

PERCENTAGE

1. If salary of A is 20% more than salary of B, then salary of B is what % less than A?
(1) $16\frac{2}{3}\%$ (2) 20%
(3) 25% (4) $15\frac{4}{5}\%$
(5) None of these
2. If the sides of a square are increased by 25%, then what will be the effect on its area?
(1) 20% (2) 10%
(3) 21% (4) 25%
(5) None of these
3. If the sides of a square field are increased by $33\frac{1}{3}\%$, then what will be the effect on its perimeter?
(1) 43% (2) $33\frac{1}{3}\%$
(3) 62% (4) 41%
(5) None of these
4. If the sides of a cube are increased by 30%, then what will be the effect on its volume?
(1) 69% (2) 119.7%
(3) 26% (4) 52%
(5) None of these
5. If the length of a rectangle is increased by 25% and breadth is increased by 20%, then what will be the effect on its area?
(1) 45% (2) 50%
(3) 44% (4) 42%
(5) None of these
6. If the length of rectangle is increased by 20% while breadth is decreased by 10%, then what will be the effect on its area?
(1) 10% (2) 12%
(3) 8% (4) 9%
7. If the length of rectangle is increased by 40%, then by what % breadth shall be decreased in order to have the original area?
(1) $28\frac{4}{7}\%$ (2) 60%
(3) 40% (4) $32\frac{5}{7}\%$
(5) None of these
8. In a competitive examination in State A, 6% candidates got selected from the total appeared candidates. State B had an equal number of candidates appeared and 7% candidates go selected with 80 more candidates got selected than A. What was the number of candidates appeared from each state?
(1) 8000
(2) 8400
(3) 7680
(4) Cannot be determined
(5) None of these
9. The price of a car is Rs. 3,25,000. It was insured to 85% of its price. The car was damaged completely in accident and the insurance company paid 90% of the insurance. What was the difference between the price of the car and the amount received?
(1) Rs. 32,500 (2) Rs. 28,750
(3) Rs. 76,375 (4) Rs. 81,250
(5) None of these
10. Sameer spends 24% of his monthly income on food and 15% on the education of his children. Of the remaining salary, he spends 25% on entertainment and 20% on conveyance. He is now left with Rs. 10,736. What is the monthly income of Sameer?
(1) Rs. 27,600 (2) Rs. 28,000
(3) Rs. 31,200 (4) Rs. 32,000



- (5) None of these
11. 405 sweets are distributed equal among children in such a way that the number of sweet received by each child is 20% of the total number of children. How many sweets did each child receive?
- (1) 50 (2) 42
(3) 45 (4) 40
(5) None of these
12. In a recent survey, 40% houses contained two or more people. If in houses containing only one person, 25% were having only a male, then what is the percentage of all houses, which contains exactly one female and no males?
- (1) 15%
(2) 40%
(3) 75%
(4) cannot be determined
(5) None of these
13. The price of a D.V.D. is decreased by 25% as a result of which the sale increased by 20%. What will be the effect on total revenue of shop?
- (1) No effect (2) 5% increase
(3) 10% decrease (4) 5% increase
(5) None of these
14. If the tax on a commodity is increased by 25% as a result it's sale decreases by 20%, then what will be the effect on revenue?
- (1) No effect (2) 5% decrease
(3) 10% increase (4) 5% increase
(5) None of these
15. The total population of a village is 5000. The number of males and females increases by 10%, and 15% respectively and consequently the population of the village become 5600. What was the number of males in the village?
- (1) 2000 (2) 2500
(3) 3000 (4) 4000
(5) None of these
16. Milk contains 5% water. What quantity of pure milk should be added to 10 liters of milk to reduce this to 2%?
- (1) 10 lit (2) 15 lit
(3) 25 lit (4) 12 lit
(5) None of these
17. In an examination, the percentage of students qualified to the number of students appeared from school A is 70%. In school B, the number of students appeared is 20% more than the student appeared from school B is 50% more than the students appeared from school A. What is the percentage of students qualified to the number of students appeared from school B?
- (1) 30% (2) 70%
(3) 87.5% (4) 78.5%
(5) None of these
18. A reduction of 20% in the price of sugar enable a person to buy 2 kg more for Rs. 250. What is the reduced price?
- (1) Rs. 31.25 (2) Rs. 20
(3) Rs. 25 (4) Rs. 21.75
(5) None of these
19. Naresh's monthly income is 30% more than that of Raghu. Raghu's monthly income is 20% less than of Vishal. If the difference between the monthly income of Naresh and Vishal is Rs. 800, what is the monthly income of Raghu?
- (1) Rs. 16000
(2) Rs. 20000
(3) Rs. 12000
(4) Data Inadequate
(5) None of these
20. In a class of 40 students and 8 teachers, each got sweets that are 20% of the total number of students and each teacher got sweets than are 25% of the total number of students. How many sweets were there?
- (1) 420 (2) 400
(3) 320 (4) 360
(5) None of these
21. Ms. Deepti Jain invests 11% of her monthly salary, i.e. Rs. 5,236 in Fixed Deposits. Later she invests 19% of her monthly salary on Life



