 27
(b) 28
(c) 30
(d) 33

Q467. Select the set of classes the relationship among which is best illustrated by the given Venn diagram.

(a) Yen, Currency, Afghani
(b) Potato, Cylinder, Vegetables
(c) Bed, Sofa, Mustard oil
(d) Doctors, Singers, Extroverts

Q468. Select the number from among the given options that can replace the question mark (?) in the following series.
48, 52, 61, 77,?
(a) 101
(b) 102
(c) 103
(d) 104

Q469. From the given figure answer figures, select the one in which the question figure is hidden/embedded.

(a) 
(b) 
(c) 
(d) 

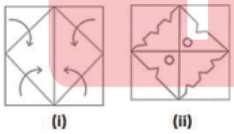
Q470. Select the option that is related to the third term in the same way as the second term is related to the first term.
SYSTEM: METSYS:: ADVENTURE:?
(a) ERNTNEVDE
(b) ERUTNRVDA
(c) ERUTNEVDE
(d) ERUTNEVDA

Q471. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.
5 : 24 :: 7:? :: 12 : 52
(a) 36
(b) 34
(c) 38
(d) 32

Q472. Select the correct combination of mathematical signs that can sequentially replace the * signs and make the given equation correct.
117 * 95 * 30 * 65 * 5 * 4
(a) ×, ÷, =, –, +
(b) +, ÷, –, =, ×
(c) =, ×, +, ÷, –
(d) =, –, +, ÷, ×

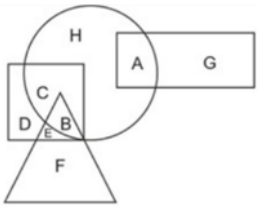
Q473. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.
SKL, VGQ, YCV, BYA, EUF,?
(a) VSG
(b) WTH
(c) HQK
(d) TRF

Q474. The sequence of folding a piece of paper (figures i) and the manner in which the folded paper has been cut (figure ii) is shown in the following figures. Select the option that would most closely resemble the unfolded form of figure (ii).



(a) 
(b) 
(c) 
(d) 

Q475. In the following figure, square represents Doctor, Triangle represents an engineer, circle represents Teacher and rectangle represents Students. Which set of letters represents Teacher who are neither Students nor Engineer?



(a) F, B, H
(b) B, D, H
(c) D, E, A
(d) C, H

Q476. In a certain code language 'RESULT' is coded as '765149' and 'PUT' is coded as '219'. How will 'TEST' be coded in that language?
(a) 9659
(b) 6599
(c) 5969
(d) 9496

Q477. A is the brother of B, C is the father of A. D is the brother of C. If E is the mother of D, then how A is related to E?
(a) Uncle
(b) Father
(c) Brother
(d) Grandson

Q478. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.
(a) Amaravati
(b) Itanagar
(c) Dispur
(d) Ahmedabad

Q479. Select the option in which the numbers are related in the same way as are the numbers of the following set.
(341, 12, 485)
(a) (255, 16, 511)
(b) (325, 14, 515)
(c) (125, 18, 448)
(d) (99, 15, 320)

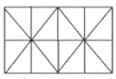
Q480. Select the number from among the given options that can replace the question mark(?) in the following series.
36, 72, 75, 300, 305,?
(a) 1840
(b) 1845
(c) 1825
(d) 1830

Q481. How many triangles are there in the following figure?

(a) 12
(b) 8
(c) 14
(d) 10

Q482. In a certain code language 'PLAYER' is written as 'CNRTGA'. How will 'ANJALI' be written in that language?
(a) LPCNKB
(b) LPCKNC
(c) PCKNCL
(d) PCKLMN

Q483. Select the option in which the given figure is embedded.

(a) 
(b) 
(c) 
(d) 

Q484. Select the option in which the numbers are related in the same way as are the numbers of the following set.
(18, 648, 9)
(a) (19, 750, 9)
(b) (17, 819, 8)
(c) (21, 588, 7)
(d) (11, 492, 9)

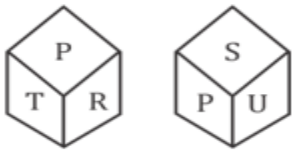
Q485. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
(a) ONC
(b) RYE
(c) NXG
(d) LOC

Q486. Select the option that is related to the third word in the same way as the second word is related to the first word.
Cercopithecidae : Monkey :: Loxodonta :?
(a) Donkey
(b) Pigeon
(c) Parrot
(d) Elephant

Q487. Select the letter-cluster from among the given options that can replace question mark (?) in the following series.
XWP, VUO, RSN, OQM,?
(a) LOL
(b) LOM
(c) LPN
(d) KPN

Q488. Select the letter from among the given options that can replace the question mark (?) in the following series.
X, V, R, P,?
(a) L
(b) M
(c) N
(d) O

Q489. Two different positions of the same dice are shown, the faces of which are marked with the letters P, Q, R, S, T and U. Select the letter that will be on the face opposite to the face having the letter U.



(a) T
(b) Q
(c) S
(d) P

Q490. 'x + y' means 'x is the husband of y'
'x % y' means 'x is the father of y'
'x $ y' means 'x is the mother of y'
If 'A + C $ E % G $ K + P' , which of the following statement is incorrect?
(a) G is the mother–in–law of P.
(b) E is the maternal grandfather of K.
(c) E is the son of A
(d) C is the maternal grandfather of G

Q491. Read the given statements and conclusion carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statements.
Statement:
1. All Almira are Beds
2. All Beds are pillows
3. Some Beds are Bedsheet.
Conclusion:
I. All pillows are Almira.
II. Some pillows are Almira.
III. All Almira are Bedsheet.

(a) Only conclusion II follows.
(b) Neither conclusion II nor III follows.
(c) Either conclusion I or III follows.
(d) Both conclusion I and III follows.

Q492. Select the letter-cluster from among the given options that can replace question mark(?) in the following series
OPQR, KTMV, GXIZ, CBED,?
(a) YFHA
(b) YFHE
(c) YFAH
(d) YRAM

Q493. Four words have been given, out of which three are alike in some manner and one is different. Select the odd word.
(a) Lucknow
(b) Jaipur
(c) Gangtok
(d) Ahmedabad

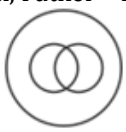
Q494. In a certain code language. "Horse" is coded as 125 and 'dog' is coded as 27. How will 'Elephant' be coded in that language
(a) 512
(b) 343
(c) 506
(d) 340

Q495. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series,
A _ I M _ L A _ _ M A _ _ N _ M A L
(a) N, A, N, I, L, A, I
(b) N, A, N, I, L, I, A
(c) N, A, I, N, L, A, I
(d) N, A, I, N, I, L, A

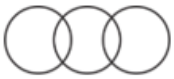
Q496. Five letter-clusters have been given, out of which three are alike in some manner and one is different. Select the odd letter cluster.
(a) AIOUE
(b) BCDFX
(c) GHJKL
(d) MNPQR

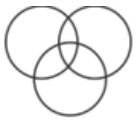
Q497. What day of the week will be on the 29th of April, if 1st April is Monday?
(a) Friday
(b) Wednesday
(c) Monday
(d) Saturday

Q498. Select the Venn diagram that best illustrates the relationship among the following classes.
Men, Father – in – law, Husband

(a)


(b)


(c)


(d)


Q499. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
1. Acme
2. Audacious
3. Abdicate
4. Abscond
5. Assassinate
6. Amaze
(a) 3, 4, 1, 6, 2, 5
(b) 3, 4, 1, 6, 5, 2
(c) 3, 4, 1, 5, 6, 2
(d) 3, 4, 1, 2, 5, 6

Q500. Select the correct combination of mathematical signs that can sequentially replace the signs to balance the given equations
65 * 13 * 15 * 3 * 42 * 8
(a) ÷, +, ×, -, =
(b) ÷, ×, +, -, =
(c) +, ÷, ×, -, =
(d) =, +, ×, ÷, -

SOLUTIONS

QUANTITATIVE APTITUDE

S1. Ans.(c)

Sol. R.m = 60% of Cost price.

M.c = 40% of cost price.

Cost price = Raw material + manufacturing cost

RM	MC	cost price
60	40	100

33.33% → 20

Selling price = 100+20

= 120

A.T.Q $6.66\% = \frac{1}{15}$, $30\% = \frac{3}{10}$, $60\frac{3}{5}\%$

New	RM		MC		CP	S.P
	64	+	52	=	116	120+72=192

$120 \times \frac{60}{100} = 72$

Profit = $\frac{72}{116} \times 100$

=65.51%

S2. Ans.(d)

Sol.

'A'	'B'
54×7	42×12
= 378	=504

Donate $\frac{5}{6}$ of earning.

Saving= $378 \times \frac{1}{6} : 504 \times \frac{1}{6}$

= 63: 84

= 9: 12

S3. Ans.(b)

Sol. $\frac{25}{100} \times P = x$

$x = \frac{p}{4}$

A.T.Q

$\frac{P}{4}\%$ of 20

= 5% of P.

S4. Ans.(d)

Sol.

	CP (100-Discount)	M.P (100+Profit)
A.T.Q	95	120

95 → ×1/3 → 31.6

120 → ×1/3 → 40

S5. Ans.(b)

Sol. Difference between discounter

$40\% - (25 + 15 - \frac{25 \times 15}{100})\%$

$(40 - 40 + 3.75)\%$

Actual difference = $\frac{3.75}{100} \times 3000$

= 112.5 Rs

S6. Ans.(b)

Sol. $83.33\% = \frac{5}{6}$

$37.5\% = \frac{3}{8}$

A.T.Q

6 : 1

8 : 11

48 → x1.5 → 72

11 → x1.5 → 37 → 55.5

S7. Ans.(b)

Sol.

	Usual	New
Speed	3	8

8 — 3

5 — 6.8 — 34

×6.8 → 54.4

S8. Ans.(c)

Sol. Ratio of Profit divided in Ratio of investment

	Atul		Amit
	2200		800
	11	:	4
15	→ 18000		
11	$\xrightarrow{\frac{18000}{15}}$ × 11		

Atul's Share = 13200

S9. Ans.(b)

Sol.

A ——— 18 ⟩ 54 ⟨ 3
B ——— 27 ⟩ 54 ⟨ 2

A fill tank in 30 mint = 30×3

Extra water empty by B

90-54=36

B close after. $\frac{36}{2}$= 18 minutes

S10. Ans.(b)

Sol.

A.T.Q	Man	Woman	Child
	2k	6k	3k

Total work = $(2k \times 5 + 2 \times 6k + 6 \times 3k) \times 9$

= 40K×9

N Women complete work in 5 days.

N=$\frac{40k \times 9}{6k \times 5}$

= 12 Women

S11. Ans.(b)

Sol.

	CP	SP	P%
	100	220	120
125	220	76	
A.T.Q	$\frac{95}{125} \times 100 = 76\%$		

Change in profit %= $\frac{120-76}{120} \times 100$

= $\frac{44}{120} \times 100$

=36.66%

S12. Ans.(c)

Sol. Means proportional = $\sqrt{80 \times 405}$

= $\sqrt{32400}$

=180

S13. Ans.(c)

Sol. Prime no. between 10 to 100 are

11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53

59, 61, 67, 71, 73, 79, 83, 89, and 97

Avg. = $\frac{sum\ of\ all\ term}{no\ of\ terms}$

= $\frac{1043}{21}$

= 49.6

S14. Ans.(c)

Sol. Sum of all no. is = 49×12

= 588

Sum of 1st six numbers = 47 x 6 = 282

Sum of last four number = 46×4

= 184

Avg of 7th and 8th numbers = $\frac{588-(184+282)}{2}$

=$\frac{122}{2}$

=61

Required ratio = 46: 61

S15. Ans.(b)

Sol.

$576 = \frac{100 \times r^2}{100}$

$r^2 = 576$

$r = 24\%$

Rate of interest = 24%

S16. Ans.(d)

A	:	B	:	C
11		15		17

2 ——— ×1083 ——— 2166

Total amount = 1083 (11+15+17)

= 1083×43

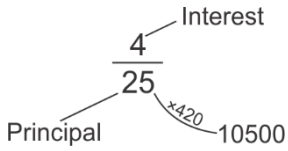
= 46569

S17. Ans.(c)

Amount after 3rd year is

The principal amount for 4th year

Then. 16% =

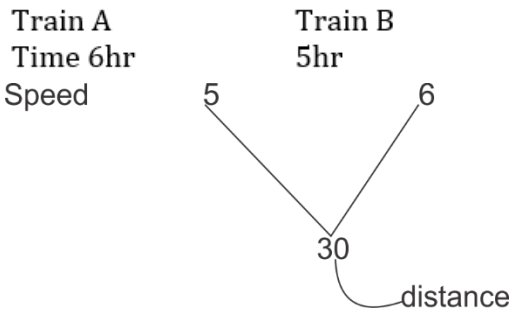


Amount = (25+4) 420

= 12180 Rs

S18. Ans.(d)

Sol.



Train a cover 10 km in 2hr

30-10

20-

Relative speed = 6+5

Time for meeting = $\frac{20}{11}$

= $1\frac{9}{11}$

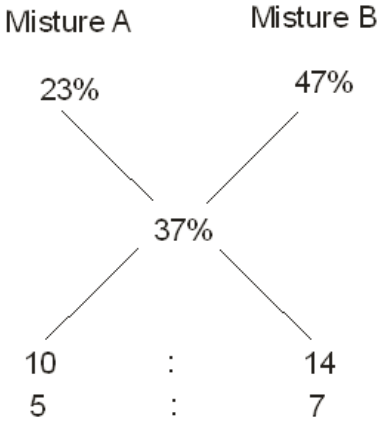
=1 hr 49 minute

Time = 11+ 1hr 49

= 12: 49 pm.

S19. Ans.(d)

Sol.

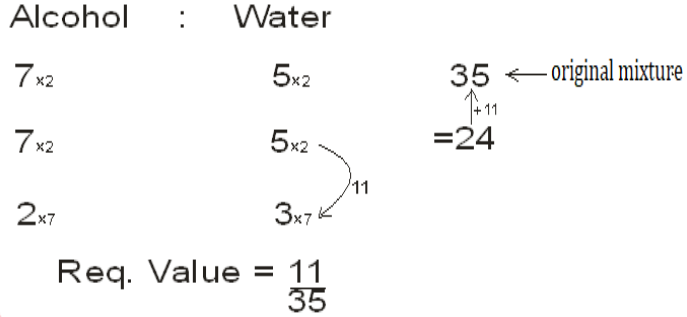


S20. Ans.(d)

Sol. Unit digit of given function is zero, because there are (2×5).

S21. Ans.(a)

Sol.



Req. Value = $\frac{11}{35}$

Alternative mathod -

Req. fraction = $\frac{11}{35}$

S22. Ans.(d)

Sol.

$AM = \frac{x+y}{2} = 5$

$x + y = 10$ .....(i)

$GM = \sqrt{xy} = 4$

$xy = 16$ ....(ii)

$x = 8, y = 2$

S23. Ans.(b)

Sol. Work done by A in 1 day = $\frac{1}{40}$ units

Work done by A in 5 days= $5 \times \left(\frac{1}{40}\right) = \frac{1}{8}$ *units*

Remaining work = $1 - \frac{1}{8} = \frac{7}{8}$ *units*

Work done by B in 1 day = $\frac{7}{8\times21} = \frac{1}{24}$ *units*

Work done by both A and B in 1 day = $\frac{1}{40} + \frac{1}{24} = \frac{1}{15}$

Required no. of days = $\frac{1}{\frac{1}{15}} = 15$ *days*

S24. Ans.(d)

Sol. Time taken by A =(x+8) hours

Time taken by B = $(x+\frac{9}{2})$ hours

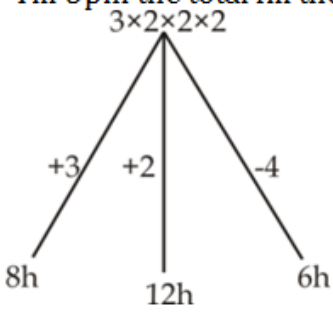
Work done together in one hour = $\frac{1}{x+8}+\frac{1}{x+\frac{9}{2}}$

Required no. of hours = x = $\frac{\left[(x+8)\left(x+\frac{9}{2}\right)\right]}{\left[2x+\frac{25}{2}\right]} = 6\ hours$

S25. Ans.(b)

Sol.

