

**Profit and Loss** is the most interesting and very important topic of the Quant section. This is a very wide topic of the quant section in which you will learn some real-life solutions to problems and it will increase your aptitude dramatically. Concepts of profit and loss will be used in other topics as well.

**EXERCISE:**

**[Easy]**

1. Due to a 20% decrease in price of potato, 5 kg more can be bought for Rs 260. Find a new price per kg of potato?

- 1. Rs 9
- 2. Rs 12.5
- 3. Rs 10.4
- 4. Rs 11.5
- 5. None of these

2. The consumption of petrol in Delhi decreases by 22% when the price of petrol is increased by Rs. 10 per liter. If the revenue collection increases by 2% only then what was the petrol price per liter before increment?

- 1. Rs. 37.5
- 2. Rs. 42.5
- 3. Rs. 32.5
- 4. Rs. 35
- 5. Rs. 32

3. Per kg rate of iron is increased by 10% and the weight of iron gate is decreased by 12%. If the price of the iron gate got decreased by Rs. 800 due to this then what is the new price of iron gate?

- 1. Rs. 24700
- 2. Rs. 23200
- 3. Rs. 25700
- 4. Rs. 25500
- 5. Rs. 24200

4. For organizing a party, Aisha received some amount of money from her father. She spent 42% of total money on the food and beverages, 25% of the remaining amount on decoration and 60% of the remaining amount on miscellaneous items. If she is left with Rs. 5568, then find the total amount received by Aisha.

- 1. Rs. 32000
- 2. Rs. 42000

3. Rs. 27000    4. Rs. 30000

5. None of these

**5.** It is given that 14% of a is equal to 10% of b. When a is increased by 20, it becomes 56.25% of the resulting sum of two numbers. What is the value of 'a + 3b'?

- 1. 110    2. 120
- 3. 130    4. 140
- 5. 150

**6.** Sudha saves 15% of her income. If her expenditure increases by 20% and savings increase by 60%, then by what percent has her income increased?

- 1. 24%    2. 30%
- 3. 35%    4. 26%
- 5. 20%

**7.** One day a man takes 1 hour to reach his office. The next day he reaches the office 15 minute early. What percentage of time does he take to reach the office from the previous day?

- 1. 25%    2. 50%
- 3. 75%    4. 30%
- 5. 45%

**8.** If 20% of A is added to 40% of B, then it becomes 50% of B. A is what percent less than B?

- 1. 30%    2. 60%
- 3. 50%    4. 40%
- 5. 70%

**9.** 25% of 8 times of A is equal to 20 times of B. A is what percentage of B?

- 1. 200%
- 2. 100%
- 3. 1000%
- 4. 80%
- 5. 50%

**10.** In an election, there are 80000 voters listed who are eligible for voting. Out of them 65% of people turned up to vote on the voting day. Further, 5% of total votes casted were termed invalid due to some discrepancy. If there were only two candidates in the election, how much minimum valid casted vote would be required by a candidate to win the election?

- 1. 32201
- 2. 26601
- 3. 29301
- 4. 24701
- 5. None of these

**11.** Initially a shopkeeper had no chocolates. A customer bought 14.28% chocolate from n then another customer bought 16.67% of the remaining chocolates. Finally the shopkeeper is left with 240 chocolates in his shop. How many chocolates were there initially in his shop?

- 1. 432
- 2. 336
- 3. 442
- 4. 342
- 5. 332

**12.** If the length and breadth of a rectangle are increased by 12% and 13.33% respectively. What is the percentage increase in the area of the rectangle?

- 1. 24.58%
- 2. 15.68%
- 3. 26.93%
- 4. 27.23%
- 5. 30.32%

**13.** Amrita purchased 90 metres of cloth, out of which 63.33% was used for making trousers. How much cloth was used by her for making trousers?

- 1. 57 metres
- 2. 60 metres

3. 54 metres      4. 51 metres

5. 64 metres

**14.** Cost of a Table is Rs. 900 and of a chair is Rs. 400. If the price of table and chair increases by 5% and 10% respectively, find the percentage increase in price of 2 Table and 5 chairs.

1. 8.43%      2. 8.72%

3. 7.63%      4. 7.38%

5. 6.72%

**15.** A student is required to get an aggregate of 65% to pass in an examination. In a class, a particular student gets 285 marks and is declared failed by 8% marks. What are the actual marks which the student should have scored to pass the examination?

1. 300      2. 325

3. 350      4. 375

5. 400

#### **[Moderate]**

**16.** What will be the cost price of a pump if the selling price is 15000 after giving a 25% discount. The shopkeeper makes the MRP 60% greater than the cost price.

1. 12500      2. 12800

3. 12600      4. 12550

5. 12760

**17.** A retailer bought 30 kg tea at a discount of 20%. Besides 2 kg tea was offered free to him by the wholesaler on the purchase of 30 kg tea. Now, if he sells the whole tea at the marked price to a customer. What is the approximate profit percentage of the retailer?

