

i(d) $P = \text{Rs } 8000$, $t = 1 \text{ year} = 2 \text{ half years}$
 $r = 9\% \text{ p.a.} = \frac{9}{2} \% \text{ p.a.}$

$$\begin{aligned} \text{amount (A)} &= P \left(1 + \frac{r}{100}\right)^n \\ &= 8000 \left(1 + \frac{9}{200}\right)^2 \\ &= \overset{24}{8000} \times \frac{209}{200} \times \frac{209}{\underset{10}{200}} \\ &= \text{Rs } 8736.20 \end{aligned}$$

$$\begin{aligned} \text{CI} &= A - P \\ &= 8736.20 - 8000 \\ &= \text{Rs } 736.20 \end{aligned}$$

② Money borrowed (P) = Rs 26400
 rate (r) = 15% p.a.
 time (n) = 2 years 4 months

amount paid to clear loan

$$\begin{aligned} &= P \left(1 + \frac{r}{100}\right)^2 \left(1 + \frac{r/3}{100}\right)^1 \\ &= 26400 \left(1 + \frac{15}{100}\right)^2 \left(1 + \frac{5}{100}\right)^1 \\ &= \overset{33}{26400} \times \frac{115}{100} \times \frac{115}{100} \times \frac{105}{\underset{1}{100}} \\ &= \text{Rs } 36659.70 \end{aligned}$$

[2 years 4 months
 = 2 complete years + 1 year with rate/3]