Till 3pm the total fill the tank = 6 + 2 = 8



& total capacity = 24

So remaining capacity = 16

& req. time = $\frac{16}{3+2-4}=\frac{16}{1}$ = 16 hours

So, time = 3pm + 16 hour = 7 a.m

S26. Ans.(c)

Sol.

Total work= 124 × 120 = 14880 men days

Work completed in 64 days = $\frac{2}{3}\times$ 14880 men days

= 9920 men days

Remaining work for remaining 60 days

= (14880 – 9920) men days

= 4960 men days

$\Rightarrow \frac{120\times64}{9920}=\frac{M_2\times60}{4960}$

M_2 = 64

So, workman reduced = 120 – 64 = 56

S27. Ans.(c)

Sol.

let the speed of train on level terrain = x km/h

And mountainous terrain = (x – 10) km/h

mountainous ←111 km→ level ←188 km→

$\frac{188}{x}+\frac{111}{x-10}=7$

x = 47 km/hr

S28. Ans.(d)

Sol.

Speed of train 20% faster than the car

So, 6(t – 12.5) = 5t

t = $1\frac{1}{4}$ hr

Speed of car = $\frac{75}{t}=\frac{75}{\frac{5}{4}}=60$ km / hr

S29. Ans.(b)

Sol.

Speed in stationary water = $\frac{2+6}{2}$ = 4 km/hr

Req. time = $\frac{5}{4}$ = 1 hr 15 min

S30. Ans.(d)

Sol.

No. of students = x and avg. weight = y

$\frac{xy+50}{x+1}=y+1$

x + y = 49 .....(i)

$\frac{xy+50+50}{x+2}=y+1.5$

1.5x + 2y = 97 .....(ii)

y = 47

S31. Ans.(a)

Sol.

Ratio → 30,000 × 12 : 40,000 × 8 : 50,000 × x

= 36 : 32 : 5x

C's share = $\frac{5x}{36+32+5x}=\frac{15000}{49000}$

$x = 6$

C joined the business (6 – 4) = 2 months after joining B.

S32. Ans.(a)

Sol.

From question, $\frac{35x+5\times32}{x+5}=34$

$x = 10$

S33. Ans.(d)

Sol.

from Question –

$\frac{12.4x+26}{x+4}=12.2$

$x = 114$

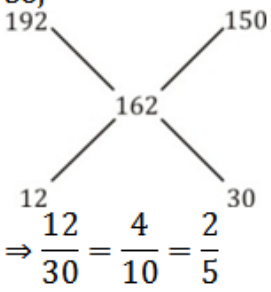
S34. Ans.(c)
Sol.
$\frac{2}{5}A+40=\frac{2}{7}B+20=\frac{9}{17}C+10=x$
$\because \frac{5}{2}(x-40)+\frac{7}{2}(x-20)+\frac{17}{9}(x-10)=600$
$x=100$
So, A's share $=\frac{5}{2}(100-40)=150$

S35. Ans.(a)
Sol.
$$\frac{(3^5)^{0.13}\times(3^5)^{0.07}}{(7)^{0.25}\times(7^2)^{0.075}\times(7^3)^{0.2}}=\frac{3^{(0.65+0.35)}}{7^{(0.25+0.150+0.6)}}=\frac{3}{7}$$

S36. Ans.(a)
Sol.
Ratio of total amount from 1st& 2nd class passengers
$=3\times1:1\times50=3:50$
So, amount collected from 2nd class passengers
$=\left(\frac{50}{53}\times1325\right)=1250$

S37. Ans.(c)
Sol.
Ratio of amount to = 5 sons : 4 daughter : 2 Nephews.
$\Rightarrow 25x:16x:2x=8600$
$x=200,$
Req. money to each daughter = 4 × 200 = 800

S38. Ans.(a)
Sol.
120% of 194.40
$x=\frac{194.40}{120}\times100=162$
So,



$\Rightarrow\frac{12}{30}=\frac{4}{10}=\frac{2}{5}$

S39. Ans.(a)
Sol.
2% of x =15
100% = 750

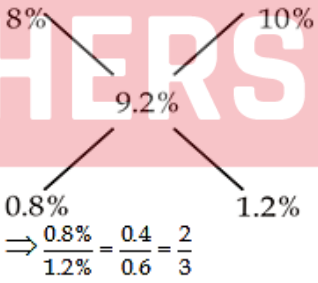
S40. Ans.(c)
Sol.
$525=P\left[\left(1+\frac{10}{100}\right)^2-1\right]$
P = 2500
A.T.Q, n = 4 years, $r_1=5\%$
S.I.$=\frac{2500\times5\times4}{100}=500$

S41. Ans.(a)
Sol.
$x+2y=800$ .....(i)
$x+6y=1600$ .....(ii)
$x=400, y=200$
Cost price of 12 shirts = 12 × 200 = 2400

S42. Ans.(a)
Sol.
Successive % of 30% and 20% = 44% discount
From question –
$(100-44)\%$ of$x=2240$
$x=4000$

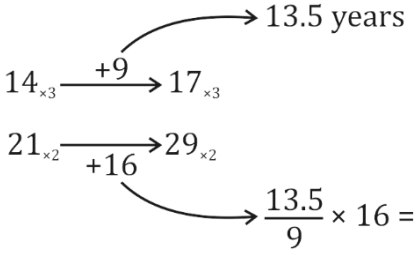
S43. Ans.(c)
Sol.
$\frac{P\times2\times4}{100}+\frac{P\times4\times6}{100}+\frac{P\times3\times8}{100}=1120$
P = 2000

S44. Ans.(a)
Sol.

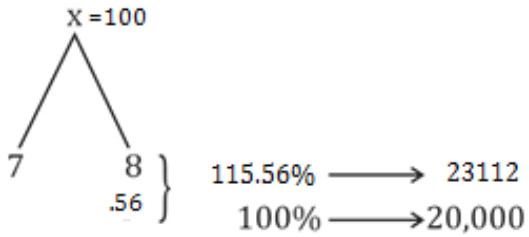


$\Rightarrow\frac{0.8\%}{1.2\%}=\frac{0.4}{0.6}=\frac{2}{3}$
So, 4000 & 6000/-

S45. Ans.(b)
Sol.



S46. Ans.(c)
Sol.



S47. Ans.(b)
Sol. Let usual speed S km/hr

$D = \frac{S(S+10)}{10} \times 1 = \frac{(S+10)(S+20)}{10} \times \frac{3}{4}$

$4S = 3S + 60$

$S = 60$ km/hr

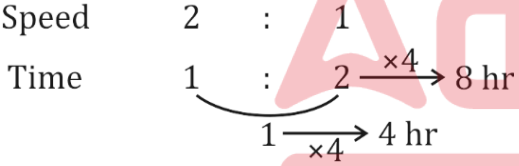
$D = \frac{60 \times 70}{10} = 420$ km/hr

S48. Ans.(b)
Sol. Speed of up stream $= \frac{900}{12 \times 60} \times \frac{18}{5} = 4.5$ km/hr

Speed of down stream $= \frac{900}{9 \times 60} \times \frac{18}{5} = 6$ km/hr

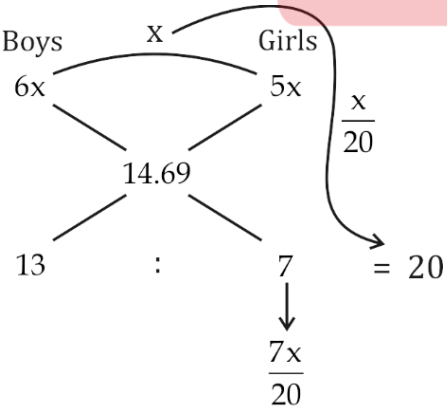
Speed of person $= \frac{10.5}{2} = 5\frac{1}{4}$ km/hr

S49. Ans.(a)
Sol.



Speed of train A $= \frac{416}{8} = 52$ km/hr

S50. Ans.(c)
Sol.



$6x - \frac{7x}{20} = 14.69$

x = 2.6

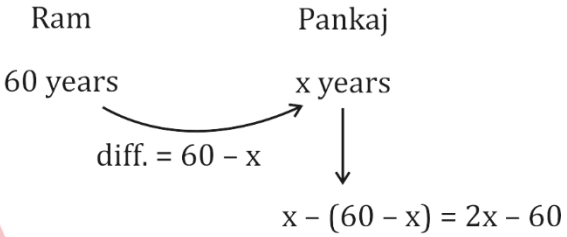
Required average = 5 × 2.6 = 13 years.

S51. Ans.(b)
Sol. $X = \sqrt{3.6 \times 0.9} = 1.8$

$Y = \frac{8 \times 8}{4} = 16$

Y – X = 16 – 1.8 = 14.2

S52. Ans.(d)
Sol.

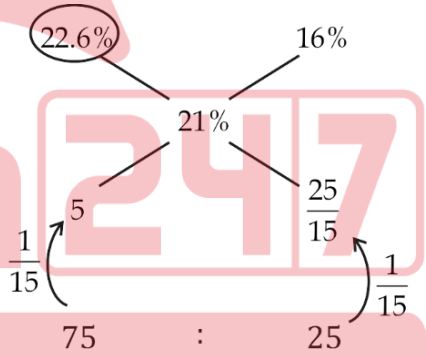


ATQ,

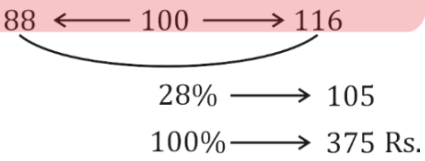
60 = 3 (2x – 60)

x = 40 years

S53. Ans.(b)
Sol.



S54. Ans.(b)
Sol.



Required % $= \frac{-25}{375} \times 100$

$= 6\frac{2}{3}\%$ loss

S55. Ans.(d)
Sol.

$\%\ error = \frac{\frac{9x}{13} - \frac{11x}{39}}{\frac{11x}{39}} \times 100$

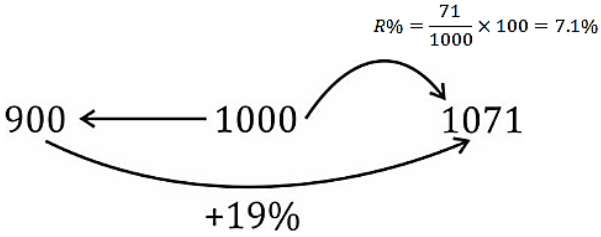
$= \frac{16}{11} \times 100 = 145.45\%$

S56. Ans.(b)
Sol.

$\text{Req\%} = \frac{\frac{1}{5}-\frac{1}{7}}{\frac{1}{7}} \times 100$

$= \frac{2}{5} \times 100 = +40\%$

S57. Ans.(c)
Sol.



S58. Ans.(b)
Sol. 160 × 9 + x +181 × 7 = 17 × 180
1440 + x +1267 = 3060
X = 3060 – 2707 = 353

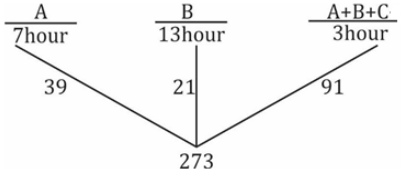
S59. Ans.(b)
Sol.

25	:	27
2	:	3
50	:	81

$\frac{31}{50} \times 100 = 62\%$

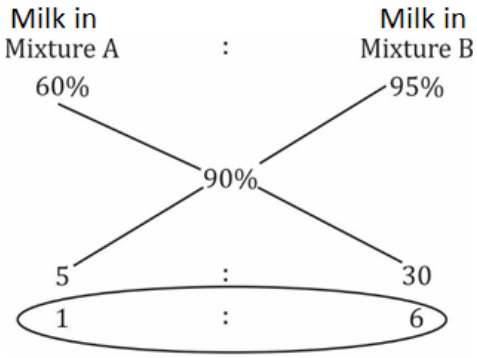
S60. Ans.(d)
Sol.
Total work = 25 × 60 = 1500
Work done in 80 day = 80 × 15 = 1200
Remaining work = 300
300 = 25x
x = 12 days.

S61. Ans.(a)
Sol.



Efficiency of C = 91-(39+21)
=31
Req. time = $\frac{273}{31} = 8\frac{25}{31}$ *hour*

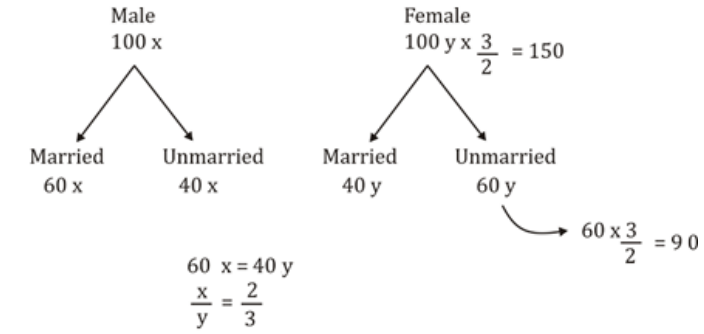
S62. Ans.(c)
Sol.



S63. Ans.(c)
Sol. Let Cost price = x
A.T.Q. $\frac{4000-x}{x-3200} = \frac{5}{3}$
$12000-3x = 5x - 16000$
$8x = 28000$
$x = 3500$
Cost price = 3500
Selling Price = 3000.
Loss = 500
$= \frac{500}{3500} \times 100$
$= 14\frac{2}{7}$ % loss.

S64. Ans.(b)
Sol. $\frac{2}{5} \times 37 + \frac{3}{5} \times x = 19\%$
X= 7%

S65. Ans.(c)
Sol.



60 x = 40 y
$\frac{x}{y} = \frac{2}{3}$

Unmarried = $\frac{90+40}{250}$ X 100 = 52%

S66. Ans.(a)

Sol.

$5\% = \frac{1}{20}$) $-19 \longrightarrow 19 \xrightarrow{X18} 342$

$\xrightarrow{X18} 360$

If he not give any discount

$12\% = \frac{3}{25}$

$28 \rightarrow 360$

$1 \rightarrow \frac{360}{28}$

$25 \rightarrow \frac{360}{28} \times 25$

$= 321.42$

S67. Ans.(b)

Sol. $\frac{1+2^2+3^2+4^2+5^2+6^2+7^2}{28}$

$= \frac{1+4+9+16+25+36+49}{28}$

$= \frac{140}{28} = 5$

S68. Ans.(b)

Sol. A + B + C + D = 4 × 35

= 140

A+B = 40×2

= 80

C+D = 30×2

= 60

B's age = 80 – 28

= 52

C's age = 60 – 42

= 18

C + B = 52 + 18

= 70

Avg. = $\frac{70}{2}$ = 35 years

S69. Ans.(c)

Sol. $\frac{52}{55} \times 100$

$= \frac{1040}{11}$

$= 94\frac{6}{11}\%$

S70. Ans.(a)

Sol. Prime no. between 30 and 60 are 31, 37, 43, 47, 53, 59

Avg = $\frac{31+37+41+43+47+53+59}{7}$

$= \frac{311}{7}$

= 44.42

S71. Ans.(c)

Sol. A → $\frac{25}{2}$

$A \rightarrow \frac{25}{2}$ | 75 | 6

$B \rightarrow 18$ | | 5

A+B= $\frac{75}{11} = 6\frac{9}{11}$ days

S72. Ans.(c)

Sol. A B C

4 : 5 : 9

4 + 5 + 9 = 18

18 ——— 141642

x7869

B's Share = $\frac{7869 \times 5}{100} \times 80$

= 31476

S73. Ans.(b)

Sol.

Filling tap → 5

Empty tap → 7

35 → 7, -5

A. T. Q. $(7 - 2\frac{1}{2})$ efficiency

Filling tap and leak open together

$\frac{35}{45}$ x 10

$= 7\frac{7}{9}$ hr

S74. Ans.(a)

Sol.