Insurance Policies, also she invests another 7% of her monthly salary on Mutual Funds. What is the total annual amount invested by Ms. Deepti Jain?

- (1) Rs. 2,11,344 (2) Rs. 17,612
(3) Rs. 1,05,672 (4) Rs. 35,324
(5) None of these

22. In a college election fought between two candidates, one candidate got 55% of the total valid votes. 15% of the votes were invalid. If the total votes were 15,200, then what is the number of valid votes the other candidate got?

- (1) 7106 (2) 6840
(3) 8360 (4) 5814
(5) None of these

23. In a test consisting of 80 questions carrying one mark each, Arpita answers 65% of the first 40 questions correctly. What percent of the other 40 questions does she need to answer correctly to score 75% on the entire test?

- (1) 60% (2) 80%
(3) 75% (4) 40%
(5) None of these

24. Mangesh spends 17% of his monthly income on travelling. He spends 25% of his monthly income on household expense and 36% of his monthly income on medical expenses. He has remaining amount of Rs. 10,032 as cash with him. What is Mangesh's annual income?

- (1) Rs. 5, 50, 300
(2) Rs. 5, 36, 500
(3) Rs. 5,47, 200
(4) cannot be determined
(5) None of these

25. Prema decided to donate 15% of her salary to an orphanage. On the day of donation, she changed her mind and donated Rs. 1896, which was 80% of what she had decided earlier. How much is Prena's salary?

- (1) Rs. 18,500
(2) Rs. 10,250
(3) Rs. 15,800

(4) Cannot be determined

(5) None of these

26. Two number are 20% and 50% more than the third number, find first number is what percent of the second?

- (1) 80% (2) 100%
(3) 70% (4) 60%
(5) None of these

27. Two numbers are such that the first is 20% less than and the second is 20% more than the third. The first number is what percent of the second?

- (1) $77\frac{2}{3}\%$ (2) $66\frac{2}{3}\%$
(3) $75\frac{2}{3}\%$ (4) $64\frac{2}{3}\%$
(5) None of these

28. Two number are such that they are 40% and 50% of the third number. First number as percentage of the second is:

- (1) 70% (2) 100%
(3) 80% (4) 60%
(5) None of these

29. If the price of sugar be increased by 20%, then how much percent a lady must reduce the consumption of sugar so as not to increase her expenditure?

- (1) 16% (2) 15%
(3) 19% (4) 20%
(5) None of these

30. The price of onions is now reduced by 25%. What percent of its consumption should the family increase so as not to reduce the expenditure on this item?

- (1) $33\frac{1}{3}\%$ (2) $30\frac{1}{3}\%$
(3) $32\frac{1}{3}\%$ (4) $33\frac{1}{3}\%$
(5) None of these

31. The salary of an executive is first increased by 20% and later it was reduced by 20%. The



net change, if any, in his original salary is:

- (1) 4% decrease (2) 5% increase
(3) 3% increase (4) No change
(5) None of these

32. When the price on a ticket is increased by 10%, the sale on ticket is reduced by 5%. Find the change in the collection?

