④ $P = Rs\ 10240$, $t = 3$ years, $r = \frac{25}{2}\%$ pa

$$\text{amount} = \left(\frac{100+r}{100}\right)^n P$$

$$= 10240\left(\frac{100+\frac{25}{2}}{100}\right)^3$$

$$= 10240\left(\frac{200+25}{200}\right)^3$$

$$= \cancel{10240} \times \frac{225}{\cancel{200}_{8}}^{9} \times \frac{\cancel{225}}{\cancel{200}_{8}}^{9} \times \frac{225}{\cancel{200}_{8}}^{9}$$

$$= Rs\ 14580$$

$$CI = 14580 - 10240$$

$$= Rs\ 4340$$

⑤ $P = Rs\ 62500$, $t = 2y\ 6mon$, $r = 12\%$ pa

$$\text{amount} = P\left(1+\frac{r}{100}\right)^2\left(\frac{100+r/2}{100}\right)$$

$$= 62500\left(1+\frac{12}{100}\right)^2\left(\frac{100+6}{100}\right)$$

$$= \cancel{62500} \times \frac{\overset{2}{\cancel{112}}^{8}}{\cancel{100}} \times \frac{\cancel{112}^{28}}{\cancel{100}} \times \frac{106}{\cancel{100}}$$

$$= Rs\ 83104$$

$$CI = A - P$$

$$= 83104 - 62500$$

$$= Rs\ 20604$$