A → $\frac{53}{3}$

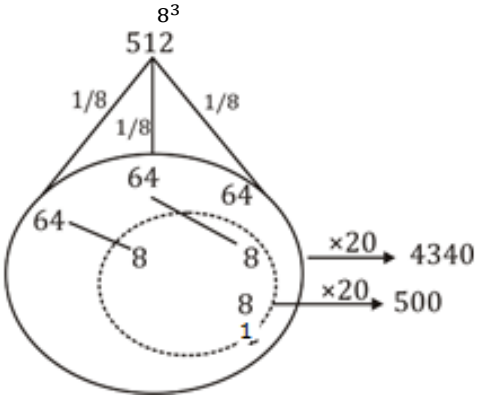
B → $\frac{53}{8}$

53 → 3, 8

4 days work = 4 (8+3)
= 44.
Remaing work = 53 – 44
= 9
$\frac{9}{53}$ work is remaining.

S75. Ans.(c)

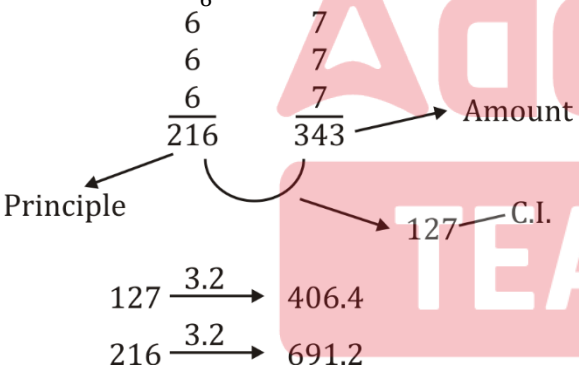
Sol. 12% = $\frac{1}{8}$



CI is 500 Rs. more then SI

S76. Ans.(b)

Sol. 16.66% = $\frac{1}{6}$



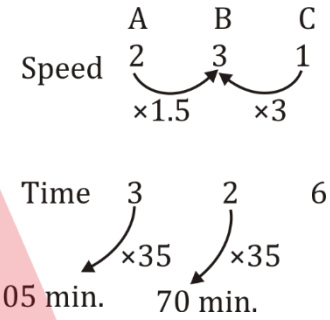
127 $\xrightarrow{3.2}$ 406.4
216 $\xrightarrow{3.2}$ 691.2

S77. Ans.(b)

Sol. Principle = x
Amount = $3x$
A.T.Q. $\frac{x\times12\times t}{100} = 2x$
t=$\frac{100}{12}$
= $16\frac{2}{3}$ years.

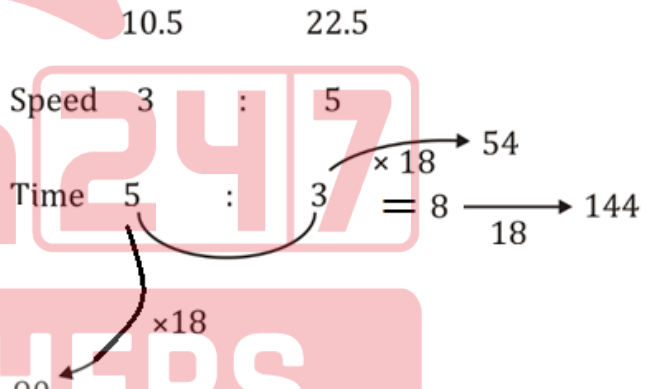
S78. Ans.(b)

Sol.



S79. Ans.(b)

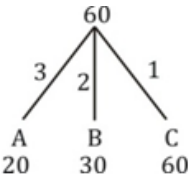
Sol.



Distance = $\frac{105}{10} \times \frac{90}{60}$
= $\frac{105}{10} \times \frac{3}{2}$
= $\frac{315}{20}$
= 15.75 km.

S80. Ans.(c)

Sol.

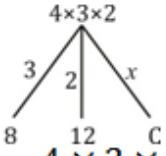


⇒on third day work = 3 × 3 + 2 + 1=12
So, work done in = $\frac{60}{12} \times 3 = 15$ days

S81. Ans.(c)
Sol.
Remaining work $= 5 - \frac{7}{2} = \frac{3}{2}$
$M_1D_1W_2 = M_2D_2W_1$
$280 \times 80 \times \frac{3}{2} = M_2 \times 20 \times \frac{7}{2}$
$M_2 = 480$
So, req. additional men $= 480 - 280 = 200$

S82. Ans.(c)
Sol.
A.T.Q. –
$\frac{M_1D_1}{W_1} = \frac{M_2D_2}{W_2}$
$\Rightarrow \frac{24 \times 25}{\frac{1}{3}} = \frac{12 \times M}{\frac{2}{3}} \Rightarrow M = 100$
So, req. Men $= 100 - 25 = 75$

S83. Ans.(d)
Sol.
Filled by A $= \frac{3}{15} = \frac{1}{5}$
Filled by B $= \frac{2}{12} = \frac{1}{6}$
Part filled till 11 a.m. $= \frac{1}{5} + \frac{1}{6} = \frac{11}{30}$
At 11 a.m. pipe C is opened to empty it.
Part of tank emptied in 1 hour $= \frac{1}{4} - \frac{1}{15} - \frac{1}{12} = \frac{1}{10}$
$\therefore \frac{11}{30}$part will be emptied in $= \frac{11}{30} \times 10 = \frac{11}{3}$ hour
i.e. in 3 hours 40 min = 2 : 40

S84. Ans.(c)
Sol.


$= \frac{4 \times 3 \times 2}{(5 + x)} = 4 \Rightarrow x = 1$
So, A : B : C = 3 : 2 : 1
So, C's share $= \frac{4500}{6} = 750$

S85. Ans.(d)
Sol.
x> y → % gain = $(x^2 - y^2)/y^2$ %

S86. Ans.(d)
Sol.
Amount of milk = 5x
Amount of water = x
(5x / x + 5) = 5/2
x = 5
The quantity of milk = 5x
= 25 litres

S87. Ans.(c)
Sol.
C.P. of clothes sewing machine
= (80) / (10 + 10) x 100
= 400

S88. Ans.(b)
Sol.
Let S.P. of a book = 1
S.P. of 12 books = 12
Profit = S.P. of 4 books = 4
C.P. of 12 books = 12 – 4 = 8
profit % = 4/8 x 100= 50%

S89. Ans.(a)
Sol.
teacher's age = 21*21 – 20*20= 41

S90. Ans.(a)
Sol.
Average speed = 1/3*3L/ L (1/x + 1/y + 1/z) = 1/3*3 / (1/ x + 1/y + 1/ z)
=xyz/ (xy + yz + zx)

S91. Ans.(b)
Sol.
A.T.Q.–
Let age of bride $= x$ year
So, $126 + x + 6 \times 4 + 5 = 180$
$x = 25$ year

S92. Ans.(a)
Sol.
A.T.Q.
$\frac{x+5}{x-3} = \frac{5}{3} \times \frac{15}{20}$
$x = 35$ kmph

S93. Ans.(a)
Sol.
$44 - 4 = 40$, after reading the table of 3, $14 \times 3 = 42$
Thus, in 14^{th} attempt it will cross 40 m.
So, the monkey will climb $14 \times 3 = 42$ meter in first 14×2 min.
To climb rest 2 meter it will take $\frac{2}{4} \times 60$ sec = 30 sec.
So, monkey will reach the top of pole in 28 min 30 sec.

S94. Ans.(c)
Sol.

$$\text{Speed of stream} = \left(\frac{x-y}{2}\right) = 10 \text{ km/h}$$

S95. Ans.(b)
Sol.
Weight of the new student = Original value + no. of students × increase
$= 51 + 50 \times \frac{1}{2} = 51 + 25 = 76$ kg

S96. Ans.(a)
Sol.

Speed	Time
24	2
48	4
72	6
96	8

-24 (72 → 6, 96 → 8) $+2$

∴ Original speed = 96 km/hr
$33\frac{1}{3}\%$ of original speed = $96 \times \frac{1}{3} = 32$ km/hr

S97. Ans.(b)
Sol.

A	B	
3	5	
		7 — 14
$5_{\times 2}$	$6_{\times 2}$	1 — 2
10	12	

	A	B
Present Age's of A and B —	$(3 \times 2) + 4$	$(5 \times 2) + 4$
	10	14

Sum of present ages of A & B = 24.

S98. Ans.(c)
Sol.

CP	SP	P%	
100	320	220	$\frac{64}{220} \times 100 = 29\%$
$\downarrow +25\%$			
125	320	156	

S99. Ans.(a)
Sol. A and C = $\frac{39 \times 17}{11} \times \frac{266}{300} = \frac{176358}{3300} = 53.4$ days

S100. Ans.(d)
Sol. Rate of interest = 8% for 8 monthly compounded $8\% = \frac{2}{25}$

15625
1250 1250 1250
100 100
100
8

CI = 4058

S101. Ans.(c)
Sol.

6	5
3	1
10	9
180	45

Req. % = $\frac{135}{180} \times 100 = 75\%$

S102. Ans.(b)
Sol.

A/9 B/12 C/18
4 3 2
36

Filled in 2 hours = $2 \times 5 = 10$
Req. time = $\frac{26}{1} = 26$ hours

S103. Ans.(c)
Sol. $x^2 = 135 \times 540$
$x = \sqrt{135 \times 540}$
$= 270$

S104. Ans.(c)
Sol.

100 → 223
×15 ×15
1500 3345

S105. Ans.(c)

Sol. Req. Avg. = $\frac{31+37+41+43+47+53+59}{7}$

= $\frac{311}{7}$

= 44.43

S106. Ans.(b)

Sol.

CP 100 ×32678 → 3267800

SP $132\times\frac{87}{100}$

MRP 132

$32678\times132\times\frac{87}{100}$

⇒ Selling price = Rs. 3752741.52

or check by unit digit.

S107. Ans.(c)

Sol. $7^{th} = 8^{th} = 9^{th} = x$

Req. ratio = $\frac{x}{x} = 1 : 1$

S108. Ans.(b)

Sol. $529 = \frac{100\times R^2}{100}$

R = 23%

So Rate of interest = 23%

S109. Ans.(d)

Sol.

A 96.8, B 88, C 100 = 284.8

×200 → 20,000

×200 → 56960

S110. Ans.(d)

Sol.

$\frac{A}{63}$: $\frac{A+B}{36}$

4 : 7

$9\times7\times4$

A : B

4 : 3 = 7

×850 → 2550

×850 → 5950

S111. Ans.(a)

Sol. Let total capacity of pond = 16 unit

On 42th day, water in pond = 16 unit

On 41th day, water in pond = 8 unit

On 40^{th} day, water in pond = 4 unit

On 39^{th} day, water in pond = 2 unit

On 38^{th} day, water in pond = 1 unit

On 38^{th} day pond is filled with $\frac{1}{16}$ of total capacity.

S112. Ans.(a)

Sol.

2800, 1750 → 2150

400 : 650

8 : 13

S113. Ans.(b)

Sol.

Ram	*Pankaj*	*Atul*
7	42	4
12	12	7
3 :	18 :	1 = 22

5060 → 22×5060 =111,320

S114. Ans.(b)

Sol.

$\frac{12\times8\times10}{100} = \frac{18\times D\times7}{70}$

D = $\frac{16}{3}$ days = $5\frac{1}{3}$ days

S115. Ans.(d)

Sol.

Mean proportion = $\sqrt{\frac{49\times169}{100}} = \frac{7\times13}{10}$

=9.1

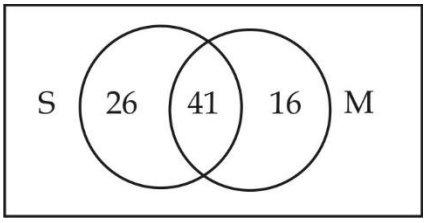
Third proportion $\frac{3}{7} = \frac{7}{x}$

$x = \frac{49}{3}$

$\therefore 9.1 : \frac{49}{3} = 27.3 : 49 = 39 : 70$

S116. Ans.(c)

Sol.



Passed = 100 – (41 + 26 + 16)

Passed = 17%

S117. Ans.(b)

Sol.

Let t be the right time

78(t + 25) = 91(t + 10)

6(t + 25) = 7(t + 10)

150 – 70 = t

t = 80 min

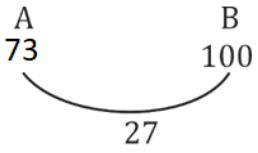
S118. Ans.(b)

Sol.

$\frac{135 \times 22}{9} \times \frac{65}{100} = 214\frac{1}{2}$ days

S119. Ans.(a)

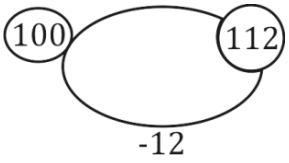
Sol.



$\frac{27}{73} \times 100 = 36.98\%$

S120. Ans.(a)

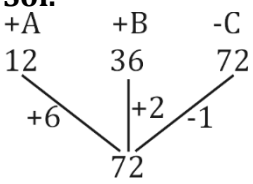
Sol.



$\frac{12}{112} \times 100 = 10.7\%$

S121. Ans.(b)

Sol.



T.W = 72

Remaining work=72-42

Remaining work done by (b+c)

$\therefore \frac{30}{1} = 30$

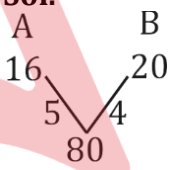
S122. Ans.(c)

Sol.

Loss% = $\frac{xy}{100} = 1.21\%$

S123. Ans.(c)

Sol.



One cycle work done (4+5) in two hours

In 8 cycle work done =9×8

Remaining work 80-72=8

Remaining work 1st done by A in one hour =8-4

Now remaining work done by B = $\frac{4}{5}$hours

Total time to complete the work =16+1+ $\frac{4}{5}$=17 $\frac{4}{5}$hours

S124. Ans.(A)

Sol.

CP	MP	SP
	100×119	73×119
100×73		119×73

11900 -------- 423

1 ---------- $\frac{423}{11900} \times 100 \times 73 = Rs.259.4$

S125. Ans.(b)

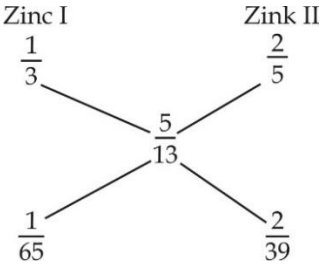
Sol.

4	3
5	4
20	17
400	204

$\frac{196}{400} \times 100 = 49\%$

S126. Ans.(a)

Sol.



S127. Ans.(d)

Sol. $4x - \frac{4}{5} \times 10 = 4x - 8$

$x = \frac{1}{5} \times 10 = x - 2$

$\frac{4x-8}{x-2+10} = \frac{2}{3}$

x = 4

4x = 16 l

S128. Ans.(c)

Sol.

$A : B$

$1 : 2$

$19 : 38 = 57$

Charity

$5\% = \frac{1_{\times 3}}{3_{\times}20}$ — Total Profit

Left Profit $19_{\times 3}$

38 unit ---------- 760

1 unit---------- 20

60 unit----------1200

S129. Ans.(b)

Sol.

$1x = \frac{9x \times R \times R}{100}$

$R = \frac{10}{3}\%$

S130. Ans.(b)

Sol.

$A + B = \frac{1}{30}, B + C = \frac{1}{20}$

$5A + 15B + 18C = 1 \text{work}$

$\Rightarrow 5(A + B) + 10(B + C) + 8C = 1$

$\left(5 \times \frac{1}{30}\right) + \left(10 \times \frac{1}{20}\right) + 8C = 1$

$C = \frac{1}{24}$

So, C will completed work in 24 days.

S131. Ans.(c)

Sol. Part of tank filled by A in 1 hr. $= \frac{1}{2}$

Part of tank filled by B in 1 hr. $= \frac{1}{6}$

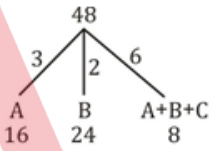
ATQ, $\frac{1}{2} + t\left(\frac{1}{2} + \frac{1}{6}\right) = 1$

$= \frac{1}{2} + t\left(\frac{2}{3}\right) = 1$

$t = \frac{3}{4}\ hr. or\ 45\ mins.$

S132. Ans.(c)

Sol.



So, C's efficiency = 1

So, A : B : C = 3 : 2 : 1

So, C's share $= \frac{1}{6} \times 960 = 160$

S133. Ans.(b)

Sol.

Total salary of 3 years

$= (380 \times 9 + 420 \times 12 + 460 \times 12 + 500 \times 3)$

$= 15480$

Average monthly salary $= \frac{15480}{36} = 430$

$\therefore$ Amount of pension $= \frac{430}{2} = 215$

S134. Ans.(b)

Sol.

Ratio of equivalent capitals of A and B for 1 month

$= (100000 \times 36 : 200000 \times 24)$

$= 3 : 4$

Req. diff.$= \left(\frac{4}{7} - \frac{3}{7}\right) \times 84000 = 12000$

S135. Ans.(b)

Sol.

A.T.Q.

No. of brown socks = x

Price of brown socks = y

Price of black socks = 2y

So, $4y + x \times 2y = \frac{150}{100}(4 \times 2y + xy)$

$4 + 2x = \frac{3}{2}(8 + x)$

$x = 16$

Req. ratio = 4 : 16 = 1 : 4

S136. Ans.(d)

Sol.

	Milk	*Water*
Mix I	$4_{\times 4} = 16$	$1_{\times 4} = 4$
Mix II	9	11

Now, *Mix I* $\times 3$ *and Mix II* $\times 2$

We get Mix I : Mix II = 66: 34 or 33: 17

S137. Ans.(b)

Sol.

Speed of cyclist = x km/h.

Time taken by the motorist to cover half of the AB

$= \frac{18}{2 \times (x+15)} = \frac{9}{x+15}$

New speed = $(x+15) \times \frac{80}{100} = \frac{4(x+15)}{5}$ km/hr.

Time taken by the motorist to cover the remaining half distance

$= \frac{9 \times 5}{4(x+15)} = \frac{45}{4(x+15)}$ hr

Total time taken by the motorist to reach B $= \frac{9}{x+15} + \frac{1}{2} + \frac{45}{4(x+15)}$ hr

A.T.Q.

$\frac{18}{x} - \frac{9}{x+15} - \frac{1}{2} - \frac{45}{4(x+15)} = \frac{1}{4}$

After solving this,

$x = -30, 12$

So, speed of cyclist = 12 km/hr.

S138. Ans.(c)

Sol.

Ratios $\rightarrow 20 \times 1 : 16 \times 1 : 2 \times 3$

$= 20 : 16 : 6$

$\Rightarrow (20 + 16 + 6)R = 42$

So, Distance covered by sea $= \frac{3990}{42} \times 16 = 1520$ km

S139. Ans.(b)

Sol.

A.T.Q. $\Rightarrow \frac{2x}{\frac{15}{2}+y} = \frac{x}{\frac{15}{2}-y}$

$y = 2.5$ kmph

S140. Ans.(a)

Sol.

$50x - 30 \times 100 = 45x$

$x = 600$

S141. Ans.(d)

Sol.

Ratio of the equivalent capitals of A & B for 1 month

$= \left(x \times 10 + \frac{3x}{4} \times 2\right) : \left(\frac{3x}{2} \times 8 + \frac{3x}{4} \times 4\right)$

= 23 : 30

A's share $= \frac{23}{53} \times 53000 = 23000$

S142. Ans.(a)

Sol

SP = CP + Profit

$2790 = x + \frac{10}{100}x \Rightarrow x = 2700$

For 2nd cooler,

SP = 2970

Loss = 10%

$2970 = y - \frac{10}{100}y$

$y = 3300$

Total cost price for coolers = 2700 + 3300 = 6000

Total selling price for two coolers = 2970 + 2970 = 5940

Loss $= \frac{60}{6000} \times 100 = 1\%$

S143. Ans.(b)

Sol.

C.P. of $\frac{1}{3}$ of wheat $= \frac{2400}{3} = 800$

S.P. of $\frac{1}{3}$ of wheat $= \frac{105}{100} \times 800 = 840$

C.P. of total wheat = 2400

Req. S.P. of total wheat $= \left(\frac{110}{100} \times 2400\right) = 2640$

C.P. of remaining $\frac{2}{3}$ of wheat $= \frac{2}{3} \times 2400 = 1600$

Profit % $= \frac{1800-1600}{1600} \times 100 = 12.5\%$

S144. Ans.(b)

Sol.

S.I. after five years $= \frac{\text{Principal} \times \text{Time} \times \text{rate}}{100} = 6000$

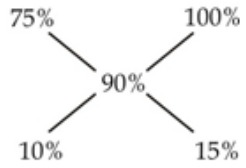
Interest earned = 2680

Rate $= \frac{2680 \times 1000}{12000 \times 3} = 7\frac{4}{9}\%$

S145. Ans.(a)
Sol.

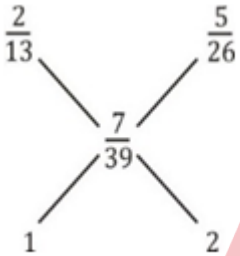
$$P = \frac{x(100)^3}{r^2.(r+300)}$$
$$x = 608, r = 4\%$$
$$P = \frac{608\times100\times100\times100}{4\times4\times(4+300)} = 1,25,000$$

S146. Ans.(c)
Sol.



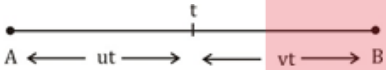
Quality of milk to be added $= \frac{3}{2} \times 6 = 9$ liters

S147. Ans.(c)
Sol.



So, ratio = 1 : 2

S148. Ans.(a)
Sol.



Dis. Covered by x in t hours = ut km
Dis. Covered by y in t hours
= vt km
AB = l = ut + vt _____ (1)
Now, x has to cover rest distance vt which he completed in t_1 hours, $vt = ut_1$
Same way for y, $ut = vt_2$

$$\frac{vt}{ut} = \frac{ut_1}{vt_2}$$
$$v = u.\sqrt{\frac{t_1}{t_2}}$$

Dis. From A to B $= ut_1 + vt_2$

$$= ut_1 + vt_2 = ut_1 + u\sqrt{\frac{t_1}{t_2}}.t_2$$
$$= u\,t_1 + \sqrt{t_1 t_2}u$$
$$= u\sqrt{t_1}(\sqrt{t_1} + \sqrt{t_2})$$

S149. Ans.(a)
Sol.

% Profit of the second shopkeeper $= \frac{(138-120)\times100}{120} = 15\%$

S150. Ans.(b)
Sol.

$$4x - 2(75 - x) = 150$$
$$x = 50$$

S151. Ans.(a)
Sol.

$$x \times \frac{30}{100} + 5 = x \times \frac{40}{100} - 10 \Rightarrow x = 150$$

Min marks req. to pars $= \frac{150\times30}{100} + 5 = 50$

S152. Ans.(a)
Sol.

$$1 \xrightarrow{9} 3 \xrightarrow{9} 9 \xrightarrow{9} 27 \xrightarrow{9} 81 \xrightarrow{9} 243$$

9x5 = 45 years

S153. Ans.(d)
Sol.

$$\frac{m+m+1+m+2+m+3+m+4}{5} = n$$

M+2=n
M=n-2

$$\frac{m+2+m+3+m+4+m+5+m+6+m7}{6}$$

$$\frac{2m+9}{2} = \frac{2(n-2)+9}{2} = \frac{2n+5}{2}$$

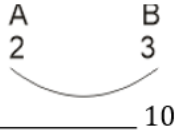
S154. Ans.(c)
Sol.

(A+B)x48 = ax120

$$\frac{A+B}{A} = \frac{60}{48} = \frac{5}{2}$$

T. W=5x48 = 240

Efficiency -



1 _____ 10
240 _____ 2400

S155. Ans.(d)

Sol.

Ax48=Bx36

$\frac{A}{B} = \frac{3}{4}$

T. W= 144

Work done by B = 4x25+2=102

Work left = 42

Work done by A = $\frac{42}{3}$= 14 min

S156. Ans.(c)

Sol.

Ram	Rohit	Sam	Rohan	Ravi
x-25	x	x-45	75	
85	110	65		119

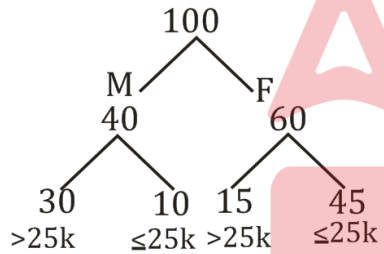
+34

M.M = 169

$\frac{119}{169} \times 100 = 70\%$

S157. Ans.(b)

Sol.



$\frac{45}{60} = \frac{3}{4}$

S158. Ans.(b)

Sol.

A	B
2(20-x)	2x
2(a(20-x)) = 2(B+x)	
$\frac{A}{B} = \frac{x}{20-x}$	
$\frac{2(x)\,x(20-x)}{20} = \frac{15}{2}$	
	x = 5
$\frac{2(5)(15)}{5} = 30$	

S159. Ans.(c)

Sol. 42.84% = $\frac{3}{7}$

6.25% = $\frac{1}{16}$

CP	SP
7x3	10x3
16x2	15x2
CP	SP
21	30
32	30
53	60

7

Loss% = $\frac{7}{53} \times 100 = 13.20\%$

S160. Ans.(d)

Sol.

	Downstream	:	upstream
	62		48
S	31	:	24
T	24	:	31
	x 16		x 16
	384		496

$\frac{496}{60} = 8.2hrs$

S161. Ans.(a)

Sol.

$\frac{CP}{MP} = \frac{100-D\%}{100+P\%} = \frac{100-30}{100+5} = \frac{70}{105}$

CP = 70, MP = 105

$x = \frac{MP-CP}{CP} = \frac{105-70}{70} = \frac{35}{70}$

$x\% = \frac{35}{70} \times 100 = 50\%$

S162. Ans.(d)

Sol.

Suppose B = 100 then A = 128

$C = \frac{75}{100}(A+B) \Rightarrow C = \frac{3}{4}(A+B)$

$= \frac{3}{4} \times (128+100)$

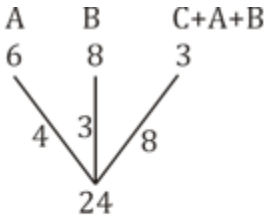
$= \frac{3}{4} \times 228 = 171$

A	:	B	:	C
128	:	100	:	171

+43

$= \frac{43}{128} \times 100 = 33.59 = 33.6\%$

S163. Ans.(a)
Sol.



A : B : C
4 : 3 : 1
$C = \frac{1}{8} \times 1848 = 231$

S164. Ans.(b)
Sol.

	A		B
S =	40	:	60
D =	2	:	3

5 → 800
1 → 160
Distance from station A = 2 × 160 = 320km

S165. Ans.(c)
Sol. a : b = 3 : 2
(5a + 2b) : (3a + 4b)
(15 + 4) : (9 + 8)
19 : 17

S166. Ans.(b)
Sol.
50 student average – 64

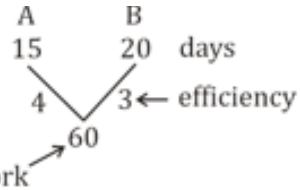
T	F
83	38
24	42
107	80

27
$\Rightarrow \frac{27}{50} = 0.54$
Correct average = 64.54

S167. Ans.(d)
Sol.

20	17
10	9
200	153
×4.2 ↓	×4.2 ↓
840	642.60

S168. Ans.(c)
Sol.



4(A + B) + 8C = 60
28 + 8C = 60
C = 4
Time taken by $C = \frac{60}{4} = 15$ days
Ratio of days taken by A : B : C = 15 : 20 : 15 = 3 : 4 : 3
Ratio of efficiency $= \frac{1}{3} : \frac{1}{4} : \frac{1}{3} = \frac{12}{3} : \frac{12}{4} : \frac{12}{3} = 4 : 3 : 4$

Total work = Efficiency × Days worked
Total work done by A = 4 × 4 = 16
Total work done by B = 3 × 4 = 12
Total work done by C = 4 × 8 = 32

16 + 12 + 32 → 6000
60 → 6000
1 → 100

Total income of A = 100 × 16 = 1600
Total income of B = 100 × 12 = 1200
Total income of C = 100 × 32 = 3200

One day income of $A = \frac{1600}{4} = 400$
One day income of $B = \frac{1200}{4} = 300$
One day income of $C = \frac{3200}{8} = 400$

S169. Ans.(a)
Sol.

for A → 60% = $\frac{3}{5}$ ← Expenditure, ← Income) 2 ×4 8
Saving — 8 unit
Similarly.
for B → 80% = $\frac{4}{5}$) 1 — 6 ×6 = 30 unit
for C → 75% = $\frac{3}{4}$) 1 — 9 ×9 = 36 unit

	A	B	C
Saving	8	6	9
Income	20	30	36

total income = 86 unit = 5160
1 unit = 60
Income of A = 20 × 60 = 1200 rupees

S170. Ans.(c)

Sol.

Let total capital is 6 units

then,	A	B	C
ratio of capital	1	2	3
ratio of time	4	3	12
ratio of their profit	4	6	36

Total profit = 46 unit = 69000

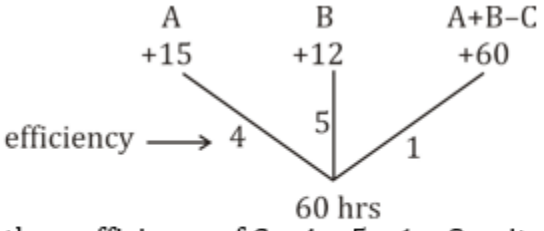
1 unit = 1500

Share of B is = 6 unit × 1500

= 9000 Rupees.

S171. Ans.(c)

Sol.



then, efficiency of C = 4 + 5 – 1 = 8 unit

C will empty the tank = $\frac{60}{8} = \frac{15}{2}$ hrs

S172. Ans.(b)

Sol.

Let maximum marks = x

then, 30% of x + 240 = 55% of x – 350

or, 25% of x = 590

$x = \frac{590\times100}{25} = 2360$

then, passing marks = $2360 \times \frac{30}{100} + 240$

= 708 + 240

= 948

S173. Ans.(a)

Sol.

LCM + HCF = 666 ...(i)

LCM – HCF = 518 ...(ii)

Add (i) and (ii)

2 × LCM =1134

LCM = 592

Subtract (i) and (ii)

2 × HCF = 148

HCF = 74

Let numbers are 74x and 74y

then, LCM = 74xy = 592

xy = 8

and 74x + 74y = 444

or $x + y = \frac{444}{74}$

x + y = 6

then, x = 4 and y = 2

actual numbers = 74 × 4 = 296

and 74 × 2 = 148

S174. Ans.(c)

Sol.

$30\%\ T_1 + 20\%\ T_2 = P$

$20\%\ T_1 + 30\%\ T_2 = P - 30$

$10\%\ T_1 - 10\%\ T_2 = 30$

$T_1 - T_2 = 300$

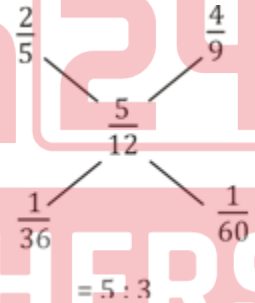
given that $T_1 + T_2 = 1700$

then, $T_1 = 1000$

$T_2 = 700$

S175. Ans.(c)

Sol.



= 5 : 3

S176. Ans.(d)

Sol.

Time difference = 15 min or $\frac{15}{60}$ hrs

Distance, $D = \frac{20\times40}{20} \times \frac{15}{60} = 10$ km

S177. Ans.(b)

Sol.

Let average of 16 innings = x

then, 16x + 80 = (x + 3) × 17

16x + 80 = 17x + 51

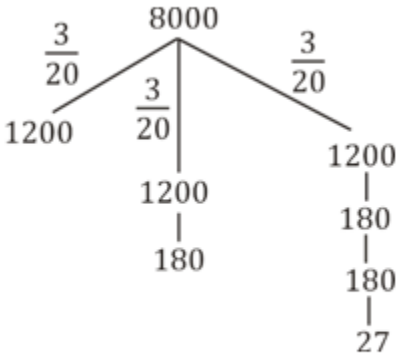
x = 29

current average = 29 + 3 = 32

S178. Ans.(d)

Sol.

$15\% = \frac{3}{20}$ Let principle = 8000



total CI = 4167 unit ×1 = 4167

then actual principle = 8000

Now, S.I $= \frac{8000\times15\times24}{5\times100} = 5760$Rs.

S179. Ans.(d)

Sol.

