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# PERCENTAGE

- KOUSTAV

## CONCEPT - PERCENTAGE

**I. The population of a town, named Mirzapur, is 8000. It decreases annually at the rate of 20% p. a. What will be its population after 2 years?**

**A) 1600**

**B) 4800**

**C) 6400**

**D) 5120**

**2. The population of a town, named Winterfell, increases 10% and 20% respectively in two consecutive years. The present population of the town is 13200. Then what was the population of the town 2 years ago?**

**A) 9504**

**B) 10001**

**C) 10000**

**D) 10100**

**3. A mixture of 20 litres of milk and water contains 20% of water. A new mixture is formed by adding 5 litres of water. What is the percentage of milk in the new mixture?**

A) 36%

B) 20%

C) 64%

D) 46%

**4. When a number is first increased by 10% and then reduced by 10%, the number:**

- A) Does not change    B) Decreases by 1%    C) Increases by 1%    D) None of these

**5. In an election between two candidates, 20% of votes were declared invalid. First candidate got 70% of the valid votes and a lead of 1600 votes. The total number of votes enrolled in that election was:**

**A) 5000 votes**

**B) 5400 votes**

**C) 10000 votes**

**D) 6667 votes**

**6. If the price of petrol increases by 25%, by how much must Batman cut down his consumption so that his expenditure on petrol remains constant?**

A) 25%

B) 16.67%

C) 20%

D) 33.33%



**7. If the price of petrol increases by 50% and Stark intends to spend only an additional 25% on petrol, by how much will he reduce the quantity of petrol purchased?**

A) 25%

B) 16.66%

C) 50%

D) 20%

**8. If  $X$  and  $Y$  are 20% and 25% greater than  $Z$  respectively, by how much percentage is  $X$  smaller than  $Y$ ?**

A) 20%

B) 4%

C) 5%

D) 4.16%

**9. In XYZ College, 65% of students are less than 20 years of age. The number of students more than 20 years of age is  $\frac{2}{3}$ rd of number of students of 20 years of age, which is 42. What is the total number of students in the college?**

**A) 75**

**B) 90**

**C) 130**

**D) 200**

**10. Fresh grapes contain 90% water by weight while dried grapes contain 20% water by weight. What is the weight of dry grapes available from 20 kg of fresh grapes?**

A) 2 kg

B) 2.4 kg

C) 2.5 kg

D) None of these

**11. In a certain city, 60 percent of the registered voters are Party A supporters and the rest are Party B supporters. In an assembly election, if 75% of the registered Party A supporters and 20% of the registered Party B supporters are expected to vote for Candidate A, what percent of the registered voters are expected to vote for Candidate A?**

**A. 20**

**B. 60**

**C. 75**

**D. 53**

**12. Hulk mistakenly divided a number by 2 instead of multiplying it by 2. Find the percentage of error.**

A) 35%

B) 45%

C) 65%

D) 75%

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# PROFIT & LOSS



# CONCEPT – PROFIT & LOSS



**13. Alfred buys an old scooter for Rs.4700 and spends Rs.800 on its repairs. If he sells the scooter for Rs.5800, his gain percent is:**

A)  $4\frac{4}{7}\%$

B)  $5\frac{5}{11}\%$

C) 10%

D) 12%

**14. If loss is  $\frac{1}{3}$ rd of SP, the loss percentage is \_\_\_\_\_?**

A) 16%

B) 25%

C) 30%

D) 33.33%

**15. A shopkeeper marks all his goods at 50% above the cost price and offers a discount of 25% on the marked price. What is his actual profit?**

A) 27%

B) 12.50%

C) 20%

D) 15%

**16. In a certain store, the profit is 320% of the cost. If the cost increases by 25% but the selling price remains constant, approximately what percentage of the selling price is the profit?**

**A) 30%**

**B) 70%**

**C) 100%**

**D) 236%**

**17. An object is sold for Rs.150 making a profit of 50% on the selling price. If the article is bought for Rs.25 less, what price must be marked so as to gain 40% by selling the object at marked price?**

A) 90

B) 80

C) 50

D) 70

**18. Joey has 12 eggs with him. He sells  $x$  at a profit of 10% and remaining at a loss of 10%. He gains 5% on the whole. What is the value of  $x$ ?**

A) 7

B) 9

C) 8

D) 10

**19. Some articles were bought at 6 articles for Rs.5 and sold at 5 articles for Rs.6. Gain percent is:**

A) 30%

B)  $33\frac{1}{3}\%$

C) 35%

D) 44%

**20. The cost price of 20 articles is the same as the selling price of  $x$  articles. If the profit is 25%, then  $x$  is:**

A) 15

B) 16

C) 18

D) 25



## EXTRA QUESTIONS:

**21. In an election between two candidates, 10% of votes were declared invalid. First candidate got 60% of the valid votes and a lead of 1800 votes. The total number of votes enrolled in that election was:**

- A) 3000 votes                      B) 5400 votes                      C) 10000 votes                      D) 6667 votes

**22. By selling 33 meters of cloth, one gains the selling price of 11 meters. Find the gain percent.**

- A) 50%                      B) 60%                      C) 75%                      D) 66%

**23. The difference between a discount of 35% and 2 successive discounts of 20% on a certain bill was Rs.22. Find the amount of the bill.**

- A) Rs.1000                      B) Rs.440                      C) Rs.1100                      D) Rs.2200

**24. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?**

- A) 3                      B) 4                      C) 5                      D) 6

**25. Scrooge purchases 50 dozen eggs at Rs. 4 per dozen. Of these, 40 eggs were found broken. At what price should he sell the remaining eggs in order to make a profit of 5% on the whole?**

- A) Rs.5/dozen                      B) Rs.4.5/dozen                      C) Rs.6/dozen                      D) Rs.4.25/dozen