

## Chapter- 8

**PROFIT, LOSS AND DISCOUNT****Main Concepts and Results****Profit (P)**

The amount gained by selling a product with more than its cost price.

**Loss (L)**

The amount the seller incurs after selling the product less than its cost price, is mentioned as a loss.

**Cost Price (CP)**

The amount paid for a product or commodity to purchase it is called a cost price. Also, denoted as CP. This cost price is further classified into two different categories:

- **Fixed Cost:** The fixed cost is constant, it doesn't vary under any circumstances
- **Variable Cost:** It could vary depending as per the number of units

**Selling Price (SP)**

The amount for which the product is sold is called Selling Price. It is usually denoted as SP. Also, sometimes called a sale price.

**Marked Price Formula (MP)**

This is basically labelled by shopkeepers to offer a discount to the customers in such a way that,

- **Discount = Marked Price – Selling Price**
- **And Discount Percentage = (Discount/Marked price) x 100**

**Profit and Loss Formulas**

Now let us find profit formula and loss formula.

- The profit or gain is equal to the selling price minus cost price.
- Loss is equal to cost price minus selling price.

**Profit or Gain = Selling price – Cost Price**  
**Loss = Cost Price – Selling Price**

**Profit percentage = (Profit /Cost Price) x 100**

**Loss percentage = (Loss / Cost price) x 100**

### Profit and Loss Tricks

You have learned until now how to calculate profit as well as loss and also the percentage of them. Now let us learn some tricks or formulas to solve maths problems based on gain and loss, starting from the general formulas.

1. Profit,  $P = SP - CP$ ;  $SP > CP$
2. Loss,  $L = CP - SP$ ;  $CP > SP$
3.  $P\% = (P/CP) \times 100$
4.  $L\% = (L/CP) \times 100$
5.  $SP = \{(100 + P\%)/100\} \times CP$
6.  $SP = \{(100 - L\%)/100\} \times CP$
7.  $CP = \{100/(100 + P\%)\} \times SP$
8.  $CP = \{100/(100 - L\%)\} \times SP$
9. Discount = MP – SP
10.  $SP = MP - \text{Discount}$
11. For false weight, profit percentage will be  $P\% = (\text{True weight} - \text{false weight} / \text{false weight}) \times 100$ .
12. When there are two successful profits say  $m\%$  and  $n\%$ , then the net percentage profit equals to  $(m+n+mn)/100$
13. When the profit is  $m\%$  and loss is  $n\%$ , then the net % profit or loss will be:  $(m-n-mn)/100$
14. If a product is sold at  $m\%$  profit and then again sold at  $n\%$  profit then the actual cost price of the product will be:  $CP = [100 \times 100 \times P / (100+m)(100+n)]$ . In case of loss,  $CP = [100 \times 100 \times P / (100-m)(100-n)]$
15. If  $P\%$  and  $L\%$  are equal then,  $P = L$  and  $\% \text{loss} = P^2/100$

Discount is a kind of reduction or deduction in the cost price of a product. It is mostly used in consumer transactions, where people are provided with discounts on various products. The discount rate is given in percentage.

Discount = List Price – Selling Price

Therefore,

Selling Price = List Price – Discount

List Price = Selling Price + Discount

#### *16. Discount Percentage Formula*

17. Rate of Discount =  $\text{Discount}\% = \text{Discount} / \text{List Price} \times 100$
18. Selling Price =  $\text{List Price} (100 - \text{discount}\% / 100)$
19. List Price =  $\text{Selling Price} (100 / 100 - \text{discount}\%)$

**GST**

Goods and Services Tax (GST) was introduced by the Government of India to boost the economic growth of India. GST is considered to be the biggest taxation reform in the history of Indian economy. It was introduced to save time, cost and effort. Goods and Services Tax (GST) Act came into effect in 2017. In order to address the complex system in India, the Government introduced 3 types of GST which are given below.

1. CGST (Central Goods and Service Tax)
2. SGST( State Goods and Service Tax)
3. IGST(Integrated Goods and Services Tax)

As per 2016 GST regime, Union Territory Goods and Service Tax (UTGST) was also introduced to account for all the taxations in the Union Territories of India. The power to make any changes in the GST law is in the hands of GST Council. GST Council is headed by the Finance Minister. One hundred and first amendment act, 2016 introduced the GST in India from July 2017.