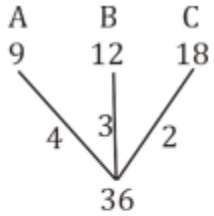
Discount – 20%, Profit – 16%

CP	:	MP
80		116
↓		↓
425		616.25

then $\boxed{\text{MP} = 616.25 \text{ Rs}}$

S180. Ans.(d)

Sol.



3 day all work together = 27

Remaining work = 36 – 27 = 9

Remaining work completed $= \frac{9}{5}$ days

S181. Ans.(a)

Sol.

We are given total average = 43

First 11 number average = 33

Last 11 number average = 53

then, 21 × 43 = 11 × 33 + 11 × 53 – x

$\Rightarrow \boxed{x = 43}$

S182. Ans.(b)

Sol.

Let total distance = 5x

40% of 5x = 2x , Remaining distance = 3x

Average speed $= \frac{\text{total distance}}{\text{total time}} = \frac{5x}{\frac{2x}{60}+\frac{3x}{40}}$

$= \frac{5x}{\frac{18x}{120}} \Rightarrow \frac{600}{13}$

S183. Ans.(c)

Sol.

We are given

$\frac{x^2}{\frac{1}{x^3}} = \frac{243}{16807}$

$\Rightarrow x^5 = \frac{243}{16807} \Rightarrow x^5 = \left(\frac{3}{7}\right)^5 \Rightarrow \boxed{x = \frac{3}{7}}$

S184. Ans.(b)

Sol.

$\frac{3x+30}{4x+30} = \frac{9}{10}$

30x + 300 = 36x + 270

x = 5

Numbers are = 15, 20

S185. Ans.(a)

Sol.

$\sqrt{10000}:\sqrt{11664} \Rightarrow 100:108$

then, $r = \frac{8}{100} \times 100$

r = 100%

$S.I = \frac{P\times r\times t}{100} = 10000 \times \frac{27}{5} \times 8 \times \frac{1}{100}$

S.I = 4320 Rs.

S186. Ans.(d)

Sol.

	Cu	:	Zn	
A	3	:	4 = 7	×2 ×2
B	5	:	9 = 14	×1 ×3

A — 12 : 16

B — 15 : 27

C — 27 : 43

$\boxed{C = 27 : 43}$

S187. Ans.(b)

Sol.

$\frac{4}{5}, \frac{6}{8}, \frac{8}{25}$

$\text{H.C.F} = \frac{\text{H.C.F}}{\text{L.C.M}} = \frac{2}{200} = \frac{1}{100}$

S188. Ans.(c)

Sol.

According to question

$8(A + B + C) = 10(A + B)$

$\Rightarrow \frac{A+B+C}{A+B} = \frac{5}{4}$

Then, C alone will take to fill $\frac{2}{3}$rd of the cistern

$= \frac{5\times12}{1} \times \frac{2}{3} = 40$ hours

S189. Ans.(d)

Sol.

A	B	C
2	5	5
31	31	25
62	155	125

Then the percentage of C's more than A's income

$= \frac{125-62}{62} \times 100 = \frac{63}{62} \times 100 = 101.6$

S190. Ans.(c)

Sol.

MP = 530

After 15%, discount = 450.5

But he sold it in = 396.44

Thus Discount = 54.06

$\text{Discount\%} = \frac{54.06}{450.5} \times 100 = 12,$

Second discount = 12%

S191. Ans.(c)

Sol.

Total questions → 140

Correct answer → $\frac{80\times70}{100} = 56$

Remaining questions = 140 − 80 = 60

need correct answer → $\frac{140\times60}{100} = 84$

Now required correct answer percentage = $\frac{84-56}{60} \times$

$= \frac{140}{3}\% = 46\frac{2}{3}\%$

S192. Ans.(d)

Sol.

$\frac{40n+80}{n+1} = 41$

$40n + 80 = 41n + 41$

$\boxed{n = 39}$

S193. Ans.(c)

Sol.

$\frac{45\text{km}}{\text{h}} = \frac{45\times5}{18} = \frac{25}{2}\text{ m/sec}$

$\text{Time} = \frac{212+188}{\frac{25}{2}} = 32\text{sec}$

S194. Ans.(b)

Sol.

$x \times \frac{2}{3} \times \frac{3}{4} \times \frac{1}{8} = 179$

$x = 179 \times 16$

Now, we have to find out $= 179 \times 16 \times \frac{1}{3} \times \frac{3}{4}$

$= 716$

S195. Ans.(a)

Sol.

$75\% = \frac{3}{4} \rightarrow$ Exp

$\frac{}{4} \rightarrow$ Income

Income	:	Saving	=	Exp	
400	:	100	=	300	27%
↓20%		↓−1%			
480		99	=	381	

S196. Ans.(c)
Sol.

	A	B	C
Amount	$\frac{2}{3}$	$\frac{3}{5}$	$\frac{5}{6}$
	20 :	18 :	25
Project	20×8 :	18×12 :	25×12 +25×4

$\Rightarrow$ 260 : 216 : 300
65 : 54 : 75
Total – 194 ×30 5820 Rs
Then c - 75 ×30 2250 Rs.

S197. Ans.(a)
Sol.
Discount → 10%, 5%, 4%,
$\frac{MP\times90\times95\times96}{100\times100\times100} = 98496$
MP = 120000

S198. Ans.(a)
Sol.
$\frac{(20-x)}{(37-x)} = \frac{54-x}{105-x}$
(20-x) (105-x) = (37-x) (54-x)
$2100 - 125x + x^2 = 1998 - 91x + x^2$
34x = 102
x = 3
$Now\ \sqrt{(7x-5)(x+1)} = \sqrt{16\times4} = 8$

S199. Ans.(c)
Sol.
No of natural number $= \frac{999}{5} + \frac{999}{7} - \frac{999}{35}$
= 199 + 142 – 28 = 313

S200. Ans.(d)
Sol.
$M_1 \times d_1 \times t_1 = M_2 \times d_2 \times t_2$
$= \frac{18\times7\times32}{14\times8\times d_2} = 1$
Days = 36

S201. Ans.(d)
Sol.
Total work = (4 + 5 + 3) × 25
= 300
$A + C = \frac{300\times35}{100\times 7} = 15\ days$

S202. Ans.(c)
Sol. 40 students average – 68

T	F
84	48
46	64
130	112

18

Then $\frac{18}{40} = 4.5$
Original Avg = 68 + .45
= 68.45

S203. Ans.(d)
Sol.
$CI - SI = p\left[\frac{r}{100}\right]^2$ for two years
$19.20 = \frac{P\times64}{100\times100}$
P = 3000

S204. Ans.(a)
Sol.
The ratio of in which amount distributed = $\frac{1}{9}:\frac{1}{6}:\frac{2}{27}:\frac{1}{18} = \frac{54}{9}:\frac{54}{6}:\frac{2\times54}{27}:\frac{54}{18} = 6:9:4:3$
So, let the share of A, B, C and D be 6x, 9x, 4x and 3x respectively.
As, ATQ
6x + 4x = 1200 $\Rightarrow 10x = 1200 \Rightarrow x = 120$
So, total amount = 22x = 22 × 120 = $Rs.2640$

S205. Ans.(d)
Sol.
Let the cost price of laptop be 100x.
So, MRP of laptop = 100x + 25% of 100x= 100x + 25x = 125x
So, S.P of Laptop = $125x - 125x \times \frac{40}{100} = 125x - 50x = 75x$
ATQ,
75x = Rs.30000
So, x = $\frac{30000}{75} = 400$
So, MRP = 125x = 125 × 400 = $Rs.50000$

S206. Ans.(a)
Sol.
For finding the value of rate of interest,
$\frac{30000\times r\times2}{100} = 6000 \Rightarrow r = \frac{6000}{600} = 10\%$
Now, Let Payal invested 'P' in the bank at 10% for 4years and get S.I as Rs.5000
So,
$\frac{P\times10\times4}{100} = 5000$
$\Rightarrow P = \frac{5000\times100}{40} = Rs.12500$

S207. Ans.(c)

Sol.

Let the speed of boat be x and speed of stream be y.(in km/hr)

ATQ, (x +y) + (x-y) =80km/hr

So, speed of boat = x = 80/2 = 40km/hr

And, speed of stream = 10km/hr(given)

So, upstream speed = 40-10=30km/hr and downstream speed = 40+10 = 50km/hr

So, Time taken in upstream = $\frac{150}{30} = 5hr$

And, time taken in downstream = $\frac{150}{50} = 3hr$

So, time difference = 5 – 3 = 2hr

S208. Ans.(c)

Sol.

As, Rohit takes 20days to complete $\frac{4}{9}$part of work,

So, Rohit takes $\frac{20\times9}{4} = 45$ days to complete the work.

As, Parul takes 8days to complete $\frac{2}{9}$part of work,

So, Parul takes $\frac{8\times9}{2} = 36$ days to complete the work.

As, Rahul takes 20days to complete $\left(1-\left(\frac{4}{9}+\frac{2}{9}\right)\right) = \frac{1}{3}$part of work,

So, Rahul takes 20 × 3 = 60 days to complete the work.

So, T.W = 180Units (L.C.M of 45,36,60)

So, efficiency of Rohit = $\frac{180}{45} = 4units/day$

Efficiency of Parul = $\frac{180}{36} = 5$units/day

Efficiency of Rahul = $\frac{180}{60} = 3$units/day

So, time taken by all of them to complete work together = $\frac{180}{(4+5+3)} = \frac{180}{12} = 15days$

S209. Ans.(b)

Sol.

Here, distance between home and office = $5 \times 18 = 90km$

Since he has to reduce his usual time by 20%, means that he have to travel same distance in (5 – 20% 0f 5) = 5-1 = 4hr

So, his increase speed = $\frac{90}{4} = 22.5km/hr$

So, % increase in speed = $\frac{22.5-18}{18} \times 100 = \frac{4.5}{18} \times 100 = \frac{450}{18} = 25\%$

S210. Ans.(b)

Sol.

As, average of the first two is less than the third number by 8,

So, $C - \frac{A+B}{2} = 8 \Rightarrow 2C - A - B = 16 \ldots\ldots\ldots\ldots (i)$

And, the average of the last two numbers is greater than first by 10,

$\frac{B+C}{2} - A = 10 \Rightarrow B + C - 2A = 20 \ldots\ldots\ldots\ldots (ii)$

Adding, equation (i) and (ii) we get,

$(2C - A - B) + (B + C - 2A) = 36$

So, $3C - 3A - 36 \Rightarrow C - A = 12$

S211. Ans.(b)

Sol.

Let the cost price for Ram be 100x and selling price for Rahul is 120y

So, S.P for Ram =120x

So, profit of Ram = 120x – 100x = 20x .....(i)

And, Profit for Rahul = $120y \times \frac{20}{100} = 24y$.....(ii)

And C.P of Rahul = 120y – 24y = 96y

ATQ, S.P of both T.V be same,

So, 120x = 120y, x – y =0.....(iii)

So, x =y

Difference in profit of both = 500 (Given)

And, difference between profit from equation (i) and (ii),

24 y – 20 x = 560, 6y – 5x = 140.....(iv)

Solving, equation (iii) and (iv), we get

x = 140 and y = 140

So, C.P of T.V sell by Ram = 100x = Rs.14000

And, C.P of T.V sell by Rahul = 96y = Rs.13440

S212. Ans.(a)

Sol.

Ramesh's mother age when he was born = 35yrs

Ramesh's father's age when his sister born = 42yrs

So, Ramesh's father's ages when he was born

= 42 -3 = 39 yrs

So, difference between ages of parents

= 39 – 35 = 4yrs.

S213. Ans.(b)

Sol. Let the total friend be 10x

So, each friend received 30% of 10x = 3x gifts

So, 3x ×10x=3000⟹x^2=100⟹x=10

So, each friend received = 3x = 30gifts

S214. Ans.(a)

Sol. Solve by option:

When we subtract 5 from each number, we get

10, 12, 30 and 36

So, numbers are in the proportion

5:6::5:6

S215. Ans.(a)

Sol.

40CP = 100SP – 100CP

140CP = 100SP

$\frac{CP}{SP} = \frac{100}{140}$

P% = 40%

S216. Ans.(d)

Sol.

60% of (x – y) = 45% of (x + y)

$\frac{3}{5}(x-y) = \frac{9}{20}(x+y)$

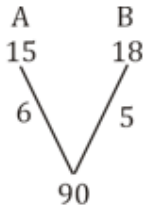
4 (x – y) = 3x + 3y

$x : y = 7 : 1 \Rightarrow \frac{x}{y} = \frac{7}{1}$

$1 = 7 \times \frac{k}{100} \Rightarrow k = \frac{100}{7}$

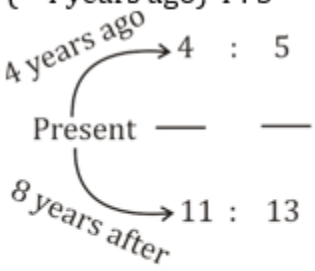
$21\%\ of\ k = \frac{21}{100} \times \frac{100}{7} = 3$

S217. Ans.(a)
Sol.



$\Rightarrow 11 \times 6 = 66$
Remaining = 90 − 66 = 24
Now, C $= \frac{24}{8} = 3$
So, A + C = 3 + 6 = 9
then, A + C working together $= \frac{90}{9} = 10$ days

S218. Ans.(a)
Sol.
(+ 8 years after) 11 : 13
(− 4 years ago) 4 : 5



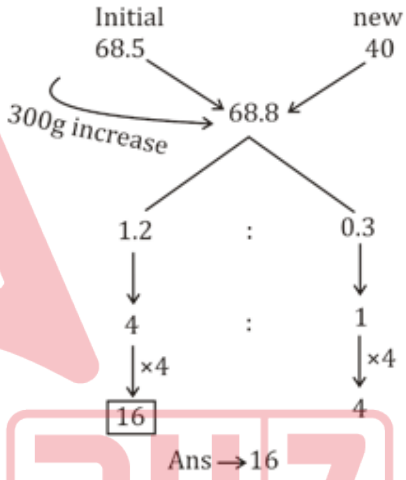
8 : 10
11 : 13) $3 = 12 \Rightarrow 1 = 4$
4 years ago → 32 : 40
Present 36 44
Sum = 80 years

S219. Ans.(c)
Sol.
$\frac{23-x}{39-x} = \frac{32-x}{56-x}$
$\Rightarrow x = 5$
Now (x + 4), (3x + 1) = 9, 16
Mean proportional b/w 9, 16 $= \sqrt{9 \times 16} = 12$

S220. Ans.(b)
Sol.
Rate = 10, 10, 5
by → $a + b + \frac{ab}{100}$
10, 10, 5
21 ← → 21+5+10.5 = 27.05%
27.05% → 1623
1% → 60
100% → 6000 ⇒ Sum = 6000

S221. Ans.(c)
Sol.
Loss → 25%
Profit → 40%
Overall percentage profit /Loss = $a + b + \frac{ab}{100}$
$= -25 + 40 + \frac{(-25)\times 40}{100}$
Profit = 5%

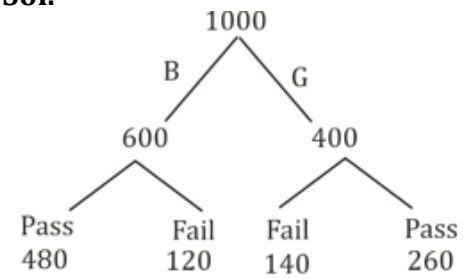
S222. Ans.(b)
Sol.
Avg of 4 new students $= \frac{72.2+70.8+70.3+66.7}{4} = 70$kg



Ans → 16

S223. Ans.(c)
Sol.
we know that
$\frac{S_A}{S_B} = \sqrt{\frac{T_B}{T_A}}$
Now $\frac{S_A}{16.8} = \sqrt{\frac{8}{\frac{49}{8}}} \Rightarrow \frac{S_A}{16.8} = \sqrt{\frac{64}{49}}$
$\frac{S_A}{16.8} = \frac{8}{7} \Rightarrow S_A = 19.2$
Speed of A = 19.2 km/h

S224. Ans.(d)
Sol.



Total Pass = 480 + 260 = 740
$= \frac{740}{1000} \times 100 = 74\%$

S225. Ans.(c)
Sol.

