Compound Interest Ex 14.1 Q12

Answer :

Given :

$\mathrm{P} = \mathrm{Rs}\ 7,500$

$\mathrm{R} = 12\%\ \mathrm{p.a.} = 3\%\ \text{quarterly}$

$\mathrm{T} = 9\ \text{months} = 3\ \text{quarters}$

We know that :

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

$$\mathrm{A} = 7,500\left(1 + \frac{3}{100}\right)^{3}$$

$$= 7,500(1.03)^{3}$$

$$= 8,195.45$$

Thus, the required amount is $\mathrm{Rs}\ 8,195.45$.

Compound Interest Ex 14.1 Q13

Answer :

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

$$= 9,600\left(1 + \frac{5.5}{100}\right)^{3}$$

$$= 9,600(1.055)^{3}$$

$$= \mathrm{Rs}\ 11,272.72$$

Now,

$$\mathrm{CI} = \mathrm{A} - \mathrm{P}$$

$$= \mathrm{Rs}\ 11,272.72 - \mathrm{Rs}\ 9,600$$

$$= \mathrm{Rs}\ 1,672.72$$

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