**CHAPTER-6**

**PROFIT AND LOSS**

**C P(Cost Price):**  
The Price at which an article is purchased, is called its **cost price** or In short called C.P. or Cost price is amount of money goes out from us when purchase any article.  
**SP (Selling Price):**  
The price at which an article is sold, called its **selling price**or In short called SP.  
Selling Price is a amount of money came in when selling by anything.  
**Profit or Gain:**  
If S.P. is greater than C.P, then seller is said to have a **profit or gain.  
Loss:**  
If S.P. is less than C.P., the seller said to have a **loss.**

**Marked Price:**  
When we purchase any item we saw the label price or Marked Price or listed Price and denoted by M.P.

**Some important formulas:**

**1.** Selling price is greater than cost price is called Gain.  
**Gain = (S.P) – (C.P)**  
15% Profit on article that means,  
Cost price 100%  
Selling Price 115%  
Profit 15%

**2.** If**Cost price**isgreater than **Selling price** is called Loss.  
**Loss = (C.P) – (S.P)**  
15% Loss on article that means,  
Cost price 100%  
Selling Price 85%  
Loss 15%

**3.Profit** and **Loss** is always calculated on C.P (CostPrice).

**Gain percent Shortcut tricks**

**Example:** Rajanpurchases an article for Rs.40 and sells it for Rs. 60. Find his gain percent.  
**Answer:** C.P = 40 and S.P = 60.  
Gain= 60 – 40 = 20.  
Gain % = 20 x 100/40 = 50%

**Loss percent Shortcut tricks**  
**Formula: Loss% = (Loss x 100/C.P)**

**Example:**  
10% loss on selling price is what percent loss on the cost price ?  
**Answer:**  
consider selling price be = Rs.100, Then loss = Rs.10  
Cost price = Rs.( 100 + 10 ) = 110  
So, loss% = (10 / 110 x 100 ) = 100 / 11 %

**Find selling Price Profit and Loss Shortcut tricks**  
**Formula: S.P = (100+Gain %)/100 x C.P.**

**Example:**If C.P of a product is a Rs. 180 , Gain = 30%, then Find the S.P.  
**Answer:**S.P =?  
S.P = 130% of Rs. 180, Gain = (100+30) = 130, (130/100 x 180) = Rs.234  
So Selling Price is Rs. 234

**Find cost price Profit and Loss Shortcut tricks**  
**Formula: C.P =100 x S.P/ (100+Gain%).**

**Example:**If S.P of a article is Rs. 240 then Gain 20%, Find the C.P.  
**Answer:**C.P.= ?  
C.P. = 100 x 240 / (100+20)   
=24000/120 = 200  
C.P. = 200  
**shortcut Tricks:**  
100 x 240/ (120) = 200

**Example:**  
Find the single discount equivalent to a series discount of 30%, 20% and 10%.  
**Answer:**  
Let price be Rs. 100.  
Then Net S.P = (90 x 80 x 70 / 100 x 100 x 100) x 100  
= 36 x 7 / 5  
= 252 / 5  
= 50.4.  
Required Discount is = (100 – 50.4) = 49.6ss

**Example:**  
The Profit earned by selling an article for Rs.630 is equal to the loss incurred when the same article is sold for Rs. 370. What should be the sale price for making 50% profit?

**Answer:**  
Let C.P price be x  
Then  
630 – x = x – 370  
2x =1000  
x = 500  
Required S.P = 150% of 500  
= 150 x 500 / 100  
= 750