A	B	C	D
89.6	64	160	100

Now check by options

B	D
64	100

−36%

S226. Ans.(a)
Sol.

	A	:	B
7 year before	4	:	5
	↓1		↓1
7 year after	5	:	6

1 = 14

Then 7 years before age

	A	:	B
	56	:	70
+7 years +5 years	↓		↓
	68	:	82 ⇒ 34 : 41

S227. Ans.(d)
Sol.

1 shirt (MP) = 1200 $\xrightarrow{15\%}$ 1020

Number of shirt = $\frac{5100}{1020} = 5$

S228. Ans.(a)
Sol.

	Vivek	Vishal
Eff	4	7
Day	7	4
	↓×2	↓×2
s	14	8 ⇒ 8 days

Vishal complete at 8 days.

S229. Ans.(d)
Sol.

A	B
18	24
4	3
72	

A and B together = 7 × 12 = 84

⇒ 84 − 72 = 12

at B = $\frac{12}{3} = 4$

4 minute before ⇒ 12 − 4 = 8 minute

S230. Ans.(b)
Sol.

	Train	:	Car
Speed	13	:	6
	↓×9		↓×9
Speed	117		54

Distance by train = Speed × Time

= 117 × 6 = 702 km

S231. Ans.(a)
Sol.

A : B = 5 : 2

B : C = 1 : 2

Then A : B : C = 5 : 2 : 4

We are given 4 = 1600 ⇒ 1 → 400

Now Salary of A = 5 × 400 = 2000 Rs

S232. Ans.(d)
Sol.

2x × 3x = 8 × 48

$6x^2 = 8 \times 48$

x = 8

Larger number = 3x = 8 × 3 = 24

S233. Ans.(a)
Sol.

Let Principal = 100

100	
10	10
	1

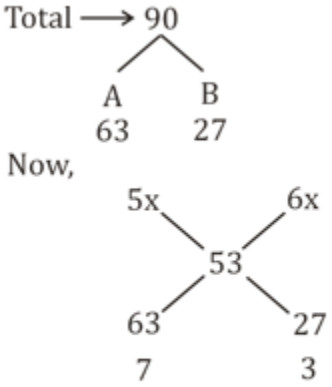
CI = 10 + 10 + 1 = 21 ⇒ 21 → 1522.5

1 → 72.5

Principal = 100 × 72.5 = 7250

S234. Ans.(b)

Sol.



$6x - 53 = 7 \Rightarrow x = 10$

Avg B = 60

S235. Ans.(b)

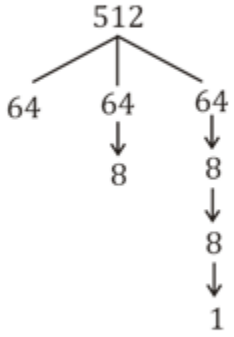
Sol.

$\text{New Rate} = \frac{15}{12} \times 10$

$= \frac{25}{2}\% = \frac{1}{8}$

Time = 3

Let Sum = 512



$512 \rightarrow 4096$

$217 \rightarrow \frac{4096}{512} \times 217$

$= 1736$

C.I = 1736 Rs

S236. Ans.(d)

Sol.

C.P of 40 dozen = 2400

For 25% profit

S.P = 3000

But 30 fruits were rotten & thrown away

he will sell = 480 − 30 = 450

$\text{Rate per dozen} = \frac{3000}{450} \times 12 = 80\text{Rs}$

S237. Ans.(c)

Sol.

Total work = (3 + 5 + 1) × 5 = 45

Left work = 45 − 24 = 21

$c = \frac{21}{1} = 21 \text{ days}$

S238. Ans.(a)

Sol.

$40\% = \frac{2}{5}$

Let income of B =500

$$+25\% \begin{pmatrix} A & B \\ 700 & 500 \\ 875 & 700 \end{pmatrix} +40\% \begin{matrix} = 1200 \\ = 1575 \end{matrix} \Big) 375$$

$= \frac{375}{1200} \times 100 = 31.25\%$

S239. Ans.(c)

Sol.

mean proportional of 4.8 and 10.8

$= \sqrt{4.8 \times 10.8} = 7.2$

third proportional $= \frac{b^2}{a} = \frac{2.4 \times 2.4}{0.4}$

$= 14.4$

$\text{Ratio} = \frac{7.2}{14.4} = 1:2$

S240. Ans.(a)

Sol.

$\text{Stop} = \frac{\text{Difference}}{\text{Average Speed}}$

$= \frac{70 - 56}{70} \times 60 = 12 \text{ minutes}$

S241. Ans.(a)

Sol.

$\frac{a}{b} = \frac{5}{8}$, $\frac{b}{c} = \frac{3}{4}$

a	:	b	:	c
5		8		8
3		3		4
15	:	24	:	32

S242. Ans.(c)
Sol.
Discount → 25%, 15%

MP	SP	
4	3	
20	17	
80	51	⟶ 535.50
	×10.5	

MP = 80 × 10.5 = 840 Rs

S243. Ans.(a)
Sol.
$\frac{7x-40}{5x-40} = \frac{27}{17}$
⇒ 16x = 40 × 10
⇒ x = 25
Sum 7x + 5x = 12x
Sum ⇒ 12 × 25 = 300

S244. Ans.(c)
Sol.
MP = 20000
↓ −20%
16000
↓ −5%
15200
CP = 15200 + 1000 = 16200
SP = 20000
$P\% = \frac{3800}{16200} \times 100$
= 23.46%

S245. Ans.(b)
Sol.

A	B
15	10
2	3
30	

5 unit = 35000
1 unit = 7000
A = 14000, B = 21000

S246. Ans.(c)
Sol.
R% = 11%
For 2 years → $11 + 11 + \frac{11\times11}{100} = 23.21\%$
23.21% → 6963
1% = 300 ⇒ 100% = 30000
P = 30000, $SI = \frac{30000\times11\times2}{100}$
SI = 6600

S247. Ans.(d)
Sol.
A spend = 85%
B spend = 70%
then 15% A = 30% A
$\frac{A}{B} = \frac{2}{1}$
3 unit = 45000
1 unit = 15000
B's salary = 15000

S248. Ans.(a)
Sol.

CP	SP
71 × 100	131 × 71
131 × 100	71 × 131

∴ SP is same
CP = 20200 SP = 18602
Loss = $\frac{1598}{20200} \times 100 = 7.91\%$

S249. Ans.(d)
Sol.
Discount = 20% = $\frac{1}{5}$

MP	SP	
5	4	According to question
↓×45		4 → 180
225		1 → 45

MP = SP = 225
and 20% profit = $\frac{1}{5}$

CP	SP
5	6 → 225

Then CP = $\frac{225}{6} \times 5$ ⇒ CP = 187.5 Rs.

S250. Ans.(b)
Sol.
Let the Income = 300

Now	I	=	E	+	S
	300		200		100
	+14% ↓		+20% ↓		+2% ↓
	342	=	240		102

Hence, savings will increase by 2%.

REASONING ABILITY

S251. Ans.(c)

S252. Ans.(d)
Sol. +1 , -2 , +3 , ……SERIES

S253. Ans.(c)
Sol. $(15)^3$-1 = 3374 & $(16)^3$-1 =4095

S254. Ans.(d)
Sol. Rickets is deficiency diseases caused by vitamin D

S255. Ans.(c)
Sol. LETTER WITH THEIR OPPOSITE LETTER

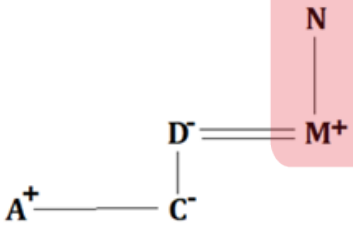
S256. Ans.(b)
Sol. NUMBER WITH A NUMBER WHICH IS ONE LESS THAN ITS SQUARE

S257. Ans.(b)

S258. Ans.(c)
Sol. -2 , -3 , -4 , -5 PATTERN

S259. Ans.(a)
Sol. +6 , +12 , +18, +24 , +30 SERIES

S260. Ans.(d)
Sol.



S261. Ans.(b)
Sol. Let the age of sakhsam , tanu and Raam are X , Y and Z respectively
X – Y = 12 ……(I)
X +5 +Y+7 = 84
X+Y = 72 ……(II)
After solving equation (i) and (ii)
X = 42
Y = 30
Z = 60% OF 30 = 18
After 10 year = 18 +10 = 28

S262. Ans.(b)
Sol. N is not present in given word

S263. Ans.(a)
Sol. +1, +2 , +3 ……SERIES

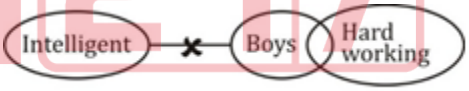
S264. Ans.(d)
Sol. 6 + 12 ÷ 3 x 5
6 + 4 x 5 = 26

S265. Ans.(a)
Sol.
⟶ ÷
% ⟶ x
4 x 24 ÷ 48 = 2

S266. Ans.(b)
Sol. 6 x 9 x 8 = 432

S267. Ans.(d)
Sol. 30 triangles

S268. Ans.(a)
Sol.



S269. Ans.(b)
Sol. 5 is opposite side of 3

S270. Ans.(a)
Sol. 24 people

S271. Ans.(a)

S272. Ans.(a)

S273. Ans.(a)

S274. Ans.(b)

S275. Ans.(d)
Sol. Changes place value of digits in 1^{st} 2^{nd} 3^{rd} to 2^{nd} 3^{rd} 1^{st}

S276. Ans.(c)
Sol. Except (c), all others are operating system of mobile phone

S277. Ans.(d)
Sol. Except (d), all others are places of rajasthan

S278. Ans.(b)
Sol. Except (b), all others are perfect cube root

S279. Ans.(b)
Sol. -1, +1 SERIES

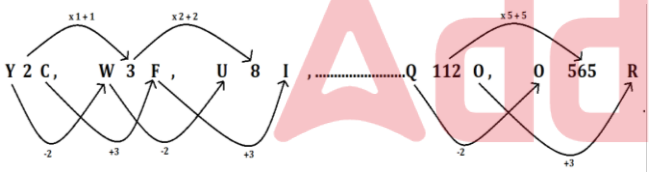
S280. Ans.(c)

S281. Ans.(d)
Sol.

Brother2 —Lady
|
Man = Wife —Brother1

S282. Ans.(a)
Sol. BCD, CDEF , DEFGH , EFGHIJ

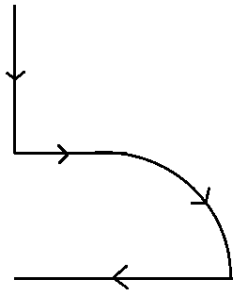
S283. Ans.(a)
Sol.



S284. Ans.(c)
Sol.
$1^2 - 1$, $3^2 - 3$, $5^2 - 5$, ...$11^2 - 11$

S285. Ans.(a)
Sol. SQUARE SERIES

S286. Ans.(a)
Sol.

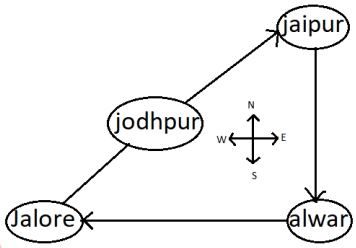


S287. Ans.(d)

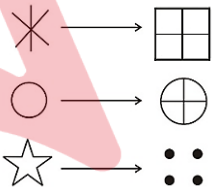
S288. Ans.(c)
Sol. Sum of numbers in each column is 200

S289. Ans.(d)

S40. Ans.(d)
Sol.



S291. Ans.(c)
Sol. Opposite faces are



Option (c) is not possible

S292. Ans.(c)
Sol. A, B, G

S293. Ans.(d)

S294. Ans.(d)

S295. Ans.(d)

S296. Ans.(d)

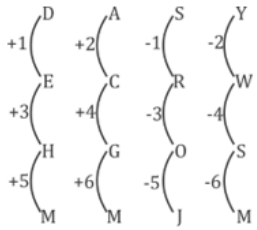
S297. Ans.(b)
Sol. X0.5, x1, x2, x4, x8 series.

S298. Ans.(c)

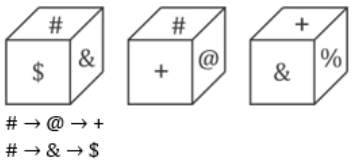
S299. Ans.(d)
Sol. Except (d), all others are tangible devices.

S300. Ans.(d)

S301. Ans.(b)
Sol.



S302. Ans.(a)
Sol.



→ @ → +
→ & → $

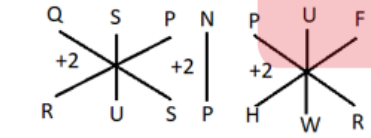
S303. Ans.(b)
Sol. Delay is an antonym of Advance. Similarly, deplete is an antonym of Enrich.

S304. Ans.(b)

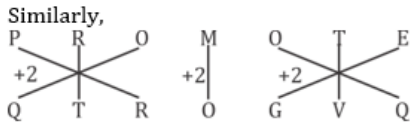
S305. Ans.(c)
Sol. Number: $\{(\text{Number}+1)^2 + \text{Number} - 1\}$
$9 : [(9 + 1)^2 + 9 - 1] \Rightarrow 9 : 108$
Similarly,
$10: [(10+1)^2 + 10 - 1]$
$= 10: [121 + 10 - 1] \Rightarrow 10: 130$

S306. Ans.(d)

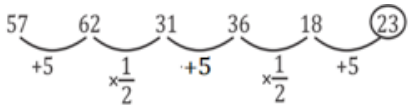
S307. Ans.(b)
Sol.



Similarly,



S308. Ans.(d)
Sol.



S309. Ans.(c)

S310. Ans.(d)
Sol. Let the present age of Riya = x years
Aastik's Present age = 2x
10 years ago, Aastik's age = 2x - 10
A.T.Q.,
2x - 10 = 3(x - 10)
x = 20 years

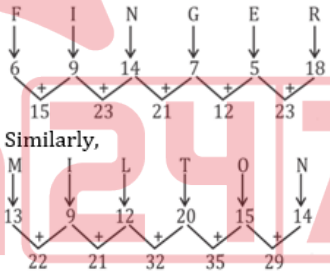
S311. Ans.(a)
Sol. N P R T V W is the correct series.
So, the answer is option (a).

S312. Ans.(b)

S313. Ans.(a)
Sol. $[\text{Number}, (\text{Number} + 1)^2 - 1, (\text{Number} + 2)^2 - 2]$
$\Rightarrow [7, (7 + 1)^2 - 1, (7 + 2)^2 - 2] \Rightarrow [7, 63, 79]$
Similarly,
Option (a) $[5, (5 + 1)^2 - 1, (5 + 2)^2 - 2] \Rightarrow [5, 35, 47]$

S314. Ans.(a)

S315. Ans.(a)
Sol.

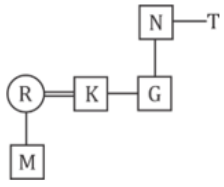


Similarly,

S316. Ans.(d)

S317. Ans.(c)
Sol. Algophobia → fear of pain
Heliophobia → fear of sunlight

S318. Ans.(b)
Sol.

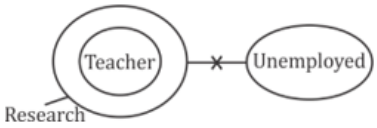


S319. Ans.(c)
Sol. By interchanging 13 and 43.
$731 \div 43 + 450 - 25 \times 13 = 142$
$\Rightarrow 17 + 450 - 325 = 142$
$\Rightarrow 17 + 125 = 142$
$\Rightarrow 142 = 142$

S320. Ans.(c)
Sol. (1+5)×(2+8) = 60
(3+4)×(2+7) = 63
(3+6) × (9+4) = 99

S321. Ans.(b)
Sol.
Number : $(\text{Number})^2$ - (Sum of digits of square)
11 : 121 - 4 = 117 ≠ 119
12 : 144 - 9 = 135 = 135
21 : 441 - 9 = 432 ≠ 440
15 : 225 - 9 = 216 ≠ 228

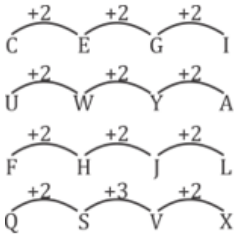
S322. Ans.(a)
Sol.



