

Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q9

Answer:

Let the cost price of one pen be Rs. C, and the selling price be Rs. S Therefore, 10S = 14C

$$C = \frac{10}{14} S$$

However, the cost price is less than the selling price.

$$S.\,P.\ =\ \Big(\frac{100+profit\,\%}{100}\Big)C.\,P$$

$$S = \left(\frac{100 + profit \%}{100}\right) C$$

$$\frac{\mathbf{S}}{\mathbf{C}} = \left(\frac{100 + \mathbf{profit} \%}{100}\right)$$

$$\frac{14}{10} = \left(\frac{100 + \text{profit }\%}{100}\right)$$

$$\frac{1400}{10} = 100 + \text{profit} \%$$

$$140-100=\operatorname{profit}\%$$

$$P \operatorname{rofit} \% = 40$$

=40%

Therefore, the required profit percent is 40%.

Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q10

Let the cost price of one chair be Rs. C, and selling price be Rs. S Therefore, 18C = 16S

$$C = \frac{16}{18} S$$

As cost price is less than the selling price,

$$S.\,P.\ =\ \Big(\frac{100+profit\,\%}{100}\Big)C.\,P$$

$$S = \left(\frac{100 + profit \%}{100}\right) C$$

$$\frac{\mathbf{S}}{\mathbf{C}} = \left(\frac{100 + \mathbf{profit} \%}{100}\right)$$

$$\frac{18}{16} = \left(\frac{100 + \text{profit }\%}{100}\right)$$

$$\frac{1800}{100} = 100 + \text{profit }\%$$

$$\frac{1800}{16} = 100 + \text{profit } \%$$
 $\frac{1800}{16} - 100 = \text{profit } \%$

$$P \operatorname{rofit} \% = \frac{1800 - 1600}{16}$$

$$=\frac{200}{16}$$

= 12.5

Therefore, the required profit percent is 12.5%.