

- ⑨ cost of buffalo for Beeru ( $P$ ) = Rs 11000  
 $r = 10\%$  pa,  $t = 3$  years  
 amount paid by Beeru to discharge debt

$$\begin{aligned}
 &= P \left( \frac{100+r}{100} \right)^n \\
 &= 11000 \left( \frac{100+10}{100} \right)^3 \\
 &= 11000 \times \frac{110}{100} \times \frac{110}{100} \times \frac{110}{100} \\
 &= \text{Rs } 14641.00
 \end{aligned}$$

- ⑩ loan amount ( $P$ ) = Rs 18000  
 $t = 2$  years,  $r_1 = 12\%$  pa,  $r_2 = \frac{25}{2}\%$  pa

$$\begin{aligned}
 \text{amount to repay loan} &= P \left( \frac{100+r_1}{100} \right) \left( \frac{100+r_2}{100} \right) \\
 &= 18000 \left( \frac{100+12}{100} \right) \left( \frac{100+25/2}{100} \right) \\
 &= 18000 \times \frac{112}{100} \times \frac{200+25}{200} \\
 &= 18000 \times \frac{112}{100} \times \frac{225}{200} \\
 &= \text{Rs } 22680
 \end{aligned}$$

- ⑪ Money borrowed ( $P$ ) = 2400,  $r = 10\%$  pa,  $t = 2\frac{3}{4}$  years  
 amount to repay loan =  $P \left( \frac{100+r}{100} \right)^2 \left( \frac{100+r/4}{100} \right)$

$$\begin{aligned}
 &= 2400 \left( \frac{100+10}{100} \right)^2 \left( \frac{100+10/4}{100} \right) \\
 &= 24000 \times \frac{110}{100} \times \frac{110}{100} \times \frac{410}{400} \\
 &= \text{Rs } 29766
 \end{aligned}$$