

EXPERIMENT #3

CONVERSION OF GALVANOMETER TO AMMETER

OBJECTIVE:

GALVANOMETER:

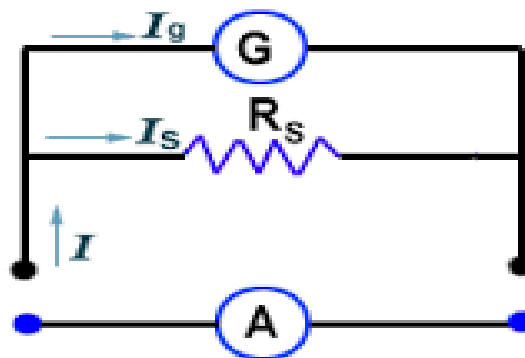
A galvanometer is a type of sensitive ammeter; an instrument for detecting small electric current. It is an analog electromechanical actuator that produces a rotary deflection of some type of pointer in response to electric current through its coil in a magnetic field.

AMMETER:

An **ammeter** is a measuring instrument used to measure the current in a circuit. Electric currents are measured in amperes (A). Instruments used to measure smaller currents, in the milli-ampere or microampere range, are designated as milli-ammeters or micro-ammeters. Digital ammeter designs use a shunt resistor to produce a calibrated voltage proportional to the current flowing. This voltage is then measured by a digital voltmeter, through use of an analog to digital converter (ADC); the digital display is calibrated to display the current through the shunt.

CONVERSION OF GALVANOMETER TO AMMETER:

For the conversion of galvanometer to ammeter a resistor of low resistance should be connected in parallel with the galvanometer to form an ammeter of desired range.



AMMETER

OBSERVATIONS AND CALCULATIONS:

V	R1	Rg	Rsh	Ig	R

Table 3.1

CONCLUSION:
