Compound Interest Ex 14.1 Q4

Answer :

$$\text{Given :}$$

$$\text{P} = \text{Rs } 1,000$$

$$\text{R} = 8\% \text{ p. a.}$$

$$\text{n} = 1.5 \text{ years}$$

$$\text{We know that :}$$

$$\text{A} = \text{P}\left(1 + \frac{\text{R}}{200}\right)^{2\text{n}}$$

$$= 1,000\left(1 + \frac{8}{200}\right)^{3}$$

$$= 1,000(1.04)^{3}$$

$$= \text{Rs } 1,124.86$$

$$\text{Now,}$$

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

$$= \text{Rs } 1,124.86 - \text{Rs } 1,000$$

$$= \text{Rs } 124.86$$

Compound Interest Ex 14.1 Q5

Answer :

Given :

$$\mathrm{P} = \mathrm{Rs}\ 16,000$$

$$\mathrm{R} = 20\%\ \mathrm{p.a.}$$

$$\mathrm{n} = 1\ \mathrm{year}$$

We know that :

$$\mathrm{A} = \mathrm{P}\left(1 + \frac{\mathrm{R}}{400}\right)^{4\mathrm{n}}$$

$$= 16,000\left(1 + \frac{20}{400}\right)^{4}$$

$$= 16,000(1.05)^{4}$$

$$= \mathrm{Rs}\ 19,448.1$$

Now,

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

$$= \mathrm{Rs}\ 19,448.1 - \mathrm{Rs}\ 16,000$$

$$= \mathrm{Rs}\ 3,448.1$$

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