

Lab-1 (Pre-Lab Report)

(Introduction to Circuit Elements and variables)

Theoretically calculate the values of I for the circuit Figure 3 For $E = 5, 6, 7, 8, 9, 10V$ and $R = 1000\Omega$

In a Ohm's law we know

$$V = IR$$

$$\text{or, } E = IR$$

[Here V is called E]

$$\text{or, } I = \frac{E}{R}$$

when, $E = 5V$ then,

$$I = \frac{5}{1000} = 5 \times 10^{-3} A = 5 mA$$

When $E = 6\text{V}$ then,

$$I = \frac{6}{1000} \\ = 6\text{mA}$$

When $E = 7\text{V}$ then,

$$I = \frac{7}{1000} \\ = 7\text{mA}$$

When $E = 8\text{V}$ then,

$$I = \frac{8}{1000} \\ = 8\text{mA}$$

When $E = 9\text{V}$ then,

$$I = \frac{9}{1000} \\ = 9\text{mA}$$

When $E = 10\text{V}$ then

$$I = \frac{10}{1000} \\ = 10\text{mA}$$

Graph

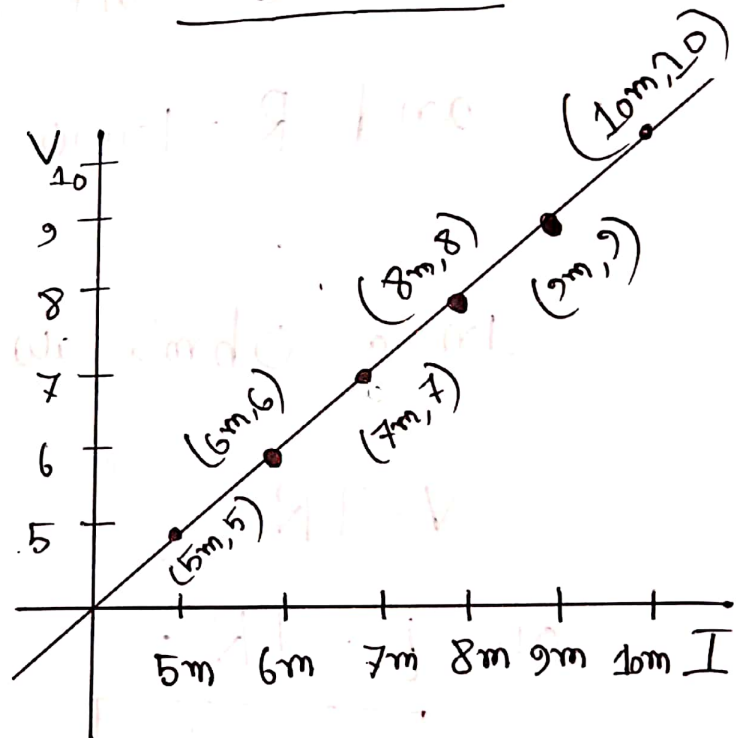


Figure: IV Curve