

(12)

let Money invested
in Scheme A = Rs x

Money invested in
Scheme B = Rs y

acc CI

$$\frac{8}{100}x + \frac{9}{100}y = 1860$$

(x100)

$$8x + 9y = 18600 \dots \textcircled{I}$$

acc CII

$$\frac{9}{100}x + \frac{8}{100}y = 1880$$

(x100)

$$9x + 8y = 18800 \dots \textcircled{II}$$

$$\textcircled{I} \times 9 - \textcircled{II} \times 8$$

$$\begin{array}{r} 72x + 81y = 167400 \\ \underline{72x + 64y = 150400} \\ 17y = 17000 \end{array}$$

$$17y = 17000$$

$$\Rightarrow y = 1000$$

Sub ①

$$8x + 9000 = 18600$$

$$\Rightarrow 8x = 9600$$

$$\Rightarrow x = \frac{9600 - 1200}{8}$$

Money invest. in Sch A = Rs 1200

Money invested in Sch B = Rs 1000

(13) let no. of bananas in
lot A = x

no of bananas in lot B
= y

con I

$$\frac{2}{3}x + y = 400$$

$$(x3) \quad 2x + 3y = 1200 \dots \textcircled{I}$$

con II

$$x + \frac{4}{5}y = 460$$

(x5)

$$5x + 4y = 2300 \dots \textcircled{II}$$

$$\textcircled{I} \times 5 - \textcircled{II} \times 2$$

$$10x + 15y = 6000$$

$$\underline{10x + 8y = 4600}$$

$$7y = 1400$$

$$\Rightarrow y = \frac{1400 - 200}{7}$$

Sub ①

$$2x + 600 = 1200$$

$$\Rightarrow 2x = 600$$

$$\Rightarrow x = \frac{600 - 300}{2}$$

\therefore Total bananas

$$= 200 + 300$$

$$= 500$$