- (1) 5% decrease
(2) 4.5% decrease
(3) 4.5% increase
(4) 3% increase
(5) None of these

33. A student has to secure 45% marks, to qualify for interview, in a written examination. If he get 79 mark and fails by 56 marks, then find the maximum marks set to qualify for interview.

- (1) 350 (2) 300
(3) 400 (4) 450
(5) None of these

34. Atul scored 30% marks in an examination and failed by 40 marks where as his friend Sunil 42% marks gets 32 marks more than the minimum required marks for the examination. The maximum marks for the examination.

- (1) 600 (2) 700
(3) 800 (4) 900
(5) None of these

35. A candidate who gets 20% marks in an examination fails by 30 marks. Another candidate who gets 32% marks in the same examination gets 42 marks more than are necessary for passing the examination. What is the pass percentage of marks?

- (1) 30% (2) 60%
(3) 25% (4) 40%
(5) None of these

36. In an examination, 23% of the candidates failed in civics: 29% failed in social studies where as 11% failed in both. Find the pass percentage who passed in both subjects.

- (1) 30% (2) 59%
(3) 58% (4) 57%

(5) None of these

37. In an examination, 30% of the candidates failed in History and 27% failed in Geography where as 15% failed in both the subjects. Find the pass percentage of those passing in both subjects.

- (1) 50% (2) 55%
(3) 58% (4) 57%
(5) None of these

38. In an examination, 78% of the candidates passed in English, 67% passed in Mathematics and 10% failed in English and Mathematics both. Find the pass percentage of those who passed in both subjects.

- (1) 50% (2) 55%
(3) 58% (4) 57%
(5) None of these

39. In an examination in which full marks were 2500. A got 10% less than B, B got 25% less than C and C got 20% less than D. If A got 540, then what percentage of the full marks was obtained by D?

- (1) 35% (2) 45%
(3) 42% (4) 40%
(5) None of these

40. In an examination A got 10% less than B, B gets 25% more than C, and C gets 20% less than D. If A got 360 marks, then the number of marks obtained by D is:

- (1) 400 (2) 500
(3) 600 (4) 700
(5) None of these

41. In an election where there are two candidates only, the candidate who gets 57 percent of the votes is declared elected by 4200 votes. The number of votes recorded is

- (1) 40,000 (2) 50,000
(3) 30,000 (4) 35,000
(5) None of these

42. Three friends x, y, z whose salary together amount to Rs. 72000, spend 80%, 85% and 75% of their salaries respectively. If their savings are in the ratio as 8 : 9 : 20, then find



their respective salaries.

- (1) Rs. 16000, Rs. 24000 and Rs. 32000
- (2) Rs. 14000, Rs. 22000 and Rs. 30,000
- (3) Rs. 18000, Rs. 26000 and Rs. 34000
- (4) Rs. 10000, Rs. 18000 and Rs. 26000
- (5) None of these

43. In an examination 27% candidates failed in English, 38% failed in Mathematics. If 19% failed in both the subjects, then the percentage of the candidates who pass in both subjects is:

- (1) 54% (2) 50%
- (3) 52% (4) 48%
- (5) None of these

44. In an examination, 70% candidates passed in English, 65% in Mathematics and 27% failed in both subjects and 248 candidates passed in both the subjects. The number of total students appeared in the examination?

- (1) 300 (2) 400
- (3) 500 (4) 600
- (5) None of these

45. In an examination 36% of marks is necessary to pass and a student gets 200 marks and fails by 124 marks. The total marks is:

- (1) 700 (2) 900
- (3) 600 (4) 400
- (5) None of these

46. In a number is 25% more than the other, then how much percent is the second number less than the first?

- (1) 12.33% (2) 16.66%
- (3) 16.33% (4) 20%
- (5) None of these

47. If A's earning is 20% less than that of B, then how much percent is B's earning is more than that of A?

- (1) 15.2% (2) 30%
- (3) 25% (4) 28%
- (5) None of these

48. Two numbers are 5% and 25% of a third number respectively. What percentage is the

first of the second?

- (1) 42% (2) 16%
- (3) 35% (4) 20
- (5) None of these

49. The numbers are less than a third number by 40% and 10% respectively. How much percent is the first number less than the second?

