



EXPERIMENT NO:	2
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PROGRAMME:	Electrical Circuit
SUBJECT:	Electrical Circuit lab
COURSEWORK TITLE:	Series and parallel Resistor's connection

## 2.1.Objective:

To study the properties of series and parallel connection.

## 2.2.Tools needed:-

1. DC voltage supply.
1. Set of wires.
2. Resistances.
3. Multi-meter.

## 2.3.Theory :

### 1. The Series Circuit

A SERIES CIRCUIT or “series-connected circuit” is a circuit having JUST ONE CURRENT PATH. Thus, Fig.(1) is an example of a “series circuit” in which a battery of constant potential difference  $V$  volts, and three resistances, are all connected “in series”.

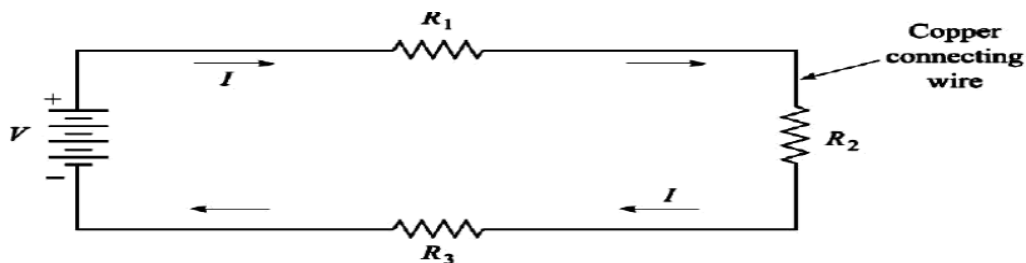


Fig.(1)

## 2. The Parallel Circuit

A PARALLEL circuit is one in which the battery current divides into a number of “parallel paths.” This is shown in Fig.(2), in which a battery, of constant  $V$  volts, delivers a current of  $I$  amperes to a load consisting of any number of  $n$  resistances connected “in parallel.”

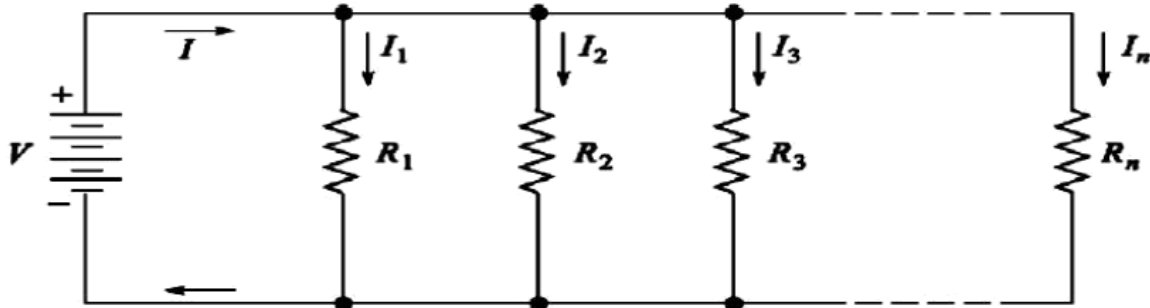


Fig.(2)

