**Percentage and its applications:**

               For 1-10: Calculate?

1. 42.75% of 960?
2. 32% of 55?
3. 24% of 225?
4. 83.33% of 1296?
5. 91.66% of 2472?
6. What percent of 687 is 359?
7. Find 359/687 in percent?
8. 25000 is what percent of 142250?
9. Find 25000/142250?
10. Which fraction is greater? 101/203 or 179/252
11. Compare 797/1599 with 421/839?
12. Compare 19/29 with 32/42?

1. Two numbers are respectively 12(1/2)% and 25% more than a third number. The first number as percentage of second number is?                                                                                                                                A.50      B.60      C.75      D.90
2. Radha spends 40% of her salary on food, 20% on house rent, 10% on entertainment and 10% on conveyance. If her savings at the end of a month are Rs 1500, then her salary per month is?                    A.Rs 8000      B.Rs 7500      C.Rs 6000     D.Rs 10000
3. Of the total amount received by Kiran, 20% was spent on purchases and 5% of the remaining on transportation. If he is left with Rs 1520, the initial amount was?                                                                     A. Rs 1000      B.Rs 2000     C. Rs 2500      D.Rs 3000
4. A person gave 20% of his income to his elder son, 30% of the remaining to the younger son and 10% of the balance , he donated to a trust. He is left with Rs 10080. His income was?                                A. Rs 50000        B.Rs 40000       C.Rs 30000       D.Rs 20000
5. A man spends 75% of his income. His income increased by 20% and he increased his expenditure by 15%. His savings will then be increased by?                                                                                                        A. 33%      B.33(1/3)%      C.35%     D.40%
6. The price of petrol is increased by 25%. By how much percent a car owner should reduce his consumption of petrol so that the expenditure on petrol would not be increased?                                   A.25%      B.30%      C.50%       D.20%
7. If the price of a book is first decreased by 25% and then increased by 20%, the net change in the price of the book will be?                                                                                                                                          A.10% decrease      B.5 % decrease       C. no change      D.5% increase
8. When the price of sugar decreases by 10%, a man could buy 1 kg more for Rs 270. Then the original price of sugar per kg is?                                                                                                                             A. Rs 25      B.Rs 30      C.Rs 27      D.Rs 32
9. The number of seats in an auditorium is increased by 25%. The price on a ticket is also increased by 12%. What is the effect on the revenue collected?                                                                                         A.40%      B.45%      C.50%      D.60%
10. In an examination, a student who gets 20% of the maximum marks fails by 5 marks . Another student who scores 30% of the maximum marks get 20 marks more than the pass marks. The necessary percentage required for passing is?                                                                                                    A. 32%     B.23%     C.22%     D.20%
11. A sample of 50 liters of glycerin is found to be adulterated to the extent of 20%. How much pure glycerin should be added to it so as to bring down the percentage of impurity to 5%?                      A. 155 liters    B. 150 liters       C. 150.4 liters      D. 149 liters
12. 1 liter of water is added to 5 liters of alcohol-water solution containing 40% alcohol strength. The strength of alcohol in the new solution will be?                                                                                                     A. 30%     B. 33%      C. 33(2/3)%     D. 33(1/3)%
13. In an election between two candidates, 75% of the voters cast their votes, out of which 2% votes were declared invalid. A candidate got 9261 votes which were 75% of the valid votes. The total number of voters enrolled in that election was?                                                                                        A.16000       B.16400     C.16800      D.18000

**Profit, Loss and Discount:**

1. A merchant sold an article at 10% loss. If he had sold it Rs 450 more, 8% would have been gained on the cost price. Find the cost price?
2. Rs 1200      B.Rs 1800      C.Rs 1500    D.Rs 2500
3. A man sells an article at a profit of 25%. If he had bought it at 20% less and sold it for Rs 10.50 less, he would have gained 30%. Find the CP of the article?                                                                                      A.50       B.20      C.25       D.35
4. The profit percentage of A and B is same on selling the articles at Rs 1800 each but A calculates his profit on the selling price while B calculates it correctly on the cost price which is equal to 20%. What is the difference in their profits?                                                                                                                 A. Rs 360            B.Rs 60        C.Rs 540      D.Rs 450
5. A person sold three articles at the same SP. He got 20% profit, 10% loss and 12.5% profit respectively on these articles. If he got overall Rs 900 profit, then find the total CP of all the three articles together?   A.15300      B.15100       C.15500     D.15600
6. A manufacturer sold some articles to a wholesaler at 12.5% profit. The wholesaler sold it to retailers at 20% loss and retailers sold customers at 16.66% loss. If a customer bought it at Rs 810. Then find the cost of article for manufacturer?                                                                                                                                                                                                      A.1020        B.1040       C.1060       D.1080
7. A dishonest dealer professes to sell his goods at Cost Price but still gets 20% profit by using a false weight. What weight does he substitute for a kilogram?

A.855 1/2 grams        B.833 1/3 grams     C.833 1/2 grams       D.875 2/7 grams

1. A grain dealer makes a profit of 10% while buying as well as selling a product. What is his total gain?                                                                                                                                                                               A.22.22%        B.21%      C.25%       D.22%
2. Rahul went to purchase a Nokia mobile handset, the shopkeeper told him to pay 20% tax if he asked the bill. Rahul managed to get the discount of 5% on the actual sale price of the mobile and he paid the shopkeeper Rs 3325 without tax. Besides he managed to avoid paying 20% tax, what is the amount of discount that he got?