Conclusion:-
I. ×
II. ✓
III. ×

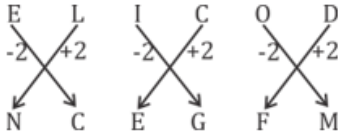
S323. Ans.(b)
Sol. 6, 3, 1, 2, 4, 5

S324. Ans.(d)
Sol.

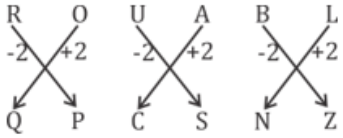


S325. Ans.(b)
Sol. 55 ÷5 +44 ×4 –108 =11+176-108=79

S326. Ans.(b)
Sol.



Similarly,



ROUABL → QPCSNZ

S327. Ans.(c)
Sol.
Logic
(57, 10, 43) → 57 + 43 = $\sqrt{100}$ = Similarly (100, 12, 44) = (100 + 44) = $\sqrt{144}$ = 12
(94, 14, 102) = $\sqrt{94+102}$ = 14
(98, 13, 71) = 98 + 71 = $\sqrt{169}$ = 13
(96, 15, 95) = 96 + 95 = $\sqrt{191}$ ≠

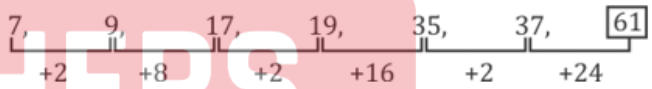
S328. Ans.(a)
Sol.
HBLEAX → ABEHLX
Similarly, - INDERH → DEHINR
(Alphabetical order)

S329. Ans.(a)
Sol.
Logic → (6, 16, 8) → $6 \times 8 = \frac{48}{3} = 16$
Similarly, (5, 15, 9) → $9 \times 5 = \frac{45}{3} = 15$

S330. Ans.(d)
Sol.
Logic → $8^2 = 64 - 5 = 59$
$9^2 = 81 - 5 = 76$
$11^2 = 121 - 5 = 116 \neq 117$
$10^2 = 100 - 5 = 95$

S331. Ans.(a)
Sol.
Logic → $7 : 32 = \frac{(7+1)^2}{2} = \frac{64}{2} = 32$
I $9 : 50 \rightarrow \frac{(9+1)^2}{2} = 50$

S332. Ans.(a)
Sol.



S333. Ans.(d)
Sol.
c c p e p f
Series → c p d f e/c p d f e/c p d f e

S334. Ans.(c)
Sol.
550 + 128 ÷ 16 × 12 - 443 = 203
550 + 96 - 443 = 203
203 = 203

S335. Ans.(a)
Sol.
Two number are 9 and 4
9 - 4 = 5
94 - 49 = 45
Original number = 94

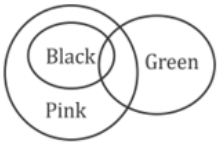
S336. Ans.(c)
Sol.

P $\xrightarrow{+2}$ R N $\xrightarrow{-4}$ J , H $\xrightarrow{+2}$ J L $\xrightarrow{-4}$ H
B $\xrightarrow{+2}$ D E $\xrightarrow{-3}$ B X $\xrightarrow{+2}$ Z U $\xrightarrow{-4}$ Q

S337. Ans.(b)
Sol.

Logic →
SON DAUGHTER
1 + 9 + 1 + 5 + 1 + 4 = 21 4 + 1 + 2 + 1 + 7 + 8 + 2 + 0 + 5 + 1 + 8 = 39
Similarly,
FATHER → 6 + 1 + 2 + 0 + 8 + 5 + 1 + 8 = 31

S338. Ans.(b)
Sol.



S339. Ans.(c)
Sol. Obstacle, Interference and hindrance have the same meaning whereas progress have different meaning.

S340. Ans.(b)
Sol.

Perk → Pick → Pile → Pith → Pour
4, 1, 3, 2, 5

S341. Ans.(c)
Sol.

line → Triangle → Square → Hexagon → octagon
5, 2, 1, 3, 4

S342. Ans.(a)
Sol. Dancer either swimmers or Painter Not both = 9 + 4 + 5 + 10 = 28

S343. Ans.(c)
Sol. As Death related to illness
Similarly, Success related to Hard work.

S344. Ans.(a)
Sol.

3, 16, 65, 196, 393, 394
3×5+1 16×4+1 65×3+1 196×2+1 393×1+1

S345. Ans.(b)

S346. Ans.(a)

S347. Ans.(d)
Sol.

Opposite face's
3 4 1
↓ ↓ ↓
3 6 2

S348. Ans.(c)

S349. Ans.(a)

S350. Ans.(c)

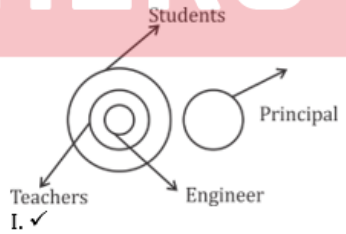
S351. Ans.(d)
Sol. 65 ÷ 5 + 45 × 2 – 30 = 73
$\Rightarrow$ 13 + 90 – 30 = 73
$\Rightarrow$ 103 – 30 = 73
73 = 73

S352. Ans.(a)
Sol. 36 – 10 = $(26)^2 \times 2 = 1352$
29 – 8 = $(21)^2 \times 2 = 882$

S353. Ans.(c)
Sol. (a) 15 $\Rightarrow$ $(15)^2 \times 3 = 675$
(b) 13 $\Rightarrow$ $(13)^2 \times 3 = 507$
(c) 9 $\Rightarrow$ $(9)^2 \times 3 = 243$
(d) 11 $\Rightarrow$ $(11)^2 \times 3 = 363$

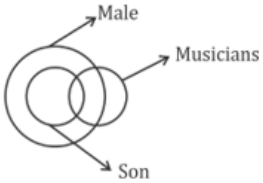
S354. Ans.(d)
Sol. Clearly, the question figure is embedded in figure (d) only.

S355. Ans.(a)
Sol.



I. ✓
II. ✓
III. ✓

S356. Ans.(a)
Sol.



S357. Ans.(b)

Sol. f e m a l e/ f e m a l e/ f e m a l e/f e m a l e

S358. Ans.(b)

S359. Ans.(a)

Sol.

$\Rightarrow (18)^2 + 4 = 328$

$\Rightarrow (21)^2 + 4 = 445$

$\Rightarrow (22)^2 + 4 = 488$

S360. Ans.(c)

Sol. Ist dice $\Rightarrow$ I $\rightarrow$ E $\rightarrow$ A

IIIrd dice$\Rightarrow$ I $\rightarrow$ U $\rightarrow$ 9

S361. Ans.(b)

Sol.

85 19 36 74 146

×2+2 ×2-2 ×2+2 ×2-2

S362. Ans.(d)

Sol. 1, 5, 2, 3, 4

S363. Ans.(a)

Sol.

3 15 15 13 5 14

C O O M E N — 3 Vowels

Opposite

X L L N V M

24 12 12 14 22 13 — Vowels

$(24 + 12 + 12 + 14 + 22 + 13) \times 3$

$= 97 \times 3 = 291$

6 9 24

F I X — 1 Vowels

Opposite

U R C

21 18 3

$(21 + 18 + 3) \times 1 = 42$

Similarly

16 18 15 6 1 14 5

P R O F A N E — 3 Vowels

Opposite

K I L U Z M V

11 9 12 21 26 13 22

$(11 + 9 + 12 + 21 + 26 + 13 + 22) \times 3 = 342$

S364. Ans.(c);

Sol. Except C , all others are capital of states.

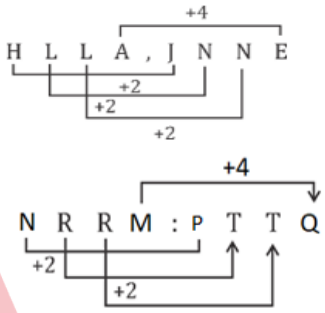
S365. Ans.(a)

Sol. Insomnia indicate sleep and Depression indicate mood.

S366. Ans.(d)

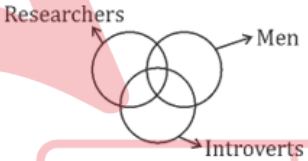
S367. Ans.(a)

Sol.



S368. Ans.(c)

Sol.



S369. Ans.(c)

Sol. $17 - 5 = 12 \times 5 = 60$

$21 - 6 = 15 \times 5 = 75$

$18 - 9 = 9 \times 5 = 45$

S370. Ans.(d)

Sol. (a) $(7)^3 + (7)^2 = 343 + 49 = 392$

(b) $8^3 + 8^2 = 512 + 64 = 576$

(c) $3^3 + 3^2 = 27 + 9 = 36$

(d) $(4)^3 + (4)^2 = 80$

S371. Ans.(a)

Sol.

$\left(23 \times \frac{16}{2} = 184\right)$

In the same way

$\left(27 \times \frac{28}{2} = 378\right)$

S372. Ans.(b)

Sol.

S H A R M A S H A R M A S H A R M A

S373. Ans.(b)
Sol.

S A J I T
↓ ↓ ↓ ↓ ↓
H Z Q R G
↓ ↓ ↓ ↓ ↓
8 26 17 18 7
×2 ×2 ×2 ×2 ×2
16 52 34 36 14

F I X
↓ ↓ ↓
U R C
21 18 3
×2 ×2 ×2
42 36 6

Now,

P L A S T I C
↓ ↓ ↓ ↓ ↓ ↓ ↓
K O Z H G R X
↓ ↓ ↓ ↓ ↓ ↓ ↓
11 15 26 8 7 18 24
×2 ×2 ×2 ×2 ×2 ×2 ×2
22 30 52 16 14 36 48

S374. Ans.(d)
Sol. Except love all belongs to same category.

S375. Ans.(a)
Sol.

I N E R T I A
+6 Opposite -6 Opposite +6 Opposite -6
O M Y I Z R U

Similarly,

P A N C H A L
+6 0 -6 0 +6 0 -6
V Z H X N Z F

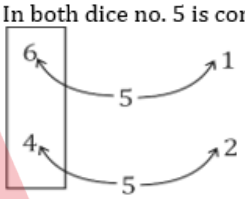
S376. Ans.(b)
Sol.
R → Reverse value → 27 – 18 = 9
E → Reverse value → 27 – 5 = 22
RE = R * E = 9 * 22 = 198
Similarly,
S → Reverse value → 27 – 19 = 8
T → Reverse value → 27 – 20 = 7
ST = 8 * 7 = 56

S377. Ans.(b)
Sol. We know,
Fear of Darkness is known as Scotophobia. Similarly, fear of Hell is known as Stygiophobia.

S378. Ans.(b)
Sol.
All the rows add to 132
→ 43 + 48 + 41 = 132
→ 42 + 44 + 46 = 132
→ 47 + 40 + 45 = 132

S379. Ans.(a)
Sol. G represents the psychiatrists who are clinical Psychologists but not Psychiatric Social Workers.

S380. Ans.(d)
Sol.
In both dice no. 5 is common



S381. Ans.(d)
Sol. In each successive term of the different sections, the letters are changed to a letter occurring two places after in the alphabetical series, and the numbers are changed by adding two to them. A → C 23 → 25
Thus, the missing term should be:
T → V 52 → 54
Hence, the term is VV54.

S382. Ans.(a)

S383. Ans.(c)

S384. Ans.(b)
Sol.

B + 2 = D	M + 2 = O
R – 1 = Q	E – 1 = D
E + 2 = G	N + 2 = P
A + 2 = C	S + 2 = U
K – 1 = J	T – 1 = S
D + 2 = F	R + 2 = T
O + 2 = Q	U + 2 = W
W – 1 = V	A – 1 = Z
N + 2 = P	L + 2 = N

Hence, option b is correct.

S385. Ans.(d)
Sol. Paternal grandfather of Sonakshi's son implies father of Sonakshi's husband i.e., Sonakshi's father – in – law.

S386. Ans.(d)
Sol.
(a) (7 + 2 + 0 + 0 = 9)
(b) (5 + 0 + 4 + 0 = 9)
(c) (4 + 0 + 3 + 2 = 9)
(d) (5 + 2 + 4 + 0 = 11)

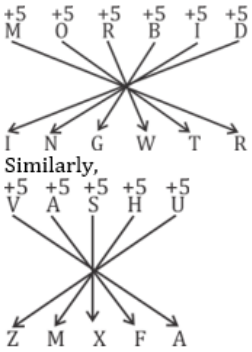
S387. Ans.(a)
Sol. GIJG/GIJG/GIJG/GIJG

S388. Ans.(c)
Sol. In the given sequence the next term is found by reversing the first number.
Thus, the missing number should be 8322 → 2238.

S389. Ans.(a)
Sol.
3. Ultimate
5. Umbilical
2. Umbrella
4. Unaltered
1. Unanimous

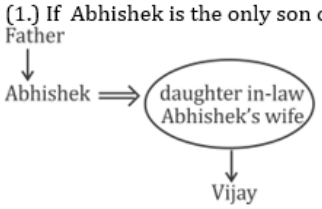
S390. Ans.(b)
Sol. Fear of Darkness is known Nyctophobia. Similarly, Fear of water is known as Aquaphobia.

S391. Ans.(c)
Sol.

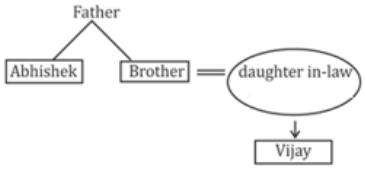


S392. Ans.(d)
Sol.
(a) $225 = \sqrt{225} = 15 \Rightarrow 24 \div 15 = 9$ Remainder
(b) $324 = \sqrt{324} = 18 \Rightarrow 63 \div 18 = 9$ Remainder
(c) $196 = \sqrt{196} = 14 \Rightarrow 65 \div 14 = 9$ Remainder
(d) $169 = \sqrt{169} = 13 \Rightarrow 34 \div 13 = 8$ Remainder

S393. Ans.(d)
Sol.
(1.) If Abhishek is the only son of his father, then the family tree is:



Then, Abhishek is the father of Vijay.
(2.) If Abhishek has a brother, then family tree is :



Then, Abhishek is the uncle of Vijay.

S394. Ans.(b)

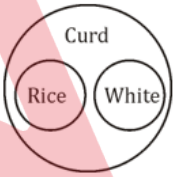
S395. Ans.(a)

S396. Ans.(d)

S397. Ans.(a)
Sol. As Vir Bhumi related to Rajiv Gandhi, Similarly Raj Ghat related to Mahatma Gandhi.

S398. Ans.(c)
Sol. 22 – 16 = 6 = 6 × 6 = 36
34 – 29 = 5 = 5 × 5 = 25
Similarly,
9 – 3 = 6 = 6 × 6 = 36

S399. Ans.(c)
Sol.



S400. Ans.(b)

S401. Ans.(d)
Sol. 1, 2, 4, 3, 5

S402. Ans.(b)
Sol.

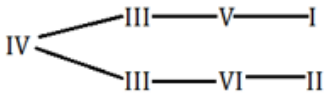
(13)	(1)	(14)	(7)	(15)
M	A	N	G	O
↓	↓	↓	↓	↓
26	2	28	14	30

Similar code used for TIGER.

S403. Ans.(d)

S404. Ans.(d)

S405. Ans.(c)
Sol.



S406. Ans.(b)
Sol. -3, +4, -5, +5 pattern followed

S407. Ans.(c)
Sol. $\sqrt{2^{nd}}$ no. + 6 = 1st number

S408. Ans.(a)
Sol. +1 is added to consonants in alphabetical order.
: +1 is added to vowel in vowel order and the next vowel is obtained.

A	E	I	O	U
↓	↓	↓	↓	↓
1	2	3	4	5

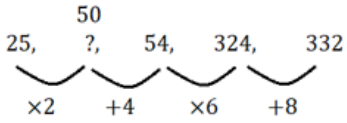
This mean

A → +1 → E → +1 → I → +1 → O → +1 → U

+1	+1	+1	+1	+1	+1
F	R	I	E	N	D
↓	↓	↓	↓	↓	↓
G	S	O	I	O	E

Similar code used for 'PRINCIPLE'

S409. Ans.(d)
Sol.



