

TABULAR COLUMN:

Parameters	Theonetical	Practical.
<u> </u>	D.0090A	0.089 A
To	D. 00891 A	0 · 076 A
I1- I2	0.00012 A	D.0012A.

100p 1:

Loop 2:

with the service principle of the service

White night alight

1111

DETERMINATION OF CURRENT IN CIRCUIT USING

AIM:

To determine the avvient in aucuit using mesh analysis both theoretically and practically for a given DC availt.

APPARATUS REQUIRED:

S.NO	APPARATUS	SPECIFICATION	RUANTITY.
1.	Regulated Power supply (RPS)	(0-30v)	1
2.	Ammeter.	(D-IDMA)MC	3
3.	Resistons	3302, 4702, 5602	each (.
4.	Bread board	13.11 13 23	, N

PROCEDURE:

- 1. Give connections as per the circuit diagram.
- 2. Switch ion the supply, vory the RPs and set a particular input voltage.
- 3. Note down the oreadings of ammeters and voltmeters and itabulate ithem.
- 4. Vary the RPS for different input voltages and mote down the readings of all the meters.
- 5. Reduce the RPS to its minimum value and switch off the supply.

```
103 ×1 =) (82400 T1 = 48410 T2 = 309
         -22090II + 48HIDI2 = 235
              60310 II
                           = 544
from postal = 5441 to tropero str. grounded a
instiged, both that ethning out 01.800 rally for it
          = 9.02 \times 10^{-3}
                                 distr of result
Sub eq II un equation (),
                                  Gudinal 14 Consump
       8 = 2[0r4 - [p00.0] 008
             7.2 - 470 I2 = 3
                -44012 = 3-4.5 - 2.2-1 had he
             -470]2 =-4.2
                                      ridinante . S.
               I2 = 4.2 = 0.0089
                                      रा गार्थकार
               1.01 470 018
   1 142107
                IR = 8.97 mA
                                  James board 11
 II-I2 = 9.02-8.97
                                            790 · 1117
   - margant juster with reg at smademen svin .)
  Switch ion the supply, road the 1868 and the
                   a gardianter warput rettings.
    is usely down in suralings sol amorters and
                 vellouters and stabulate strange
  is said yell the to tilthery with some respective
 and mode down the readings set all the
                                        Watern
  hidren Mr. 1895 to ill minimum value
              of the the state of the property property
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6. Using the tabulated values, verify Korchoff's laws spractically and verify it theoretically.

Pancheul

VI-3 0 V at

0 4821 V - 0-48 V

RESULT: VA D V 381, 3

Thus the mesh analysis is verified practically and theoretically the resultant currents you 50 30 supply are,

- a) The current across 330.0 resistor is
- b) The current across 560.0 resistor is 0.0089.
- c) The avoient avious 470_0 resistor is 0.00012.