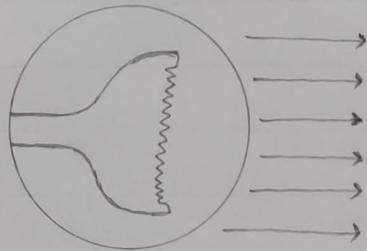
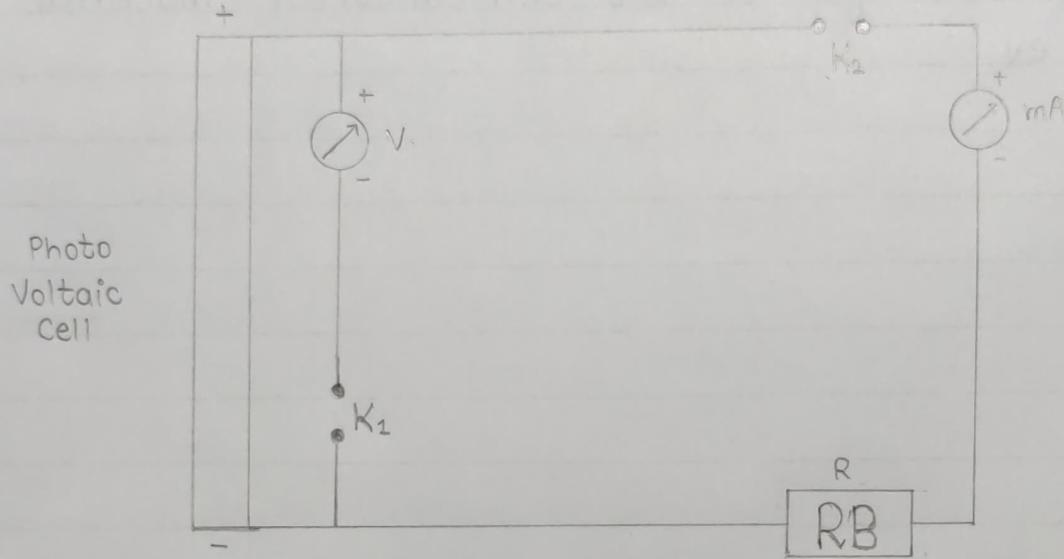


DIAGRAM  $\Rightarrow$



① V-I AND V-R CHARACTERISTICS.

Intensity	Resistance $\Omega$	Voltmeter Reading V	Ammeter Reading mA
10	10	1.57	122.6
22	22	2.83	122.1
47	47	3.62	74.1
56	56	3.63	63.3
Maximum	68	3.84	55.2

## STUDY OF V-I AND V-R CHARACTERISTICS OF A SOLAR CELL.

AIM  $\Rightarrow$

To study the V-I and V-R characteristics of a solar cell.

APPARATUS REQUIRED  $\Rightarrow$

Solar cell, voltmeter, milliammeter, a dial-type resistance box, keys, illuminating lamps, connecting wires, etc.

82	3.90	45.5
100	3.93	36.2
160	3.94	26.2
180	3.96	21.6

(ii) V-I AND V-R CHARACTERISTICS.

Intensity	Resistance	Voltmeter Reading	Ammeter Reading
Minimum	10	0.39	32.5
	22	0.77	32.2
	47	1.55	32.1
	56	1.84	31.9
	68	2.20	31.7
	82	2.61	30.5
	100	2.93	29.0
	160	3.43	22.8
	180	3.57	19.4

**RESULT** =>

The V-I and V-R characteristics of the solar cell is studied.