 A.750       B.Rs 375        C.Rs 875        D.Rs 525

1. A stockiest wants to make some profit by selling sugar. He contemplates about various methods. Which of the following would maximize his profit?                                                                                                                              1) Sell sugar at 10% profit.

2) Use 900 g weight instead of 1 kg.

3) Mix 10% impurities in sugar and selling sugar at cost price.

4) Increase the price by 5% and reduced weights by 5%.

A. 1 or 2          B. 2         C.2, 3 and 4        D. Profits are same

      35. The price of an article is sold at Rs 850 after two successive discounts. The mark up is 80% above        the cost price of Rs 680. What is the new profit percentage if only one discount is given instead of two successive discounts, given that the rate of discount is same in each case?                                                                                        A. 50%       B. 80%        C. 25%       D. 75%

     36. A shopkeeper marks up his article by 37.5% but then after that he gives two successive discounts and finally he gets neither profit nor loss. If 2nd discount percentage is 20%. Find the first discount percentage?                                                                                                                                                                     A.18.5%        B.25%       C.9.09%        D.14.28%

   37. CP of 17 articles is equal to the SP of 15 articles but the profit on 3 articles is equal to the discount on 4 articles. Then find the ratio of markup percentage and discount percentage?

A.229/90            B.249/80     C.259/90      D.289/60

   38. The discount percentage on three articles A, B and C is 10%, 20% and 25% and the ratio of the mark price is 1: 2: 4. Also the ratio of the number of articles sold of A, B and C is 2:5:2 then find the overall discount percentage on the total selling of articles?                                                                                                                                 A.60%       B.95%     C.21%       D.35%

**Simple Interest/Compound Interest:**

39. The rate of SI per annum of bank being increased from 3.5% to 5% and time duration is also increased from 2.5 years to 3.5 years. The total SI was increased by Rs 135. Find the initial SI?                                         A.135     B.145     C.185     D.175

40. Rs 435 become Rs 555 in 3 years at a certain rate of SI. If the rate of interest is 2% less, then what will be new amount at the end of 5th year?                                                                                                                                     A.571.25      B.591.5       C.691     D.791.5

41. Rajeev borrowed some money at the rate of 6% per annum for first three years, 9% per annum for next five years and 13% per annum for the period beyond eight years. If the total interest paid by him at the end of eleven year is Rs 7140, the money borrowed by him was?                                                                             A.7000      B.1700     C.9000     D.2000

42. With a given rate of SI the ratio of principal and amount for a certain period of time is 4:5. After 2.5 years, with the same rate of interest, the ratio of the principal and amount becomes 5:7. Find the rate of interest?                                                                                                                                                                                A.18%       B.10%       C.6%        D.16%

43. A person invests some money in two banks in the ratio of 7:5. The rate of SI on first investment is 17%, but overall annual interest on total investment is 19.5%. Find his total investment if interest gain by in second investment is Rs 460?                                                                                                                                                A.4200       B.5200      C.4800      D.5600

44. A person invests certain money in the bank at the rate of 6% per annum simple interest. At the end of 2nd year, he withdraws Rs 1600 and bank gives him 12.5% SI on remaining amount. At the end of 3rd year his total amount is Rs 4500. Find the total interest given by bank?                                                                              A.100      B.1100       C.2200      D.4400

45. A person deposits a certain sum of money at the starting of each year. The bank gives him 8% SI. At the end of 3rd year, total amount becomes Rs 69600. Find how much money does he invest each year?                                    A.28000        B.26500      C.10000     D.20000

46. Rs 3200 becomes Rs 4000 at a certain rate of interest compounded annually in 1.5 year. Then in how many years, Rs 12800 will amounts to 25000 at the same rate of interest compounded annually?                                    A.4.5 years      B.4 years       C.6 years      D.9 years

47. Rs 2700 become Rs 4800 at a certain rate of interest compounded annually in 3 year. Find the amount at the end of 4.5 year?                                                                                                                                                  A.6000     B.6400      C.7800     D.7500

48. CI on a certain sum of money in 3 year is Rs 3810. If rate of interest is 16(2/3)% per annum compounded annually. Find the principal?                                                                                                              A.5725     B.5915      C.6910     D.6480

49.A money lender borrows money at 5% per annum and pays the interest at the end of the year. He lends it at 8% per annum compound half yearly and receives the interest at the end of the year. In this way , he gains Rs 158 a year. The amount of money he borrows?                                                                                 A.6000      B.5200     C.5000       D.5900

50. SI on a certain sum of money is Rs 100 in 2.5 year at a certain rate of interest. But the compound interest on the same sum of money at the same rate of interest compounded annually in 2 yrs is Rs 85. Find the principal?                                                                                                                                                                                  A.320         B.330             C.620      D.440

51. Difference between SI and CI is Rs 40 in 2 years at a certain rate of interest, but difference between SI and CI is Rs 125 in 3 year, at same rate of interest, find the principal?                                                                           A.2650       B.2560      C.6250     D.5260

52. A sum of money place at compound interest doubles itself in 4 years. In how many years will it amount to eight times itself?                                                                                                                                                                  A.16     B.8       C.12     D.20

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

ANSWERS:

13D 14B 15B 16D 17C 18D 19A 20B 21A 22C 23B 24D 25C 26D 27A 28B 29A 30D 31B 32B 33C 34B 35A 36C 37A 38C 39 A 40B 41A 42C 43C 44B 45D 46A 47B 48D 49C 50A 51B 52C