Exercise 11A

Q1

Answer:

(i) CP = Rs. 950

Gain = 6%

$$SP = \left\{ \frac{(100 + G \text{ ain } \%)}{100} \times CP \right\}$$

$$= \left\{ \frac{(100 + 6)}{100} \times 950 \right\}$$

$$= \frac{106}{100} \times 950$$

$$= \frac{100700}{100}$$

$$= Rs. 1007$$

(ii) CP = Rs. 9600

Gain = $16\frac{2}{3}\% = \frac{50}{3}\%$

$$SP = \left\{ \frac{(100 + G \text{ ain } \%)}{100} \times CP \right\}$$

$$= \left\{ \frac{\left(100 + \frac{50}{3}\right)}{100} \times 9600 \right\}$$

$$= \frac{350}{300} \times 9600$$

$$= \frac{3360}{3}$$

$$= Rs. 11200$$

(iii) CP = Rs. 1540

Loss = 4%

$$SP = \left\{ \frac{(100 - Loss\%)}{100} \times CP \right\}$$

$$= \left\{ \frac{(100 - 4)}{100} \times 1540 \right\}$$

$$= \frac{96}{100} \times 1540$$

$$= \frac{147840}{100}$$

$$= Rs.\ 1478.40$$

(iv) CP = Rs. 8640

Loss = $12\frac{1}{2}\%$ = $\frac{25}{2}\%$

$$SP = \left\{ \frac{(100 - Loss\%)}{100} \times CP \right\}$$

$$= \left\{ \frac{\left(100 - \frac{25}{2}\right)}{100} \times 8640 \right\}$$

$$= \frac{175}{200} \times 8640$$

$$= \frac{1512000}{200}$$

$$= Rs.\ 7560$$

Q2
Answer :

(i) CP = Rs. 2400

SP = Rs. 2592

Gain = SP - CP = Rs. (2592 - 2400) = Rs. 192

$$\text{Gain\%} = \left(\frac{\text{Gain}}{\text{CP}} \times 100 \right) = \left(\frac{192}{2400} \times 100 \right) = 8$$

(ii) CP = Rs. 1650

SP = Rs. 1452

Loss = CP - SP = (1650 - 1452) = Rs. 198

$$\text{Loss\%} = \left(\frac{\text{Loss}}{\text{CP}} \times 100 \right) = \left(\frac{198}{1650} \times 100 \right) = 12$$

(iii) CP = Rs. 12000 and SP = Rs. 12800

Gain = SP - CP = (12800 - 12000) = Rs. 800

$$\text{Gain\%} = \left(\frac{\text{Gain}}{\text{CP}} \times 100 \right) = \left(\frac{800}{12000} \times 100 \right) = 6.66$$

(iv) CP = Rs. 1800

SP = Rs. 1611

Loss = CP - SP = (1800 - 1611) = Rs. 189

$$\text{Loss\%} = \left(\frac{\text{Loss}}{\text{CP}} \times 100 \right) = \left(\frac{189}{1800} \times 100 \right) = 10.5$$

Q3

Answer :

(i) SP = Rs. 924

Gain = 10%

$$CP = \left\{ \frac{100}{(100 + G \text{ ain } \%)} \times SP \right\}$$

$$= \left\{ \frac{100}{(100 + 10)} \times 924 \right\}$$

$$= \frac{92400}{110}$$

$$= Rs. 840$$

(ii) SP = Rs. 1755

Gain = $12\frac{1}{2}\% = \frac{25}{2}\%$

$$CP = \left\{ \frac{100}{(100 + G \text{ ain } \%)} \times SP \right\}$$

$$= \left\{ \frac{100}{\left(100 + \frac{25}{2}\right)} \times 1755 \right\}$$

$$= \left\{ \frac{200}{225} \times 1755 \right\}$$

$$= \frac{351000}{225}$$

$$= Rs. 1560$$

********** END *********