Compound Interest Ex 14.2 Q2

Answer :

Given :
$P = \text{Rs } 2,400$
$R = 20\%$ p.a.
$n = 3$ years
We know that amount A at the end of n years at the rate R% per annum when the interest is
compounded annually is given by $A = P\left(1 + \frac{R}{100}\right)^n$.

$\therefore A = 2,400\left(1 + \frac{20}{100}\right)^3$

$= 2,400(1.2)^3$

$= 4,147.20$

Thus, the required amount is Rs $4,147.20$.

Compound Interest Ex 14.2 Q3

Answer :

Given :
$P = \text{Rs } 16,000$
$R = 12.5\%$ p.a.
$n = 3$ years
We know that amount A at the end of n years at the rate R% per annum when the interest is
compounded annually is given by $A = P\left(1 + \frac{R}{100}\right)^n$.

$\therefore A = 16,000\left(1 + \frac{12.5}{100}\right)^3$

$= 16,000(1.125)^3$

$= 22,781.25$

Thus, the required amount is Rs $22,781.25$.

Compound Interest Ex 14.2 Q4

Answer :

Given :
$P = \text{Rs } 1,000$
$R = 10\%$ p.a.
$n = 2$ years
We know that amount A at the end of n years at the rate R% per annum when the interest is
compounded annually is given by $A = P\left(1 + \frac{R}{100}\right)$.

$\therefore A = 1,000\left(1 + \frac{10}{100}\right)^2$

$= 1,000(1.1)^2$

$= 1,210$

Thus, the required amount is Rs $1,210$.

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