(12) Money borrowed (P) = Rs 16000
rate = $\frac{15}{2}$ % p.a, time 2 years

SI

$SI = \frac{prt}{100}$

$= \frac{16000 \times 15 \times 2}{100 \times 2}$

$= Rs\ 2400$

CI

$Amount = P\left(1+\frac{r}{100}\right)^n$

$= 16000\left(1+\frac{\frac{15}{2}}{100}\right)^2$

$= 16000\left(1+\frac{15}{200}\right)^2$

$= 16000 \times \frac{215}{200} \times \frac{215}{200}$

$= Rs\ 18490$

$CI = 18490 - 16000$

$= Rs\ 2490$

Profit $= 2490 - 2400$

$= Rs\ 90$

(13) SI = Rs 2400, rate = 8% p.a, time = 2 years

$SI = \frac{prt}{100}$

$2400 = \frac{p \times 8 \times 2}{100}$

$\Rightarrow p = Rs\ 15000$

$CI = P\left[\left(1+\frac{r}{100}\right)^n - 1\right]$

$= 15000\left[\left(1+\frac{8}{100}\right)^2 - 1\right]$

$= 15000\left[\left(\frac{108}{100}\right)^2 - 1\right]$

$= 15000\left[\frac{729-625}{625}\right]$

$= 15000 \times \frac{104}{625}$

$= Rs\ 2496$