

**AVERAGE**

1. The average of five positive numbers is 308. The average of first two numbers is 482.5 and the average of last two numbers is 258.5. What is the third number?  
(a) 224 (b) 58 (c) 121 (d) cannot be determined  
(e) None of these
2. The average of five positive numbers is 213. The average of the first two numbers is 233.5 and the average of last two numbers is 271. What is the third number?  
(a) 64 (b) 56 (c) 106 (d) cannot be determined (e) None of these
3. The average of 5 consecutive even numbers A, B, C, D and E is 106. What is the product of B & D?  
(a) 11440 (b) 11024 (c) 10608 (d) 11232  
(e) None of these
4. Find the average of the following set of scores-  
125,133,298,345,446,507  
(a) 312 (b) 309 (c) 315 (d) 306 (e) None of these
5. Find the average of the following Set of Scores-  
221,231,441,359,665,525  
(a) 399 (b) 428 (c) 407 (d) 415 (e) None of these
6. The average of 5 consecutive even numbers A, B, C, D and E is 52. What is the product of B and E?  
(a) 2912 (b) 2688 (c) 3024 (d) 2800 (e) None of these

**PERCENTAGE (PROFIT AND LOSS)**

7. Sophia invests 25% of her monthly salary in insurance policies. She spends 15% of her monthly salary in shopping and 35% of

her salary on household expenses. She saves the remaining amount of Rs.9, 050. What is Sophia's annual income?  
(a) Rs.84, 500 (b) Rs.5, 30, 000 (c) Rs.3, 25, 200 (d) Rs.4, 34, 400 (e) None of these

8. The number of employees in Companies A, B and C are in a ratio of 3:2:4 respectively. If the number of employees in the three Companies is increased by 20%, 30% and 15% respectively, what will be the new ratio of employees working in companies A, B and C respectively?  
(a) 18:13:24 (b) 13:18:23 (c) 17:13:23 (d) 18:11:23 (e) None of these

9. A trader sells 150 metres of cloth for Rs.6, 600 and he sells 300 metres of cloth for Rs.12, 750. How much concession does the trader give per metre of cloth, when he sells 300 metres of cloth?  
(a) Rs.3 (b) Rs.2.5 (c) Rs.1.5 (d) Rs.2 (e) None of these

10. The number of employees in Companies A, B and C in a ratio of 4:5:6 respectively. If the number of employees in the three Companies is increased by 25% , 30% and 50% respectively, what will be the new ratio of employees working in Companies A, B and C respectively?  
(a) 13:10:18 (b) 10:13:17 (c) 13:15:18 (d) cannot be determined (e) None of these

11. A milkman sells 120 litres of milk for Rs.3360 and he sells 240 litres of milk for Rs.6120. How much concession does the trader give per litre of milk, when he sells 240 litres of milk?  
(a) Rs.2 (b) Rs.3.5 (c) Rs.2.5 (d) Rs.1.5 (e) None of these

