

64 S.P of T.V = ₹ 3,600

$$\text{Gain} = \frac{1}{6} \text{ of } ₹ 3,600 = \frac{1}{6} \times \overset{600}{\cancel{3600}} = ₹ 600$$

(i) Gain = ₹ 600

(ii) C.P price of T.V = ~~₹ 3600~~ S.P - Gain = ~~₹ 3600~~
= ₹ 3600 - ₹ 600 = ₹ 3000

(iii) Gain % = $\frac{\cancel{600}}{\cancel{3000}} \times \overset{20}{\cancel{100}} = 20\%$

$$157 \text{ C.P of } 9 \text{ radioset} = \cancel{225}x$$

$$\text{Gain} = \frac{2x}{9}$$

$$\text{S.P} = \frac{2x}{9} + x = \text{₹} 250$$

$$= \frac{9x + x}{9} = \text{₹} 250$$

$$\therefore 10x = 250 \times 9 = 2250$$

$$x = \frac{2250}{10} = 225$$

$$\therefore \text{C.P of radioset} = \text{₹} 225$$

$$\text{Profit} = \frac{2x}{9} = \frac{225}{9} = 25$$

$$\text{Profit \%} = \frac{25}{225} \times 100 = 11\frac{1}{9} \%$$

11) Let C.P of the scooter for Rajesh = ₹ 100x
 S.P for Rajesh = $100x \times \frac{92}{100} = 92x$

This will be CP for Rahim = 92x, Gain = 5%.

∴ S.P for Rahim = $92x \times \frac{105}{100}$

= $\frac{92x \times 21}{20} = \frac{92x \times 21}{10} = \frac{966x}{10}$

This will be C.P for prem. = ₹ 14,490

∴ $\frac{966x}{10} = 14,490$

∴ $x = \frac{14490 \times 10}{966} = \frac{14490}{96.6} \times 5 = 30 \times 5 = 150$

i) C.P of scooter for Rahim = 92x = 92 × 150 = ₹ 13800

S.P of scooter for Rahim = $\frac{966x}{10} = \frac{966 \times 150}{10} = ₹ 14490$

ii) CP of scooter for Rajesh = 100x = 100 × 150 = ₹ 15000

S.P of scooter for Rajesh = 92x = 92 × 150 = ₹ 13800

12) Mohan paid for the article = ₹ 912

∴ Peter sold the article to Mohan

For Peter

S.P = ₹ 912, Loss = 5%

C.P. = $\frac{100}{100 - \text{Loss}\%} \times \text{S.P}$

= $\frac{100}{100 - 5} \times 912$

= $\frac{100}{95} \times 912$

₹ $\frac{100 \times 912}{95} = 20 \times 48 = ₹ 960$

John sold the same article to Peter

For John

$$SP = ₹ 960$$

$$\text{Profit} = 20\%$$

$$CP = \frac{100}{(100 + \text{Profit}\%)} \times SP$$

$$= \frac{100}{(100 + 20)} \times ₹ 960$$

$$= \frac{₹ 100}{120} \times \overset{2}{960} = ₹ 800$$

Hence John paid for article = ₹ 800