Compound Interest Ex 14.3 Q1

Answer :

Let the sum be Rs x.
We know that :

$$CI = A - P$$

$$= P\left(1 + \frac{R}{100}\right)^n - P$$

$$= P\left[\left(1 + \frac{R}{100}\right)^n - 1\right]$$

$$164 = x\left[\left(1 + \frac{5}{100}\right)^2 - 1\right]$$

$$164 = x\left[(1.05)^2 - 1\right]$$

$$x = \frac{164}{0.1025}$$

$$= 1,600$$

Thus, the required sum is Rs 1,600.

Compound Interest Ex 14.3 Q2

Answer:

Let the sum be Rs x.
We know that :
$$CI = A - P$$
$$= P\left(1 + \frac{R}{100}\right)^n - P$$
$$= P\left[\left(1 + \frac{R}{100}\right)^n - 1\right]$$
$$210 = x\left[\left(1 + \frac{10}{100}\right)^2 - 1\right]$$
$$210 = x\left[(1.10)^2 - 1\right]$$
$$x = \frac{210}{0.21}$$
$$= 1,000$$
Thus, the required sum is Rs 1,000.

Compound Interest Ex 14.3 Q3

Answer:

Let the sum be Rs x.
Then,
$$A = P\left(1 + \frac{R}{100}\right)^n$$
$$= P\left[\left(1 + \frac{R}{100}\right)^n\right]$$
$$756.25 = x\left[\left(1 + \frac{10}{100}\right)^2\right]$$
$$756.25 = x\left[(1.10)^2\right]$$
$$x = \frac{756.25}{1.21}$$
$$= 625$$
Thus, the required sum is Rs 625.

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