Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q23

**Answer :**

Let the C.P of both the shirts be Rs. $x$.

C.P = Rs. $x$

For shirt 1 :

Profit is 4% :

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

$\text{Profit} = \frac{4}{100} \times \text{C.P}$

$= \text{Rs. } 0.04x$

$\text{S.P} = \text{C.P} + \text{Profit}$

$= x + 0.04x$

$= \text{Rs. } 1.04x$

For shirt 2 :

Profit = 5% :

C.P = Rs. $x$

$\text{Profit} = \frac{5}{100} \times \text{C.P}$

$= \text{Rs. } 0.05x$

$\text{S.P} = \text{C.P} + \text{Profit}$

$= x + 0.05x$

$= \text{Rs. } 1.05x$

It is given that the difference between their profits is Rs. 6

So, $1.05x - 1.04x = 6$

$0.01x = 6$

$x = \text{Rs. } 600$

Thus, C.P = Rs. 600

$$\text{S.P of shirt } 1 = \text{Rs. } 1.04x$$
$$= \text{Rs. } 1.04 \times 600$$
$$= \text{Rs. } 624$$
$$\text{S.P of shirt } 2 = \text{Rs. } 1.05x$$
$$= \text{Rs. } 1.05 \times 600$$
$$= \text{Rs. } 630.$$

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