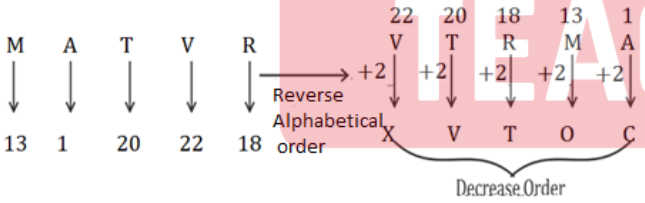
S410. Ans.(a)
Sol.

I Love table — Cuz duz ruz
I am officer — guz ruz buz
Love your life — cuz kuz buz

Table be code as duz

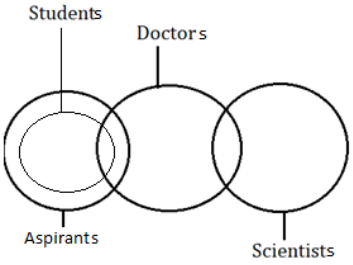
S411. Ans.(a)

S412. Ans.(d)
Sol.



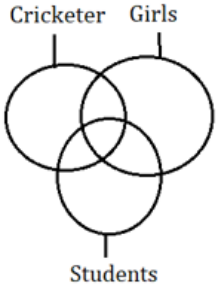
Similar code used for 'RTANP'.

S413. Ans.(c)
Sol.



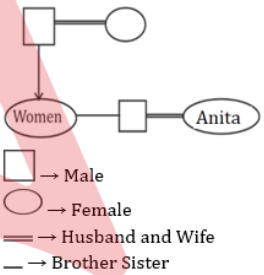
I. Wrong
II. Right

S414. Ans.(d)
Sol.



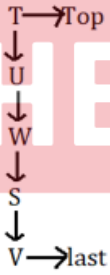
S415. Ans.(c)
Sol. +6, -5, +4, -3, +2

S416. Ans.(b)
Sol.



S417. Ans.(b)
Sol. Row: (1st number + 3rd number) × (1st number - 3rd number) = 2nd Number

S418. Ans.(b)
Sol.



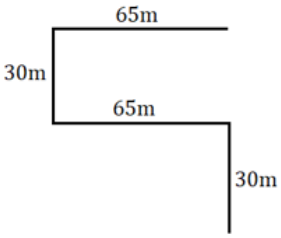
S419. Ans.(a)
Sol. 96 ÷ 16 × 5 + 30 - 24 = 36
30 + 30 - 24 = 36
36 = 36

S420. Ans.(b)
Sol. -5, +6, -7 pattern followed except in option 'b'.

S421. Ans.(d)
Sol. 35 ÷ 7 × 5 - 30 ÷ 6 +18 = 38
25 – 5 + 18 = 38

S422. Ans.(d)
Sol. H **A** N **D** /**H** A N**D** /H **A N** D

S423. Ans.(a)
Sol.

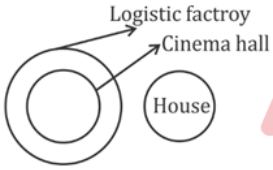


S424. Ans.(b)
Sol. Hight court of Kerala is situated in Kochi. Similarly, high court of Haryana is situated in Chandigarh.

S425. Ans.(b)

S426. Ans.(a)
Sol. $36 \times 21 \div 7 - (122 + 44) + 20 + (37 + 8) = 7$
$\Rightarrow 108 - 166 + 20 + 45 = 7$
$\Rightarrow 173 - 166 = 7$
$\Rightarrow 7 = 7$

S427. Ans.(c)
Sol.



I. ✓
II. ✓
III. ✓
IV. ×

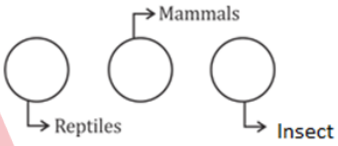
S428. Ans.(d)

S429. Ans.(d)
Sol. Oink is sound of pig and rest are the synonyms.

S430. Ans.(a)

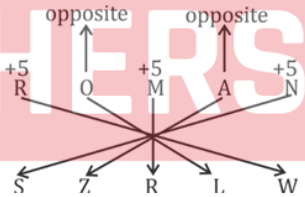
S431. Ans.(c)
Sol. $(15)^2 = 9 \times 25 = 225$
$(18)^2 = 4 \times 81 = 324$
Similarly,
$(21)^2 = 7 \times 63 = 441$

S432. Ans.(d)
Sol.

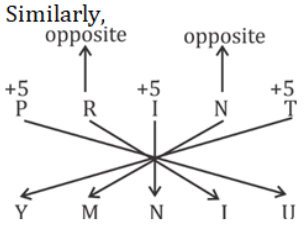


S433. Ans.(d)
Sol. 1st term in the series is 8.
Second term in the series is obtained using the logic $17 = 8 + 9$
Third term in the series is obtained using the logic $27 = 17 + 9 + 1^3$
Forth term in the series is obtained using the logic $29 = 27 + 9 + 1^3 - 2^3$
Fifth term in the series is obtained using the logic $58 = 29 + 9 + 1^3 - 2^3 + 3^3$
Sixth term in the series is obtained using the logic $23 = 58 + 9 + 1^3 - 2^3 + 3^3 - 4^3$
Seventh term in the series is obtained using the logic $113 = 23 + 9 + 1^3 - 2^3 + 3^3 - 4^3 + 5^3$

S434. Ans.(b)
Sol.



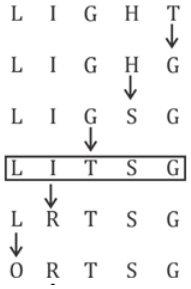
Similarly,



S435. Ans.(a)
Sol.
4. Sarcastic
3. Satire
1. Sodium
2. Solution
5. Sophisticate

S436. Ans.(a)
Sol. World cancer day is observed on 4th February every year. Similarly, World Education Day is observed on 24th January every year.

S437. Ans.(d)
Sol.



One letter starting form the last letter of the word LIGHT is changed to its opposite letter in each step.

S438. Ans.(d)
Sol. Except Lethargic, All words are synonyms of one other.

S439. Ans.(a)
Sol. EJOT = 5 + 10 + 15 + 20 = 50
CIOT = 3 + 9 + 15 + 20 = 47
XFIH = 24 + 6 + 9 + 8 = 47
POLD = 16 + 15 + 12 + 4 = 47

S440. Ans.(b)

S441. Ans.(c)

S442. Ans.(a)

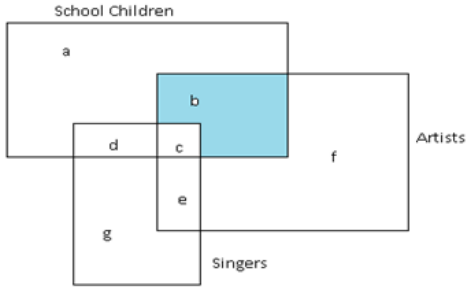
S443. Ans.(c)
Sol. (9, 36, 72) = (9 × 1, 9 × 4, 9 × 8)
Similarly,
(11, 44, 88) = (11 × 1, 11 × 4, 11 × 8)

S444. Ans.(b)
Sol. V E R B A L / V E R B A L / V E R B A L

S445. Ans.(b)
Sol. A.T.Q.
P × (P + 1) = 552
P^2 + P = 552
By solving
P = 23 and (-24)
P = 23 (as P is Positive number)
And,
P + Q = 88
Q = 65

S446. Ans.(a)
Sol. The dictionary sequence is:
Raise → Rapid → Ratio → Robin → Royal.
Thus, 2, 3, 1, 4, 5 will be the correct sequence.

S447. Ans.(b)
Sol.



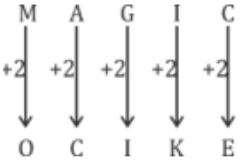
So, the region is b.

S448. Ans.(a)
Sol. Let my present age be "x" years and my friend's age be "y" years.
A.T.Q
y = 3x …….. (1)
5 years ago, the relation between their age would be:
y – 5 = 5(x-5) …… (2)
Putting the value of y from equation (1) in equation (2)
3x – 5 = 5(x-5)
3x – 5x = 5-25
x = 10 years
present age of friend = 3x = 3 * 10 = 30 years.

S449. Ans.(c)

S450. Ans.(c)
Sol. From positions I and III, we found,
2 is opposite to 5, 6 is opposite to 4, whereas 3 is opposite to 1.

S451. Ans.(a)
Sol.

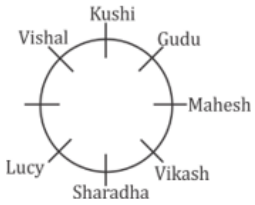


Similar pattern used for 'VISHVASH'

S452. Ans.(d)
Sol. 28 + 64 ÷ 16 × 4 – 6 = 38
28 + 4 × 4 – 6 = 38
28 + 16 – 6 = 38
38 = 38

S453. Ans.(c)

S454. Ans.(c)
Sol.



S455. Ans.(d)
Sol. Ist number + 2nd number – 3rd number = 4th number

S456. Ans.(a)
Sol. +7, +7, +7 pattern follow except in option 'a'.

S457. Ans.(a)
Sol.

D E A R
↓ ↓ ↓ ↓ ← Coded as
3 7 4 9

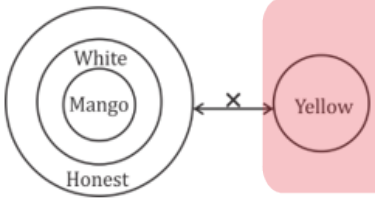
And

C A R E
↓ ↓ ↓ ↓ ← Coded as
5 4 9 7

Similarly

R A R E
↓ ↓ ↓ ↓
9 4 9 7

S458. Ans.(c)
Sol.



✓
✓
✓

S459. Ans.(b)
Sol. A V **E** S H / **A** **V** E **S** H / **A** V E **S** H

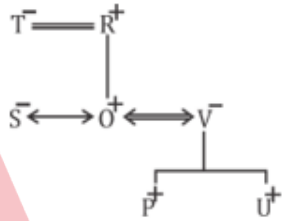
S460. Ans.(a)
Sol. Scientific name of dog is Canis lupus. Similarly, scientific name of Deer is Cervidae.

S461. Ans.(d)
Sol. All corner cubes are painted on three sides, there are 8 corners in cubes, so cubes with paint 3 side = 8.

S462. Ans.(d)
Sol.

Alternate prime number is added.
Prime numbers = 2, 3, 5, 7, 11, 13, 17, 19, 23,29, 31, 37, 41, 43, 47, 53, 59, 61, 67

S463. Ans.(a)
Sol.



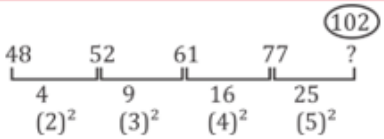
S464. Ans.(c)

S465. Ans.(a)

S466. Ans.(d)

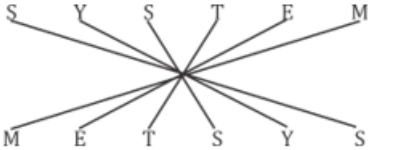
S467. Ans.(a)
Sol.

S468. Ans.(b)
Sol.



S469. Ans.(d)

S470. Ans.(d)
Sol.



Similar pattern used for ADVENTURE

S471. Ans.(d)
Sol. 5 × 4 + 4 = 24
12 × 4+4 = 52
Similarly
7 × 4 + 4 = 32

S472. Ans.(d)
Sol. 117 = 95 – 30 + 65 ÷ 5 × 4
117 = 95 – 30 + 52
117 = 95 + 22
117 = 117

S473. Ans.(c)
Sol. +3, -4, +5 pattern followed

S474. Ans.(c)

S475. Ans.(d)
Sol. (C, H)

S476. Ans.(a)
Sol.

R	E	S	U	L	T
↓	↓	↓	↓	↓	↓
7	6	5	1	4	9

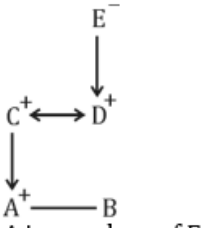
and

P	U	T
↓	↓	↓
2	1	9

All alphabets represented as a number. So,

T	E	S	T
↓	↓	↓	↓
9	6	5	9

S477. Ans.(d)
Sol.

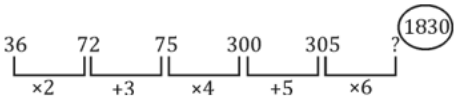


A is grandson of E

S478. Ans.(d)
Sol. All Except 'Ahmedabad' is the capital city of any state of India.

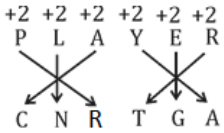
S479. Ans.(a)
Sol.
⇒ 341 + $(12)^2$ = 341 + 144 = 485
Similarly
255 + $(16)^2$ = 255 + 256 = 511

S480. Ans.(d)
Sol.

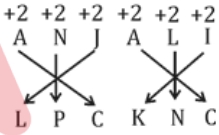


S481. Ans.(a)

S482. Ans.(b)
Sol.



Similarly



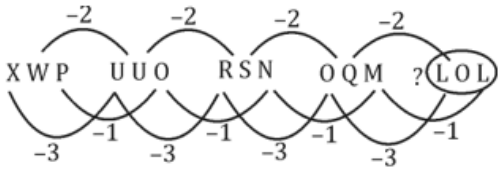
S483. Ans.(c)

S484. Ans.(c)
Sol. (18, 648, 9)
⇒ 18 × 9 = 162 × 4 = 648
Similarly
(21, 588, 7)
⇒ 21 × 7 = 147 × 4 = 588

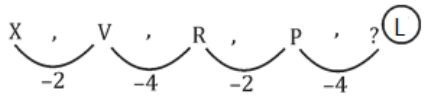
S485. Ans.(c)
Sol. ONC = 15 + 14 + 3 = 32 even.
RYE = 18 + 25 + 5 = 48 even.
NXG = 14 + 24 + 7 = 45 odd.
LOC = 12 + 15 + 3 = 30 even.

S486. Ans.(d)
Sol. Monkey's scientific name is Cercopithecidae. Similarly, Elephant's scientific name is Loxodonta.

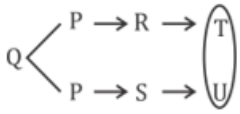
S487. Ans.(a)
Sol.



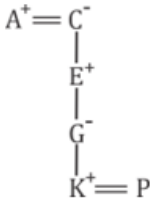
S488. Ans.(a)
Sol.



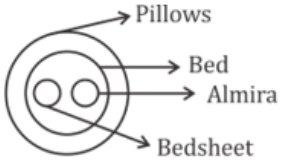
S489. Ans.(a)
Sol.



S490. Ans.(d)
Sol.



S491. Ans.(a)
Sol.



I. ×
II. ✓
III. ×

S492. Ans.(c)
Sol.

				-4	+4	-4	+4
O	P	Q	R	15	16	17	18
K	T	M	V	11	20	13	22
G	X	I	Z	7	24	9	26
C	B	E	D	3	2	5	4
Y	F	A	H	25	6	1	8

S493. Ans.(d)
Sol. Except for Ahmedabad all are the capital of any state of India.

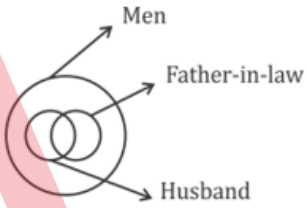
S494. Ans.(a)
Sol. "Horse" is a word of five letters.
So, $(5)^3 = 125$
Dog is a word of 3 letter
So, $(3)^3 = 27$
Similarly,
Elephant is a worded Eight letter.
So, $(8)^3 = 512$

S495. Ans.(a)
Sol. A **N** I M **A** L / A **N** **I** MA **L** / **A** N **I** M A L

S496. Ans.(a)
Sol. All given alphabets are Vowels. (A, E, I, O, U)

S497. Ans.(c)
Sol. If 1st April is Monday, then 8th, 15th, 22nd and 29th of April will also be Monday.

S498. Ans.(a)
Sol.



S499. Ans.(b)
Sol.
3. Abdicate
4. Abscond
1. Acme
6. Amaze
5. Assassinate
2. Audacious

S500. Ans.(a)
Sol. 65 ÷ 13 + 15 × 3 – 42 = 8
5 + 45 – 42 = 8
8 = 8