$= 36$

$N_1 = 60$, $M_1 = 900$, $N_2 = 40$, $M_2 = 950$

$$\bar{x} = \frac{(N_1 M_1) + (N_2 M_2)}{N_1 + N_2}$$

$$= \frac{(60 \times 900) + (40 \times 950)}{60 + 40}$$

$$= \frac{54000 + 18000}{100}$$

$$= \frac{92000}{100}$$

$= 920$ Ans.

Q. 33. The average income of 100 labourers is Rs. 200. If the average income of all 150 labourers is Rs. 250. calculate the average income of remaining 50 labourers.

$N_1 = 100$, $\bar{X} = 250$

$M_1 = 200$ $N_2 = 50$

$$\bar{X} = \frac{(N_1 M_1) + (N_2 M_2)}{N_1 + N_2}$$

$$250 = \frac{(100 \times 200) + (150 \times M_2)}{100 + 50}$$

$$250 = \frac{20000 + 150M_2}{150}$$

$$20000 + 150M_2 = 37500$$

$$150M_2 = 37500 - 20000$$

$$M_2 = \frac{17500}{150}$$

$$= 350 \text{ Ans.}$$

Q.34. The average run scored by Australian Team in a match consisting of 10 players is 50 and the average run of Indian Team of 11 players is 42. Find the combined average run scored by both the teams.

$$N_1 = 10, \quad N_2 = 11$$

$$M_1 = 50 \qquad M_2 = 42$$

$$\bar{x} = \frac{(N_1 M_1) + (N_2 M_2)}{N_1 + N_2}$$

$$= \frac{(10 \times 50) + (11 \times 42)}{10 + 11}$$

$$= \frac{500 + 462}{21}$$

$$= \frac{962}{21} = 45.8 \text{ Ans.}$$