

4. Money borrowed (P) = Rs 12000
 rate (R) = 6% p.a.
 time = 2 years

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

$$= \frac{12000 \times 6 \times 2}{100}$$

$$= Rs 1440$$

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

$$= 12000 \left[\left(1 + \frac{6}{100} \right)^2 - 1 \right]$$

$$= 12000 \left[\left(\frac{106}{100} \right)^2 - 1 \right]$$

$$= 12000 \left[\frac{106 \times 106}{100 \times 100} - 1 \right]$$

$$= 12000 \left[\frac{11236 - 10000}{10000} \right]$$

$$= 12000 \times \frac{1236}{10000}$$

$$= Rs 1483.20$$

extra amount paid for C.I = 1483.20 -
 = Rs 43.20 ¹⁴⁴⁰