1. 16%      2. 14%

3. 25%      4. 20%

5. 33%

**18.** The marked price of a jacket is Rs 2100. Even after giving successive discounts of 8% and 13%, a profit of 10% is earned. Find the approximate cost price of the jacket.

- 1. Rs 1528
- 2. Rs 1537
- 3. Rs 1510
- 4. Rs 1519
- 5. None of these

**19.** A person sold an article at a loss of 8%. Had he sold it at a gain of 10.5%, he would have received Rs. 92.50 more. To gain 12%, he should have sold it for:

- 1. Rs. 560
- 2. Rs. 580
- 3. Rs. 537.40
- 4. Rs. 540.50
- 5. Rs. 550.50

**20.** A shirt is marked 20% above the cost price and discount of 10% is offered on the marked price to a customer. To another customer a 10% discount is offered on selling price. If the amount paid by the 2nd customer is Rs. 6 more than the amount paid by the 1st customer then find the cost price of the shirt.

- 1. Rs. 600
- 2. Rs. 550
- 3. Rs. 660
- 4. Rs. 650
- 5. Rs. 440

**21.** On selling an article the profit is 40% of the cost price. If the cost price increases by 25% but the selling price remains constant then find the change in profit%.

- 1. 12%
- 2. 24%
- 3. 28%
- 4. 52%
- 5. 42%

**22.** A wholesaler purchased 7 hair clips for a rupee. How many clips must he sell for a rupee to get a profit of 40%?

1. 6      2. 5      3. 4      4. 3      5. 7

**23.** A shopkeeper first marked up the price by some 10 percent of an article and then gave only 980 gm instead of 1 kg. Find the approx profit of the shopkeeper.

1. 10%      2. 15%      3. 12%      4. 18%  
5. 20%

**24.** An article is listed at Rs. 900 and two successive discounts of 8% and 8% are given on it. How much would the seller gain or lose, if he gives a single discount of 16%, instead of two discounts?

1. Loss of Rs. 5.76  
2. Loss of Rs. 4.76  
3. Gain of Rs. 5.76  
4. Gain of Rs. 4.76  
5. Gain of Rs. 6.76

**25.** Vishal marked 30% above the price of his bicycle and gave a 10% discount to the customer. Find what percent he has profit or loss at the last.

1. 17% loss      2. 20% profit  
3. 17% profit      4. 20% loss  
5. 15% loss

**26.** Amount of profit earned on a product is reduced by Rs. 105. Find the percentage change in the cost price of the product if the profit percentage remains the same as 50%.

1. 20%      2. 10%      3. 25%  
4. 15%      5. Can't be determined

**27.** The price of an article is first increased by 20% and later on decreased by 25% due to a reduction in sales. Find the net percentage change in the final price of the article.

1. 15%      2. 7.5%      3. 5%  
4. 10%      5. 12.5%

**28.** Marked price of an item is Rs. 80 and its selling price is numerically double the discount % given. What is the discount %?

1. 28.93      2. 28.57  
3. 28.43      4. 28.97  
5. 28.23

**29.** A bookseller buys 40 books for Rs. 3200 and sells them at a profit equal to the selling price of 8 books. What is the selling price of two dozen books, if the price of each book is the same?

1. Rs. 1440      2. Rs. 1920  
3. Rs. 2400      4. Rs. 2860  
5. Rs. 2460

**30.** A gives an article to the B at a discount of 10%. B gives the same article to C at a discount of 15%. At last, C gives it to A at a 5% discount. If the cost price of the article C is Rs.800. Find the selling price of A.

1. Rs.1001.17      2. Rs. 841.17  
3. Rs. 941.17      4. Rs. 741.17  
5. Rs. 1041.17

**31.** A merchant agrees to give a product at a discount of 20% over its cost price. But the merchant has a tampered weighing machine, which measures 1 kg when only 500 g of product is placed. What is the profit (%) he earns?

- 1. 25%
- 2. 40%
- 3. 60%
- 4. 75%
- 5. 50%

**32.** A shopkeeper allows a discount of 20% and still makes a profit of 60%. If the profit he makes is Rs 84, then what is the marked price of the object?

- 1. Rs 210
- 2. Rs 240
- 3. Rs 260
- 4. Rs 280
- 5. Rs 250

**33.** A merchant agrees to give a product at a discount of 20% over its cost price. But the merchant has a tampered weighing machine, which measures 1 kg when only 500 g of product is placed. What is the profit (%) he earns?

- 1. 25%
- 2. 40%
- 3. 60%
- 4. 75%
- 5. 50%

**34.** Oil equals to 20% of the weight of groundnut is extracted in a mill. The matter left after extraction is sold as cattle feed at the rate of Rs 12.5/kg. The groundnuts are bought at Rs 20/kg. The processing cost is Rs 5/kg. At what price (Rs per kg) should the oil be sold to earn 20% profit on the total cost. (Total cost = Cost of groundnuts and processing cost) ?