12. The difference between 36% of a number and 45% of the same number is 342. What is 78% of that number?

- (a) 1342 (b) 4182 (c) 1558 (d) 1670 (e) None of these
13. The owner of a cell phone shop charges his customer 23% more than the cost price. If a customer paid Rs.7, 011 for a cell phone, then what was the cost price of the cell phone?  
(a) Rs.5, 845 (b) Rs.6, 750 (c) Rs.5, 900 (d) Rs.6, 925 (e) None of these
14. If an amount of Rs.85, 602 is distributed equally amongst 33 persons. How much amount would each person get?  
(a) Rs.2, 594 (b) Rs.2, 954 (c) Rs.2, 549 (d) Rs.2, 495 (e) None of these
15. Sumit invests Rs.4, 762, which is 25% of his monthly income, in insurance policies. What is his monthly income?  
(a) Rs.28, 572 (b) Rs.23, 810 (c) Rs.19, 048 (d) Rs.14, 285 (e) None of these
16. There are 2010 employees in an organization. Out of which 30% got transferred to different places. How many such employees are there who got transferred?  
(a) 603 (b) 402 (c) 804 (d) 703 (e) None of these
17. In an examination Shalini scores a total of 436 marks out of 325. What is her approximate percentage in the examination?  
(a) 83 (b) 65 (c) 82 (d) 78 (e) 70
18. The difference between 56% of a number and 41% of the same number is 660. What is 8% of that number?  
(a) 321 (b) 336 (c) 345 (d) 358 (e) None of these
19. A plot of 575 sq. ft. is available at the rate of Rs.5, 500 per sq. ft. If 25% of the total cost of the plot is to be paid for booking the plot, how much is the booking amount?  
(a) Rs.8, 25, 750 (b) Rs.7, 90, 625 (c) Rs.8, 75, 250 (d) Rs.7, 35, 500 (e) None of these
20. One-seventh of a number is 51. What will be 64% of that number?  
(a) 248.12 (b) 228.48 (c) 238.24 (d) 198.36 (e) None of these
21. The owner of a Television shop charges his customer 16% more than the cost price. If a customer paid Rs.16, 588 for a Television, then what was the cost price of the Television?  
(a) Rs.14, 300 (b) Rs.15, 500 (c) Rs.13, 800 (d) Rs.12, 000 (e) None of these
22. In a class of 30 students and 2 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 30% of the total number of students. How many sweets were there?  
(a) 188 (b) 180 (c) 208 (d) 178 (e) None of these
23. If an amount of Rs.97, 836 are distributed equally amongst 31 children. How much amount would each child get?  
(a) Rs.3, 756 (b) Rs.3, 556 (c) Rs.3, 356 (d) Rs.3, 156 (e) None of these
24. A sum of money is divided among A, B, C and D in the ratio of 4:6:11:13 respectively. If the share of C is Rs.7, 854, then what is the total amount of money of B & D together?  
(a) Rs.13, 566 (b) Rs.16, 928 (c) Rs.12, 784 (d) Rs.15, 676 (e) None of these
25. 38 per cent of first number is 52 per cent of the second number. What is the respective ratio of the first number to the second number?

- (a) 5:4 (b) 16:9 (c) 26:19 (d) cannot be determined (e) None of these
26. The owner of a Gift shop charges his customer 28% more than the cost price. If a customer paid Rs.1408 for some Soft toys, then what was the cost price of those Soft toys?  
(a) Rs.1300 (b) Rs.1000 (c) Rs.1200 (d) Rs.1400 (e) None of these
27. A plot of 715 sq. ft. is available at the rate of Rs.3850 per sq. ft. If 40% of the total cost of the plot is to be paid for booking the plot, how much is the booking amount?  
(a) Rs.1110000 (b) Rs.1101100 (c) Rs.1101000 (d) Rs.1100100 (e) None of these
28. If an amount of Rs.96, 393 is distributed equally amongst 33 children. How much amount would each child get?  
(a) Rs.2789 (b) Rs.2563 (c) Rs.2860 (d) Rs.2921 (e) None of these
29. The difference between 73% a number and 58% of the same number is 960. What is 22% of that number?  
(a) 1408 (b) 1232 (c) 1324 (d) 1536 (e) None of these
30. One-seventh of a number is 39. What will be 56% of that number?  
(a) 164.66 (b) 152.88 (c) 178.22 (d) 182.44 (e) None of these
31. In a class of 55 students and 3 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 60% of the total number of students. How many sweets were there?  
(a) 737 (b) 671 (c) 714 (d) 638 (e) None of these
32. The owner of an electronics shop charges his customer 22% more than the cost price. If a customer paid Rs.10980 for a DVD Player, then what was the cost price of the DVD Player?  
(a) Rs.8000 (b) Rs.8800 (c) Rs.9500 (d) Rs.9200 (e) None of these
33. 45% of a number is 255.6. What is 25% of that number?  
(a) 162 (b) 34 (c) 152 (d) 142 (e) None of these
34. The difference between 42% of a number and 28% of the same number is 210. What is 59% of that number?  
(a) 630 (b) 885 (c) 420 (d) 900 (e) None of these
35. If an amount of Rs.41910 is distributed equally amongst 22 persons. How much amount would each person get?  
(a) Rs.1905 (b) Rs.2000 (c) Rs.1885 (d) Rs.2105 (e) None of these
36. If the numerator of a fraction is increased by 400% and the denominator is increased by 500% the resultant fraction is  $\frac{10}{21}$ . What was the original fraction?  
(a)  $\frac{5}{12}$  (b)  $\frac{8}{13}$  (c)  $\frac{17}{14}$  (d)  $\frac{4}{7}$  (e) None of these
37. One-eighth of a number is 17.25. What will 73% of that number be?  
(a) 100.74 (b) 138.00 (c) 96.42 (d) 82.66 (e) None of these
- RATIO**
38. The ratio of roses and lilies in a garden is 3:2 respectively. The average number of roses and lilies is 180. What is the number of lilies in the garden?  
(a) 144 (b) 182 (c) 216 (d) 360 (e) None of these