Intensity → Maximum

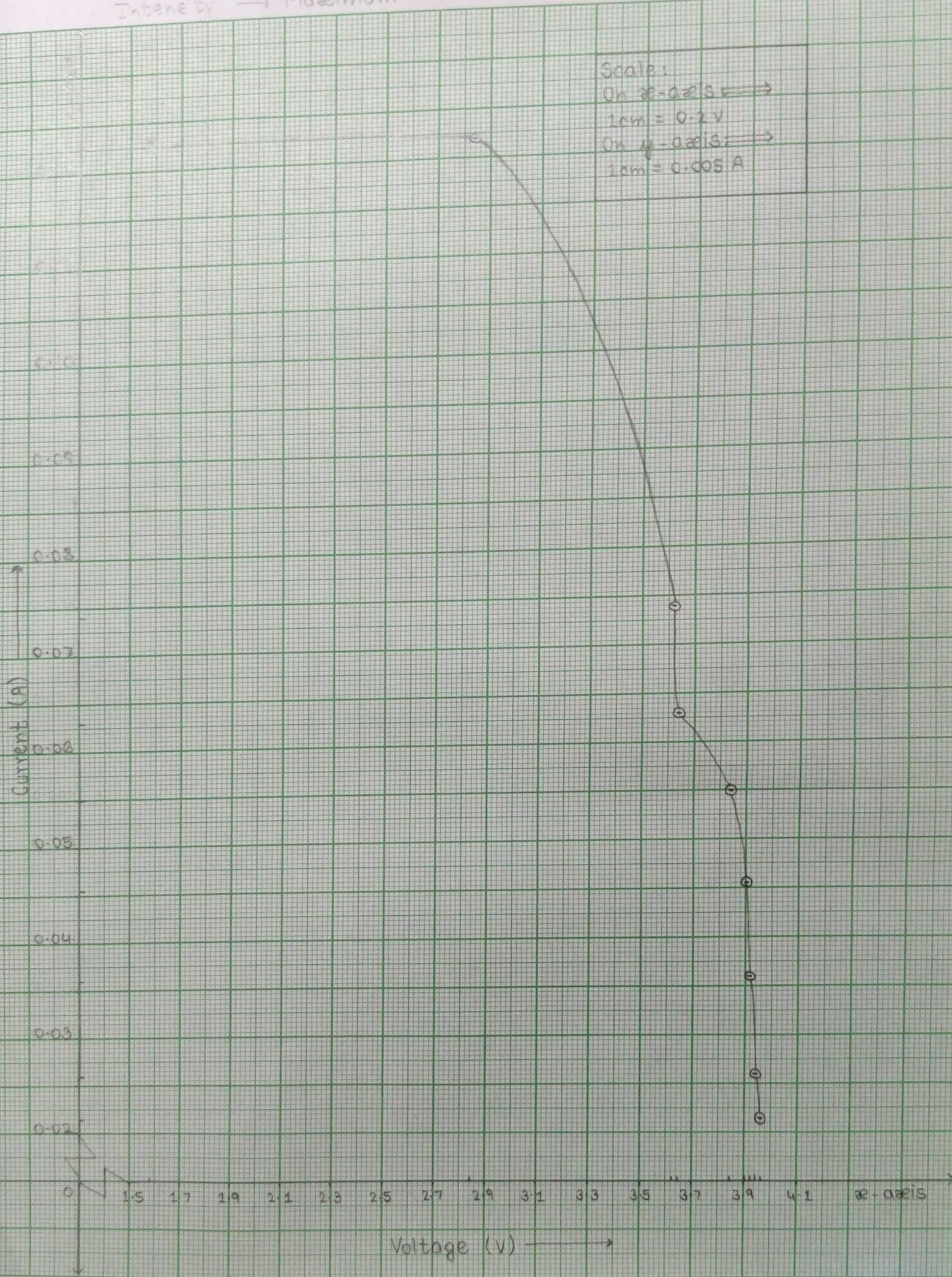
Scale:

On  $x$ -axis  $\rightarrow$

1 cm = 0.2 V

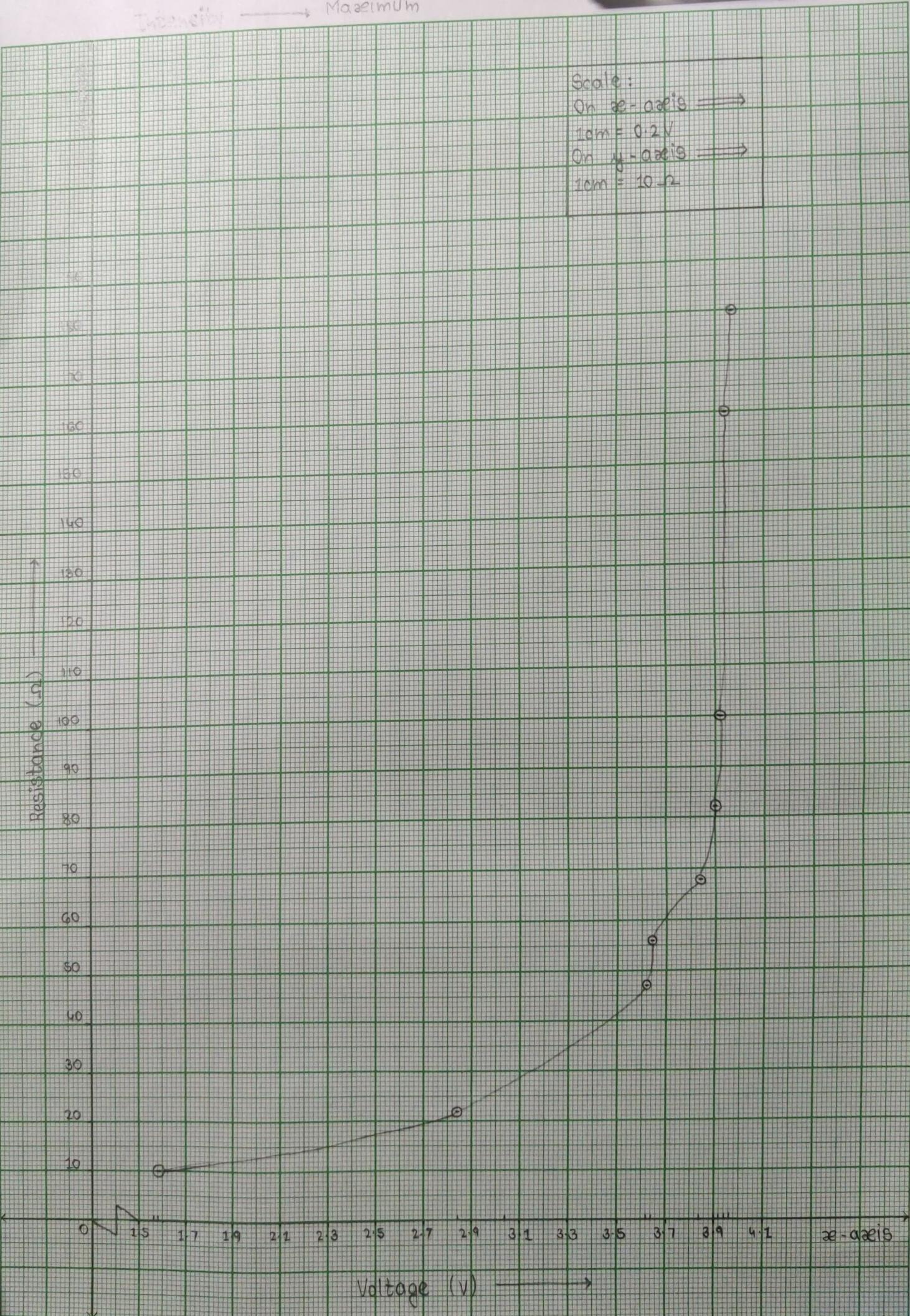
On  $y$ -axis  $\rightarrow$

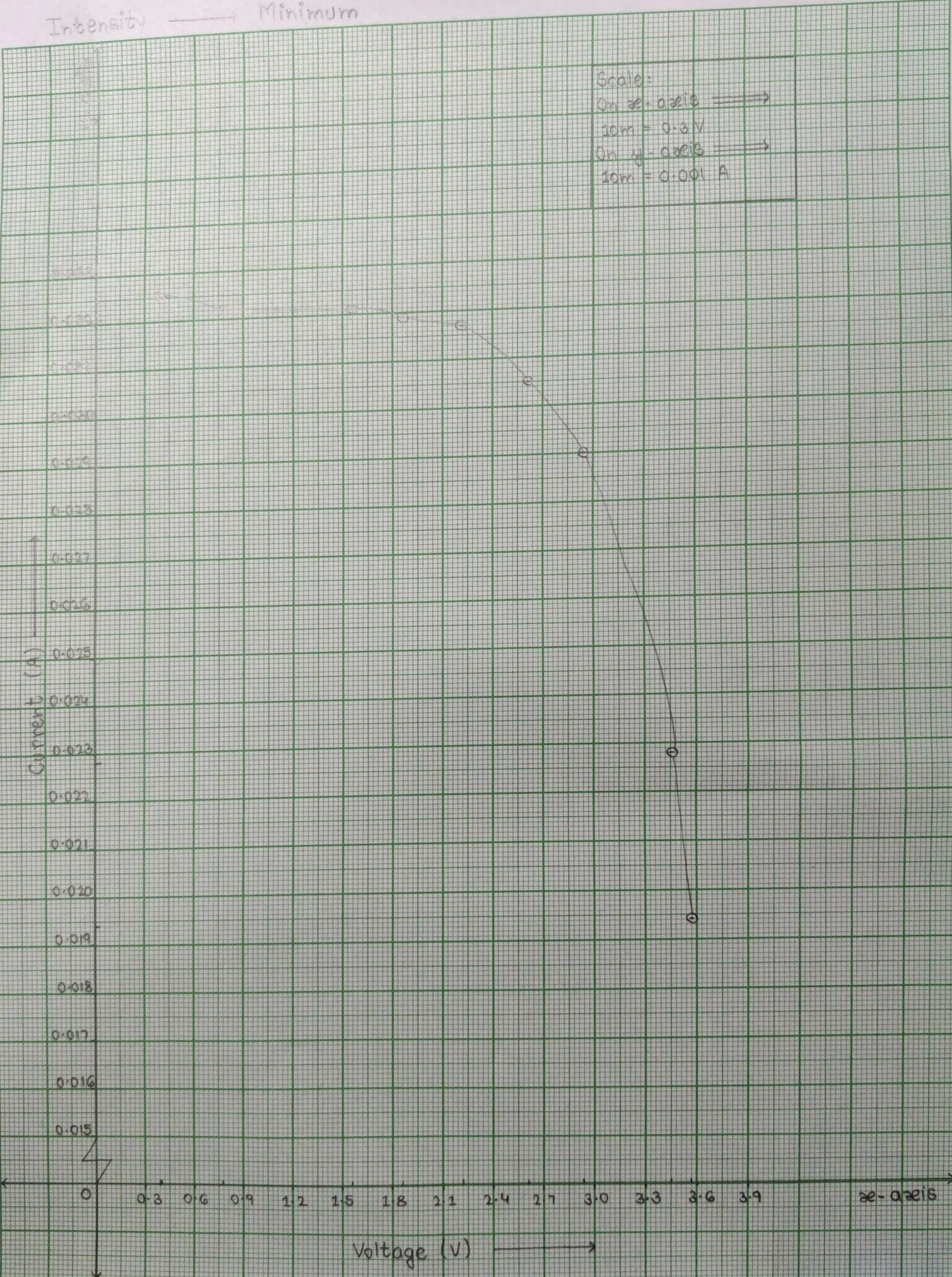
1 cm = 0.005 A



Induction → Maximum

Scale:  
On  $x$ -axis →  
1cm = 0.2V  
On  $y$ -axis →  
1cm =  $10^{-2}$





Intensity → Minimum

Scale:

On  $\alpha$ -axis →  
 $1 \text{ cm} = 0.3 \text{ V}$

On  $\gamma$ -axis →  
 $1 \text{ cm} = 10 \Omega$

