

Percentage, Profit and Loss

11

1m	2m	3m	4m	5m	6m
1(U)	–	1(K)	–	1(A)	9

1 MARK QUESTIONS

- Convert the following into percentage. (Understanding)
 - $\frac{6}{7}$
 - $\frac{3}{4}$
 - $\frac{5}{7}$
 - $\frac{13}{12}$
 - $\frac{6}{13}$
 - $\frac{15}{4}$
- Convert the following into fractions.
 - 85%
 - 35%
 - 49%
 - 53%
 - 79%
 - 69%
- Convert the following into ratio.
 - 19%
 - 28%
 - 36%
 - 45%
 - 18%
 - 68%
- Convert the following into percentage.
 - 1:5
 - 3:7
 - 9:2
 - 6:7
 - 5:3
 - 9:2
- Convert the following into decimal.
 - 25%
 - 42%
 - 53%
 - 73%
 - 69%
 - 78%
- Convert the following into percentage.
 - 0.42
 - 0.57
 - 0.64
 - 0.28
 - 0.88
 - 0.93
- Find $12\frac{1}{2}$ of 1 hour 40 minutes.
- Find 14% of 1 hour 28 minutes.
- What percent is 68 km of 140 km?
- What percent is 36 m of 58 km?
- What percent is ₹78 of ₹28?
- What percent is 12 paise of ₹58?
- If a company makes a profit of 10,000 by selling goods worth ₹25,000. Find the profit percentage.
- If a person makes a profit of ₹1200 by selling a watch worth ₹6000. Find the profit percentage.
- By selling a mobile at ₹12,500 the profit made is ₹500. What is the cost price of the mobile?
- Find the value of a house in the purchase of which the broker was paid 2.5% brokerage which amounted to ₹85,000.
- Find the value of a machine in the purchase of which the broker was paid 2% brokerage which amounted to ₹1,30,000.
- A person bought a cycle for ₹3000. For what price should he sell it to gain 10%?
- A person bought a computer for ₹9000. for what price should he sell it to gain 8%?

3 MARKS QUESTIONS

(Knowledge)

1. A's income is 10% more than B's. How much is B's income less than A's.
2. A's income is 15% less than B's. How much is B's income more than A's.
3. The original price of a watch was ₹3500. It was decreased by ₹800. what is the percentage decrease of the price of the shirt?
4. While taking measurement a tailor write 36 instead of 26. what is the percentage error?
5. Rohit received a scholarship of ₹3500 in 2013 and ₹7800 in 2014. Find the percentage increase.
6. The admission in the college for the year 2016 was 1200 students and in 2017 is 14900. Find the percentage increase.
7. the sales of a company was ₹3500 in May and ₹30,000 in June. Find the percentage decrease.
8. When 35% of a number is added to 38, the result is the number itself. Find the number.
9. Bhavya and Divya score 78% and 82% in an examination. If the difference in their marks is 48. Find the maximum marks.
10. Vishal gets ₹45,000 after getting an increase of 10% of his salary. What is his original income?
11. The price of a motor cycle was decreased by 22% to 3900. What was the original price of the motor cycle.
12. A student has to score 50% marks to pass. He gets 100 marks and yet fails by 50 marks. find the maximum marks.
13. A person sold his mobile for ₹2500 and got a percentage profit equal to cost price. Find the cost price of the mobile.
14. Find the cost price of an article which is sold for ₹550 at a loss of 10%.
15. Find the cost price of an article which is sold for ₹350 at a profit of 6%.
16. A seller bought a colour T.V set for ₹10,000. He marked the selling price as ₹25,000. If he sells the TV after giving a discount of 30% from the marked price. find the profit percentage.
17. The cost price of 12 articles is equal to the selling price of 9 articles. Find the profit percent.
18. A dealer by selling 15 pens get the cost price of 20 pens. What is the profit percentage?
19. By selling 16 rings a shopkeeper loses the selling price of 4 rings. Find the loss percent.
20. The difference between cost price and selling price is 175. If the profit is 12%. Find the selling price.
21. In a dance competition 70% of the participants were girls. 35% of the boys and 65% of the girls got qualified for the next round. If 49 girls were eliminated find the number of boys who were selected.
22. Monthly income Anish, Manish and Suresh was increased from 27,000, 29,000 and 18,000 to 28,500, 30,500 and 20,000 respectively whose gain percent is maximum.
23. Rajesh's salary was increased by 10% and then again by 3%. If the present salary is ₹12,800. What was Rajesh's previous salary.
24. By how many percent should the use of tea be increased if the price of tea is decreased by 10%. So that the expenditure remains unchanged.

BASIC MATHEMATICS

25. By how much percent should the use of sugar be increased if the price of the sugar is decreased by 15% so that the expenditure remains unchanged.
26. The cost of an article is increased by 15% and then decreased by 5%. Find the percentage increase in the original cost.
27. A number x is mistakenly divided by 20 instead of being multiplied by 20. What is the percentage error in the result.
28. A number ' x ' is mistakenly multiplied by 10 instead of being divided by 10. What is the percentage error in the result.
29. A dealer buys 200 quintals of wheat at ₹1200 a quintal. He spends ₹10,000 on transportation and storage. Then he sells the wheat at ₹13/kg. Find his profit or loss. Also calculate it as a percentage.
30. 'A' sells a laptop to 'B' at a profit of 18% and 'B' sells to 'C' at a profit of 25%. If 'C' pays ₹2800 for the laptop what did 'A' pay for it.
31. A microoven is sold for ₹9400 in which sales tax amounts for 20% of this and profit $\frac{2}{3}$ of the remainder. Find the cost price of the microoven. Calculate the sale than % profit.
32. By selling 12 notebooks a person gains the selling price of 8 notebooks. calculate the gain percent.
33. Ram Singh purchased two camels for ₹18,000 and ₹15,000 respectively. He sold them at a loss of 15% and a gain of 19% respectively. Find the selling price of each of the camels. Also find the overall loss or gain percent in the transaction.
34. A trader sells a calculator at a profit of 12%. If he had bought it at 6% less and sold it for ₹12 more, he would have gained $16\frac{1}{2}$ percent. What did it cost him?
35. An article is sold at ₹36, there is a profit of ₹8. If it is sold at a loss of 8% find out its selling price.
36. A person sold a furniture at a profit of 10% instead of a loss of 10% and got ₹108 more. Find the cost price of the furniture.
37. Nihal refused to sell his book for ₹726 because there was a loss of 12%. If he sold the book at a profit of 5% find the selling price.
38. A person refuses to sell his car for ₹2,20,000 because there was a loss of 8%. If he sold the car at a profit of 6%. Find the selling price.
39. 1 kg of salt and 4 kg of sugar cost ₹160. But if the cost of sugar rose by 20% and that of salt by 10% the same quantity of salt and sugar would cost ₹190. Find the prices per kg of salt and sugar.

5 MARKS QUESTIONS

(Application)

1. There are two candidates in an election 20% of the members in the voters list did not cast their votes and 50 votes were declared invalid. The successful candidate secured 300 votes more than his rival. If 45% of the total members voted in favour of successful candidate then find the votes secured by each candidate.
2. A person gives 60% to his wife, 30% of the remaining he spends on recreation, 10% of the remaining he give to his daughter as pocket money and still saves ₹8000. What is the person's income? Also find the amount he gives his wife and daughter.

QUESTION BANK

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3. A person spent 25% of his salary and thereafter ₹22,000 and further 12% of the remainder. If ₹18,900 is still remaining what was his total salary.
4. In a college there are 2200 students. Last day except 5% of the boys all the students were present in the college. Today except 4% of the girls all the students are present in the college, but in both the days number of students present in the college were same. Find the number of boys and girls in the college.
5. Due to increase in the price of tea by 6% a man reduces his consumption by 5%. Find the percentage increase or decrease in expenditure. What difference would it make if the price decreases by 6% and the consumption increases by 6%?
6. The total number of students in Arts and Science College is 4200. If the number of arts students is increased by 40% and the number of science students is decreased by 25%. The total strength remains unchanged. Find the number of arts and science students.
7. A radio channel telecast the programme from 11:00 a.m to 11:00 p.m. It telecast 80 advertisements each of 6 seconds and 18 advertisements of 35 seconds. What is the percentage of time devoted in a day for the advertisement?
8. A man sells an article for ₹1750 and earns a profit of 15%. Find the (a) cost price (b) profit % at s.p.
9. If an article is sold for ₹3700 there is a profit of 20%. If the cost price increased by ₹800. Find the profit percentage.
10. A man purchased a certain number of apples at ₹35 and the same number at ₹30. He mixes them together sells them at ₹45. How much percent does he lose or gain in the transaction.
11. A dealer sold 3 furniture sets at ₹12,500 each. He sold one at a profit of 12% and the other two at a loss of 6%. Find his gain or loss percentage.
12. 6% more is gained by selling a table for ₹180 than by selling for ₹225. Find the cost price of the table.
13. A T.V is sold at a profit of 20% cost price and selling price both are increased by 250. If the new profit is at the rate of 15%, find the original cost of the t.v.
14. A wholesale dealer sold a machine to a shopkeeper at 20% profit. The shopkeeper sold it to a customer so as to get 25% profit for himself. The difference between the selling price of the shopkeeper and that of the wholesale dealer was found to be ₹129. Find the initial price of the machine.
15. Ram sold to Rahim cinema tickets at a profit of 12%. Rahim sold it back to Ram at a loss of 12%. In the whole process Ram gain ₹75 in all. Find the price at which Ram originally bought the tickets.
