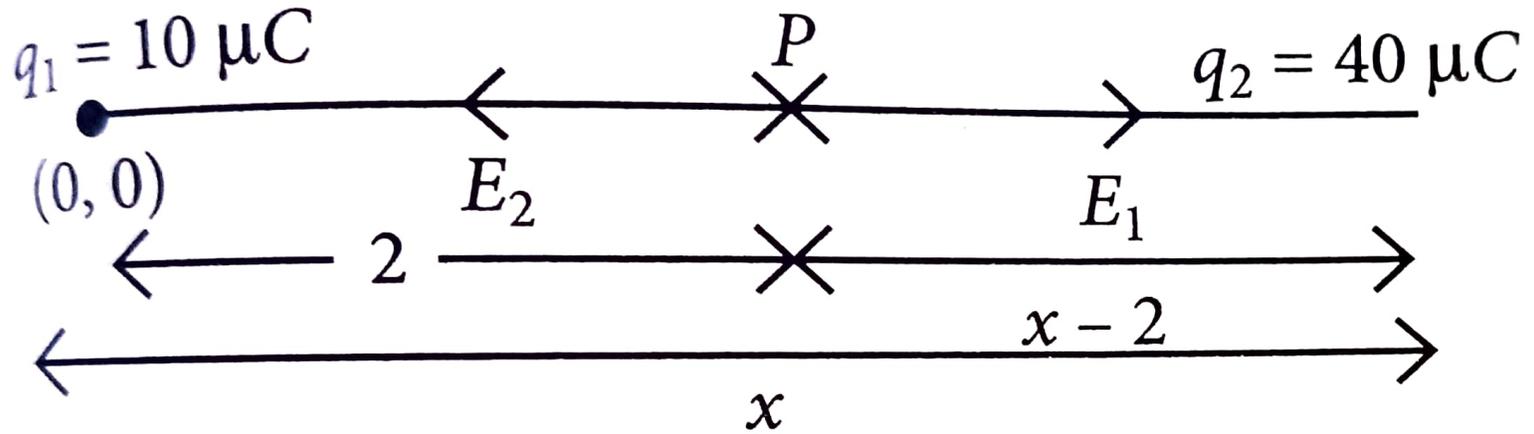


Given, $E_1 = E_2$ at $x = 2$ cm from zero on x -axis.



$$E = \frac{Kq}{r^2}; \quad \frac{K \cdot q_1}{(2)^2} = \frac{K \cdot q_2}{(x - 2)^2}; \quad \frac{10}{4} = \frac{40}{(x - 2)^2}$$

$$(x - 2)^2 = 16 \Rightarrow x - 2 = 4 \quad \therefore x = 6 \text{ cm}$$