- (1) 42% (2) 16%
- (3) 35% (4) 20%
- (5) None of these

50. In an examination, out of 1500 boys and 300 girls, 70% of boys and 30% of girls have passed. What is the percentage of students that failed?

- (1) 33% (2) 25.5%
- (3) 30% (4) 20%
- (5) None of these

51. Rajesh has to score 20% marks to pass in a test. If he gets 60 marks and fails by 40 marks, then find the total marks assigned for the test?

- (1) 550 (2) 450
- (3) 500 (4) 200
- (5) None of these

52. In a rectangle, the length and the breadth are increased by 20% and 30% respectively. What is the percentage increase in its area?

- (1) 45% (2) 16%
- (3) 15% (4) 56%
- (5) None of these

53. The value of an article is Rs. 3450. Its values decrease 5% during the first year, 10% during the second year and 20% during the third year. What is value of the article after 3 years?

- (1) 1892 (2) 2500
- (3) 1890.5 (4) 2359.8
- (5) None of these

54. The price of an item is decreased by 30%. In order to get the original price, the new price must be increased by

- (1) 33% (2) 35.7%
- (3) 50% (4) 42.85%



- (5) None of these
55. The length and breadth of a square are increased by 20% and 25% respectively. The area of the rectangle so formed exceeds the area of the square by
- (1) 50% (2) 18%
(3) 35% (4) 40%
- (5) None of these
56. In an examination, 15% and 30% students failed in Biology and Hindi respectively while 20% students failed in both the subjects. If the number of students passing the examination is
- (1) 1250 (2) 1200
(3) 1600 (4) 2000
- (5) None of these
57. Rohan spends 20% of his income in entertainment, 10% of the rest in his higher education and 15% of the balance in paying his telephone bills. After his expenditure, he is left with Rs. 7956. What is Rohan's income?
- (1) 12560 (2) 14789
(3) 16600 (4) 20000
- (5) None of these
58. Out of 140 pieces, 10% are defective and out of 100 pieces, 15% are defective. For all the pieces combined, what percent of the pieces are defective?
- (1) 15% (2) 6.1%
(3) 12.08% (4) 12.05%
- (5) None of these
59. $a\%$ of $2b$ is $b\%$ of
- (1) $2a$ (2) a
(3) 0.5 (4) $3a$
- (5) None of these
60. An ant travels along the diagonal of a square. How much extra, in terms of percentage, it needs to travel if it were to travel along the sides of the square?
- (1) 55% (2) 41%
(3) 30% (4) 25%
- (5) None of these
61. 10% of income of X is equal to 15% income of Y and a 20% income of Y is equal to 25% of the income of Z. If the income of Z is Rs. 5000, then the total income of X, Y and Z is
- (1) 20625 (2) 26500
(3) 21040 (4) 20550
- (5) None of these
62. In a group of 40 men and 80 women, 30% of the men are less than 30 years old and 40% of the total persons are less than 30 years. What percentage of men are under 30 years?
- (1) 35% (2) 61%
(3) 40% (4) 29%
- (5) None of these
63. A reduction of 25% in the price of wheat enables a person to purchase 2.5 kg more of Rs. 120. What is the original price per kg of wheat?
- (1) 16 (2) 19
(3) 20 (4) 25
- (5) None of these
64. A shopkeeper has 5% of the total pencils as defective. He sells 92% of the remainder and still has 684 pencils left. How many pencils did he originally have?
- (1) 9000 (2) 6000
(3) 10000 (4) 8000
- (5) None of these
65. Successive discounts of 15% and 25% are equivalent to a single discount of
- (1) 15% (2) 21%
(3) 18% (4) 25%
- (5) None of these
66. If the numerator of a fraction is increased by 10% and the denominator is decreased by 20%, then the value of the fraction is $\frac{12}{13}$. What is the original fraction?
- (1) $\frac{96}{143}$ (2) $\frac{61}{89}$
(3) $\frac{55}{143}$ (4) $\frac{25}{89}$
- (5) None of these
67. The population of a city increases at the rate of 5% per annual increase of 2% in the population due to the job seekers. The



percentage increase in the population after 2 years will be

- (1) 23% (2) 12%
- (3) 15% (4) 25%
- (5) None of these

68. Two fifth of one-third of a number is 85% of 320. What is the number?

- (1) 1020 (2) 1021
- (3) 2040 (4) 2450
- (5) None of these

69. The digit at unit's place in a two-digit number is increased by 100% and the ten's digit of the same number is increased by 40%. The number thus formed is 20 more than the original number. What is the original number?

