Profit & Loss - I

1. A Shopkeeper sold an article for Rs. 2564.36. Approximately what was his profit percent of the cost price of the article was Rs. 2400.

a) 4% b) 5% c) 6% d) 7% ✓ e) None of these

$S.P = 2564.36$

$C.P = 2400$

$\%\ \text{Profit} = ?$

$$\%\ \text{profit} = \frac{\text{Profit}}{CP} \times 100$$

$$= \frac{164.36}{2400} \times 100$$

$\Rightarrow$ 7%

$$\boxed{\%\ \text{Profit} = \frac{\text{Profit}}{CP} \times 100}$$

$$\boxed{\%\ \text{loss} = \frac{\text{loss}}{CP} \times 100}$$

Profit = S.P − C.P

$$= 2564.36 - 2400.00 = 164.36$$

C.P ⇒ cost price

Pen → 10rs → C.P

15rs → S.P ⇒ selling

$$\boxed{\text{Profit} = S.P - C.P = 15 - 10 = 5}$$

C.P = 10rs ⇒ cost price

S.P = 8rs ⇒ selling price

$$\boxed{\text{loss} = 10rs - 8rs = 2rs = C.P - S.P}$$

Q2. A book was sold for Rs. 27.50 with a profit of 10%. If it were sold for Rs. 25.75, then would have been percentage of profit and loss.

a) 2% profit b) 3% profit c) 2% loss d) 3% loss e) None of these

S.P = 27.50 rs

Profit = 10%

⟹ C.P

CP = 25 rs

$$S.P = C.P \times \frac{100 \pm \%\,profit/loss}{100}$$

S.P = 25.75 rs CP = ?

profit / loss% = ?

CP = 25 rs.

$$SP = CP \times \left(\frac{100 + \%\,profit}{100}\right) \quad (100 + 10)$$

$$= \frac{27.50}{100} = CP \times \frac{110}{100}$$

$$\boxed{CP = 25\,rs}$$

Profit

$$\left(S.P = CP \times \frac{100 + \%\,profit}{100}\right)$$

Supreme court

Profit = SP - CP

= 25.75 - 25.00

= 0.75 rs

$$\%\,profit = \frac{profit \times 100}{cp}$$

$$= \frac{0.75 \times 100}{25 \times 100}$$

3%