- 1. 250
- 2. 150
- 3. 200
- 4. 100
- 5. 300

**35.** A trader has 600 kgs of wheat, a part of which he sells at 15% profit and the remaining quantity at 20% loss. On the whole, he incurs an overall loss of 6%. What is the quantity of rice he sold at 20% loss?

- 1. 250 kgs
- 2. 320 kgs
- 3. 420 kgs
- 4. 360 kgs
- 5. None of these

#### **[Hard]**

**36.** If the sum of the cost prices of two articles is Rs. 500 and one of them was sold at a profit of 20% and another at a loss of 20%. If the selling prices of both the articles were same, then find the amount of overall profit or loss?

- 1) Rs. 40 loss
- 2) Rs. 40 profit
- 3) Rs. 60 loss
- 4) Rs. 50 profit
- 5) Rs. 20 loss

**37.** A dishonest shopkeeper sells the mangoes x% above the cost price but uses 980 grams weight instead of 1 kg. If he earns 17% profit by selling the mangoes then find the value of x.

- 1) 16.66%
- 2) 15.5%
- 3) 14%
- 4) 14.66%
- 5) 12.33%

**38.** A shopkeeper marked an article at 75% above the cost price and sold it after a discount of 30%. Had he sold it after two consecutive discounts of 20% and 10%, he would have gained Rs. 168 more. Find the cost price of the article.

- 1) Rs. 4000

- 2) Rs. 4200
- 3) Rs. 5400
- 4) Rs. 4500
- 5) Rs. 4800

**39.** A shirt which is marked at Rs. 1500 is sold at a discount of 12% and 25% profit is earned on it. How much of a percentage of discount should be offered on the shirt so that the seller earns no profit by selling it? 1) 28.8% 2) 30.2% 3) 29.2% 4) 29.6% 5) 28.5%

**40.** The amount of profit earned on a product is reduced by Rs. 105. Find the percentage change in the cost price of the product if the profit percentage remains the same as 50%. 1) 20% 2) 10% 3) 25% 4) 15% 5) Can't be determined

**41.** A seller sold a bike at a loss of 10 percent, and after some time he sells another bike at a profit of 100 percent. Find the difference between the selling price of the bike, if the cost price of each bike is Rs.95000.

- 1. Rs.100000
- 2. Rs.124500
- 3. Rs.104500
- 4. Rs.155000
- 5. Rs.167820

**42.** A shopkeeper marked a price for an article is Rs.750. Find the selling price of the article if he sells on a profit of 20% after giving a discount of 30%.

- 1. Rs.425
- 2. Rs.625
- 3. Rs.525
- 4. Rs.655
- 5. Rs.355

**43. Directions:** Two quantities I and II are given in the following questions. You have to find the values of both I and II by using your knowledge of mathematics and choose the most suitable relation between quantity I and II from the given options.

**Quantity I:** Anil buys a chair marked at Rs. 5000 after two successive discounts of 20% and 15%. He spends Rs. 120 on transportation of the chair and sells it at Rs. 4400. Find the percentage profit earned by Anil.

**Quantity II:** A shopkeeper claims to gain 12% while selling and he also mixes 15% impurities in the rice. Find the actual profit percentage earned by the shopkeeper.

- 1) Quantity I > Quantity II
- 2) Quantity I < Quantity II
- 3) Quantity I = Quantity II or No relation can be established
- 4) Quantity I  $\geq$  Quantity II
- 5) Quantity I  $\leq$  Quantity II

**44.** A shopkeeper sold an article for Rs.540 and earned a profit of 20%. Had the shopkeeper sold the same article after giving a cashback of Rs.'x' on the selling price he would have still earned a profit of  $(100/9)\%$ , find the value of x? 1) 35 2) 40

- 3) 45
- 4) 50
- 5) 55

45. Gayatri went to a shopping complex and bought a dress for herself. The marked price of the dress was Rs. 2400 and the shopkeeper gave her a discount of 15%. Further, there was an 11% discount on the bill amount if the payment was made in cash. If Gayatri paid the bill amount in cash, how much total discount percent she got on her dress? 1) 20.5% 2) 25.2% 3) 19.6% 4) 24.3% 5) 22.4%

46. A shopkeeper launched a product on sale and was earning 20% profit. After a few days, the shopkeeper increased the price of the product by 15%, what is the new profit percentage of the shopkeeper? 1) 35% 2) 42% 3) 40% 4) 38% 5) 44%

47. An article was offered at a discount of 15% and a further cash discount of 4% was given. If the article had a marked price of Rs. 3500 and a profit of 14.24% was made after selling. What was the cost price of the article? 1) Rs. 2200 2) Rs. 2500 3) Rs. 2000 4) Rs. 2750 5) None of these