- (1) 75 (2) 61
- (3) 70 (4) 26
- (5) Cannot be determined

70. A got 20% of the maximum marks in an examination and failed by 10 marks. B who took the same examination got 50% of the total marks and got 20 more than the passing marks. What were the passing marks in the examination?

- (1) 35 (2) 30
- (3) 10 (4) 28
- (5) None of these

71. If two numbers are 30% and 15% of the number respectively, then what is the percentage of the first number to the second?

- (1) 200% (2) 300%
- (3) 350% (4) 250%
- (5) None of these

72. Two students appeared in an examination. One of them secured 3 marks more than the other and his marks was 40% of the sum of their marks. The marks obtained by them are

- (1) 4, 15 (2) 3, 15
- (3) 3, 6 (4) 2, 12
- (5) None of these

73. In an election, out of the two candidates, one who got 40% of the total votes was defeated by 20,000 votes. Calculate the total number

of votes polled.

- (1) 50000 (2) 100000
- (3) 102450 (4) 500000
- (5) None of these

74. A and B has the same price. If the price of A increases by 10% and the price of B increases by 5%, then how much more will it cost to but 3 A's and 3 B's?

- (1) 550% (2) 600%
- (3) 445% (4) 350%
- (5) None of these

75. A vendor had some boxes. He sells 30% of the boxes and still has 154 boxes. What is the number of boxes he had originally?

- (1) 51 (2) 31
- (3) 30 (4) 22
- (5) None of these

76. In an island, 30% of men is same is half of women and there are 15000 women. Total number of people in the island is

- (1) 35000 (2) 29000
- (3) 10000 (4) 25000
- (5) None of these

77. 40% of the voters decide to vote for A and rests decide to vote for B. But on the last day of the election, only 20% voted for A and 40%, voted for B. If A lost by 20 votes, then the total number of voters is

- (1) 75 (2) 61
- (3) 90 (4) 95
- (5) None of these

78. Out of the 2500 inhabitants of a town, 70% are males of whom 30% are literate. If, out of all the inhabitants 30% are literate, then what percentage of the females of the town are literate?

- (1) 15% (2) 21%
- (3) 18% (4) 5%
- (5) None of these

79. Rs. 7400 was distributed among A, B and C such that A received 25% more than B and B received 20% more than C. What amount did



C receive?

- (1) 2000 (2) 6.071
(3) 10 (4) 2.05
(5) None of these

80. A trader dealing in mobile phone reduced the price by 20% as result of which, the sales went up by 80%. What was the net effect on his sales income?

- (1) 105% (2) 116%
(3) 98.5% (4) 72%
(5) None of these

81. Ramesh spends Rs. 50 to buy butter. On one occasion, he could buy 2.5 kg of butter less for Rs. 50 as the price had gone up by 20%. What was the earlier price of butter per kg?

- (1) Rs. 3.33 (2) Rs. 6.21
(3) Rs. 4.10 (4) Rs. 5.05
(5) None of these

82. If 'a' is 90% of 'b' is what percent of 'a+3b'?

- (1) 35% (2) 12.5%
(3) 10% (4) 25.6%
(5) None of these

83. 40% of the employees of certain company are men and 60% of men earn more than Rs. 30,000 per year. If 40% of the company's employees earn more than Rs. 30,000 per year, then what fraction of the women employed by the company earn less than or equal to Rs. 30,000 per year?

- (1) $\frac{7}{12}$ (2) $\frac{11}{25}$
(3) 0.6 (4) 2.05
(5) None of these

84. Rajnesh's earning increases by 30% in one year but decreases by 5% in the next year. After 5 years, his total earnings would be Rs. 60,000. What is his present earning?