39. The ratio of ducks and frogs in a pond is 37:39 respectively. The average number of ducks and frogs in the pond is 152. What is the number of frogs in the pond?  
(a) 148 (b) 152 (c) 156 (d) 144 (e) None of these

40. The total number of students in a school is 5050. If the number of girls in the school is 2450, then what is the respective ratio of the total number of boys to the total number of girls in the second?  
(a) 49:52 (b) 51:50 (c) 50:51 (d) 52:49 (e) None of these

41. 48 per cent of first number is 60 per cent of the second number. What is the respective ratio of the first number to the second number?  
(a) 4:7 (b) 3:4 (c) 5:4 (d) cannot be determined (e) None of these

42. A sum of money is divided among A, B, C and D in the ratio of 4:5:7:11 respectively. If the share of C is Rs.1351, then what is the total amount of money of A and D together?  
(a) Rs.2, 123 (b) Rs.2, 316 (c) Rs.2, 565 (d) Rs.2, 895 (e) None of these

43. Pinku, Rinku and Tinku divide an amount of Rs.4200 amongst themselves in the ratio of 7:8:6 respectively. If an amount of Rs.200 is added to each of their shares, what will be the new respective ratio of their shares of amount?  
(a) 8:9:6 (b) 7:9:5 (c) 7:8:6 (d) 8:9:7 (e) None of these

### COMPOUND INTEREST

44. What amount of compound interest can be obtained on an amount of Rs.8, 840 at the rate of 5p.c.p.a. at the end of 3 years?  
(a) Rs.1, 393.405 (b) Rs.1, 326 (c) Rs.1, 384.50 (d) Rs.1, 340 (e) None of these

45. What approximate amount of compound interest can be obtained on an amount of Rs.9650 at the rate of 6p.c.p.c. at the end of 3 years?  
(a) Rs.1737 (b) Rs.1920 (c) Rs.1720 (d) Rs.1860 (e) Rs.1843

46. What would be the compound interest obtained on an amount of Rs.4, 000 at the rate of 5p.c.p.a. after 3 years?  
(a) Rs.612 (b) Rs.578 (b) Rs.525.5 (d) Rs.630.5 (e) None of these

47. What would be the simple interest obtained on an amount of Rs.8, 930 at the rate of 8p.c.p.c. after 5 years?  
(a) Rs.5, 413 (b) Rs.2, 678 (c) Rs.3, 572 (d) Rs.4, 752 (e) None of these

48. What is the compound interest accrued on an amount of Rs.12, 000, at the rate of 9p.c.p.a. at the end of 2 years?  
(a) Rs.2, 545 (b) Rs.2, 257.2 (c) Rs.2, 986 (d) Rs.2, 775.4 (e) None of these

49. What is the compound interest accrued on an amount of Rs.12000, at the rate of 10p.c.p.a. at the end of 3 years?  
(a) Rs.3972 (b) Rs.2567 (c) Rs.4780 (d) Rs.5609 (e) None of these

50. What would be the simple interest obtained on an amount of Rs.5760 at the rate of 6p.c.p.a. after 3 years?  
(a) Rs.1036.80 (b) Rs.1666.80 (c) Rs.1336.80 (d) Rs.1063.80 (e) None of these

51. What would be the compound interest obtained on an amount of Rs.3000 at the rate of 8p.c.p.a. after 2 years?  
(a) Rs.501.50 (b) Rs.499.20 (c) Rs.495 (d) Rs.510 (e) None of these

52. The simple interest accrued on an amount of Rs.19, 800. At the end of three years is

Rs.7, 128. What would be the compound interest accrued on the same amount at the same rate in the same period?

- (a) Rs.8934.6784 (b) Rs.8017.5744 (c) Rs.7861.8754 (d) cannot be determined (e) None of these

### PERMUTATION AND COMBINATION

53. In how many different ways can the letters of the word 'HAPPY' be arranged?  
(a) 120 (b) 140 (c) 60 (d) 70 (e) None of these

54. In how many different ways can the letters of the word 'ARISE' be arranged?  
(a) 90 (b) 60 (c) 180 (d) 120 (e) None of these

### SIMPLE INTEREST

55. Ms. Vishakha deposits an amount of Rs.35, 800 to obtain a simple interest at the rate of 15p.c.p.a. for 4 years. What total amount will Ms. Vishakha get at the end of 4 years?

