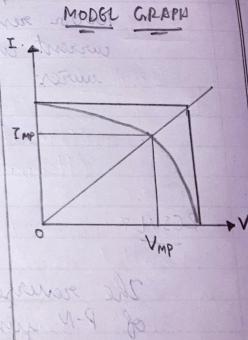


Photo . Voltaic Cell.

Schematic Reposesentation of circuit of solar cell.

## OBSERVATION TABLE - DONN OF SOND A

arinan.	for me	uttime to	WB1 CM
Intensity	Registance	Voltmeter	Ammetes 1
	(ohm)	Reading (v)	Reading
	10	1.57	122.6
	22	2.83	122.1
	47	3.62	74.1
Maximum	56	3,63	63.3
	68	3.84	55 . 2
	82	3.9	45.5
itis	100	3.93	36.2
d and	160	3,94	26.2
	180	3,96	21.6



Expt. No!	Date
	Page No. 44
	CUSTO A TOTAL
DETERINTIVATION OF EXCLUSION	
DETERINITION OF EFFICIENCY OF A	SOLAR CELL
AIM;	hea of the nelss
To determine the efficience solar cell	y of the
solar cell	Alligania of the
AT <sub>5</sub>	
•	
APPARATUS REQUIRED -0	
Ada all with it is	M. atan
della et de la commenta del commenta del commenta de la commenta del commenta de la commenta del commenta de la commenta del commenta de la commenta del co	alymmeter, a
rolar cell, nottmeter, mit dial type resistance bon, be lamps, connecting wires	yr, illuminaling
lamps, connecting weres	, eli-
FORMULAE:	
Efficiency of solar cell (n) = Pm	ast wino
Efficiency of solar cell (n) = Pm	2,
D W. Many - Too & 1/.	IN/. Ha
mus 3 1 Min grower 3 IMP A OM	p vain
13 - 13 xa of the rolar cell [1.C	cm x 4,5cm)
To - Internaling of light - Vouce	r of the bull Trad
Pmus : Mon power = Imp & Vm  D - Dxn of the rolar cell [7.2  To - Internety of light = Power  d- distance Hw rolar panel	and the
louble.	
NYWW.	



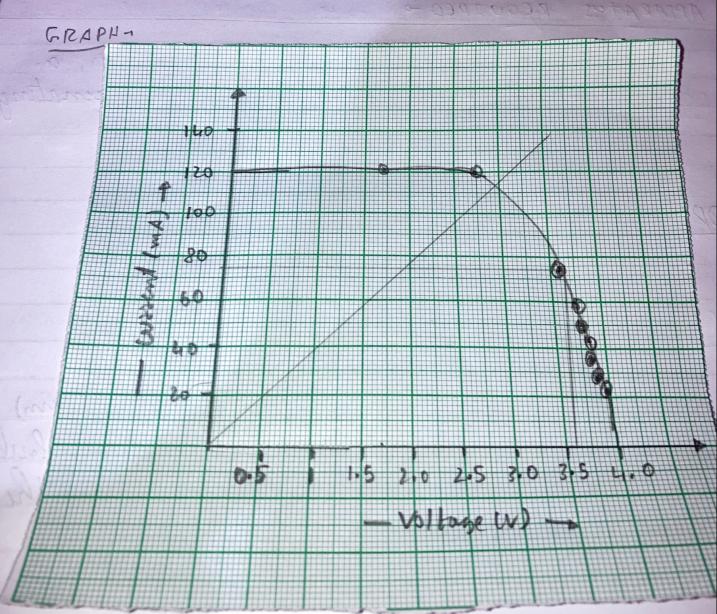
## CAL CULATIONS -

Monimum Power > 0.62 x 3.58 Intervily of light (Po) , 75

Area of the rolar panel, 7.2 cm x 4.5 cm = 32.4 cm

refliciency of the cell (n) 2 Pmay x 100

0.306 x100 2 15.74% 32.4 x 0.0599



Expt. No.	Page No.
	rage No.
OBSERVATION -	
Power of the bull > 7	75 W.
Marie between rolar	panel & bull = 10 cm.
Power of the bulk : 7. Distance between rolar Maximum Power Pmax: Antensity of hight Io: Area of the rolar Panel	> 3.06 W
Area of the relax Passel	2 2 2 4 1
i source of ame	3 - 4 cm
AMAYA	
	Carlotte and the second
	and the second of the second o
RESULT. >	
The efficiency of the	solar panel is n'= 15.74%
	Walls X Van Walls
	But Colle Them y Ustalian
	and the first of the said of the
	and the second second second
TO THE STATE OF TH	
acher & Signature	Teacher's Signature