- (1) Rs. 30,000 (2) Rs. 41,000
(3) Rs. 25000 (4) Rs. 35000
(5) None of these

85. Three subjects in an examination have maximum marks per subject in the ratio of 1 : 2 : 4 respectively. If a student obtained 40% in the first subject, 50% in the second and

60% in the third subject, then what percentage did he score overall?

- (1) 52.5% (2) 67%
(3) 54.3% (4) 56.7%
(5) None of these

86. Give that a% of b + ? % of 2a = a% of (a+2b). The value of '?' is

- (1) a - b (2) $\frac{(a + b)}{2}$
(3) a - 2b (4) a + b
(5) None of these

87. In city, 10% of the population died due to drought, 10% of the remaining due to lack of food and 20% of the rest due to disease. The final population was reduced to 820, 80,88. What was the original value of the population?

- (1) 5560000 (2) 6710000
(3) 1000000 (4) 20550000
(5) None of these

88. The daily wage is increased by 25% and a person now gets Rs. 25 per day. What was his daily wage before the increase?

- (1) Rs. 35 (2) Rs. 24
(3) Rs. 20 (4) Rs. 25
(5) None of these

89. The price of sugar has fallen by 10%. How many 1 kg can be bought for the same amount which was sufficient to buy 18 1 kg at the higher price?

- (1) 15 (2) 60
(3) 10 (4) 20
(5) None of these

90. There are five boxes in a container. The weight of the first box is 200 kg and the weight of the second box is 20% higher than the weight of the third box, whose weight is 25% higher than the first box. The fourth box at 350 kg is 30% higher than the fifth box. The difference in average weight of the four heaviest boxes and the four lightest boxes is

- (1) 55 (2) 62.5
(3) 70.5 (4) 82
(5) None of these

91. In a college, there are 15 more girls than boys.



If the number of girls is increased by 10% and the number of boys is also increased by 16%, there would be 9 more girls than boys. What is the number of students in the school?

- (1) 300 (2) 265
(3) 120 (4) 455
(5) None of these

92. The worker receives a 2.5% cut in pay and now his salary is Rs. 25000. What was his salary to begin with?

- (1) 18433 (2) 13452
(3) 22354 (4) 24562
(5) None of these

93. Anirban gets a 4% raise. A year later, Anirban receives a 2.5% cut in pay and now his salary is Rs. 25000. What was his salary to begin with?

- (1) Rs. 24654.8 (2) Rs. 20000
(3) Rs. 13005 (4) Rs. 15421
(5) None of these

94. Given that $40\% \text{ of } 2490 + 30\% \text{ of } x = 33.33\% \text{ of } 4500$. What is the value of 'x'?

- (1) 1250 (2) 3215
(3) 168 (4) 105
(5) None of these

95. Given that $20\% \text{ of } 25\% \text{ of } 8420 \text{ of } x = 20\% \text{ of } 12500 + 0.5 \times 112$. What is the value of 'x'?

- (1) 5 (2) 6.071
(3) 10 (4) 2.05
(5) None of these

ANSWERS

1.	1	17.	3	33.	2	49.	5	65.	5	81.	1
2.	5	18.	5	34.	1	50.	2	66.	1	82.	4
3.	2	19.	1	35.	3	51.	3	67.	3	83.	2
4.	2	20.	2	36.	2	52.	4	68.	3	84.	1
5.	2	21.	1	37.	3	53.	4	69.	5	85.	3
6.	3	22.	4	38.	2	54.	4	70.	2	86.	2
7.	1	23.	5	39.	4	55.	1	71.	1	87.	5
8.	1	24.	5	40.	1	56.	2	72.	3	88.	3
9.	3	25.	3	41.	3	57.	5	73.	2	89.	4
10.	4	26.	1	42.	1	58.	3	74.	3	90.	2
11.	3	27.	2	43.	1	59.	1	75.	4	91.	2
12.	5	28.	3	44.	2	60.	2	76.	5	92.	5
13.	5	29.	5	45.	4	61.	1	77.	5	93.	1
14.	1	30.	4	46.	3	62.	5	78.	5	94.	3
15.	3	31.	1	47.	3	63.	1	79.	1	95.	2
16.	2	32.	2	48.	1	64.	1	80.	2		



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