- (a) Rs.45, 680 (b) Rs.39, 880 (c) Rs.21, 480 (d) Rs.57, 280 (e) None of these

56. The simple interest accrued on an amount of Rs.12, 450 at the end of 6 years is Rs.8, 964. What is the rate of interest p. c. p. a.?  
(a) 8 (b) 14 (c) 10 (d) 12 (e) None of these

57. Ms. Anisha deposits an amount of Rs.35, 000 to obtain a simple interest at the rate of 15p.c.p.a. for 4 years. What total amount will Ms. Anisha get at the end of 4 years?

- (a) Rs.56, 000 (b) Rs.60, 500 (c) Rs.52, 000 (d) Rs.48, 500 (e) None of these

58. The simple interest accrued on an amount of Rs.9530 at the end of 6 years is Rs.2, 859. What is the rate of interest p.c.p.a.?

- (a) 5 (b) 7 (c) 9 (d) 11 (e) None of these

59. Mr. Madhur deposits an amount of Rs.58750 to obtain a simple interest at the rate of 12p.c.p.a. for 4 years. What total amount will Mr. Madhur get at the end of 4 years?

- (a) Rs.91230 (b) Rs.86950 (c) Rs.74760 (d) Rs.69540 (e) None of these

60. Ms. Suchi deposits an amount of Rs.24000 to obtain a simple interest at the rate of 14p.c.p.a. for 8 years. What total amount will Ms. Suchi get at the end of 8 years?  
(a) Rs.52080 (b) Rs.28000 (c) Rs.50880 (d) Rs.26880 (e) None of these

### NUMBERS

61. When 3888 is divided by the square of a number and the answer so obtained is multiplied by 21, the final obtained is 252. What is the number?

- (a) 324 (b) 16 (c) 256 (d) 144 (e) None of these

62. The sum of the two digits of a two digit number is 14, the difference between the first digit and the second digit of the two digit number is 4. What is the two digit number?

- (a) 86 (b) 95 (c) 59 (d) cannot be determined (e) None of these

63. When 3626 is divided by the square of a number and the answer so obtained is multiplied by 32, the final answer obtained is 2368. What is the number?

- (a) 7 (b) 36 (c) 49 (d) 6 (e) None of these

64. The sum of the two digits of a two digit number is 14. The difference between the first digit and the second digit of the two digit number is 2. What is the product of the two digits of the two digit number?

(a) 56 (b) 48 (c) 45 (d) cannot be determined (e) None of these

65. The product of two consecutive odd numbers is 6399. What is the smaller number?  
(a) 83 (b) 79 (c) 81 (d) 77 (e) None of these

66. If  $(16)^3$  is subtracted from the square of a number, the answer so obtained is 3825. What is the number?  
(a) 69 (b) 59 (c) 89 (d) 79 (e) None of these

67. 43% of a number is 559. What is 32% of that number?  
(a) 416 (b) 429 (c) 403 (d) 384 (e) None of these

68. If the fractions  $\frac{1}{5}, \frac{2}{7}, \frac{3}{5}, \frac{5}{6}$  and  $\frac{11}{13}$  are arranged in descending order of their values, which one will be the fourth?  
(a)  $\frac{11}{13}$  (b)  $\frac{2}{7}$  (c)  $\frac{5}{6}$  (d)  $\frac{1}{5}$  (e) None of these

69. If  $(92)^2$  is added to the square of a number, the answer so obtained is 10768. What is the number?  
(a) 46 (b) 2304 (c) 48 (d) 2116 (e) None of these

70. What is 394 times 113?  
(a) 44402 (b) 44632 (c) 44802 (d) 44522 (e) None of these

71. In an examination it is required to get 441 of the aggregate marks to pass. A student gets 392 marks and is declared failed by 5% marks. What are the maximum aggregate marks a student can get?  
(a) 890 (b) 980 (c) 1140 (d) cannot be determined (e) None of these

72. What is the least number to be added to 7700 to make it a perfect square?

(a) 131 (b) 221 (c) 77 (d) 98 (e) None of these

73. If the product of two successive positive integers is 7482, which is the greater integer?  
(a) 87 (b) 82 (c) 84 (d) 89 (e) None of these

74. If  $(58)^2$  is added to the square of a number, the answer so obtained is 5668. What is the number?  
(a) 56 (b) 33 (c) 47 (d) 51 (e) None of these

75. In an examination it is required to get 380 of the aggregate marks to pass. A student gets 32% marks and is declared failed by 76 marks. What are the maximum aggregate marks a student can get?  
(a) 945 (b) 975 (c) 950 (d) cannot be determined (e) None of these