

$$\frac{1}{f} = \frac{\mu - 1}{R_1} - \frac{\mu - 1}{R_2} + \frac{t(\mu - 1)^2}{\mu R_1 R_2}$$

$$\frac{1}{f} = (\mu - 1) \left\{ \frac{1}{R_1} - \frac{1}{R_2} + \frac{t(\mu - 1)}{\mu R_1 \cdot R_2} \right\} \quad \text{--- (iv)}$$

This is the required formula for a thick lens.