**EXPERIMENT 7**

**GALVANOMETER - 1**

**Day & Date:**

Aim: To determine resistance of the given galvanometer by half deflection method and hence find its figure of merit.

Theory:

 Resistance of galvanometer is given by G$=\frac{RS}{R-S}$

 Figure of merit of the galvanometer K= $=\frac{E}{R+G }\frac{1}{θ}$

CIRCUIT DIAGRAM:

OBSERVATIONS:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Resistance (R) (Ω) | Deflection(θ) - div | Shunt resistance (S)   | Half deflection (/2) | G$=\frac{RS}{R-S}$ | $$K=\frac{E}{R+G }\frac{1}{θ}$$A/div |
| 01 |  |  |  |  |  |  |
| 02 |  |  |  |  |  |  |
| 03 |  |  |  |  |  |  |
| 04 |  |  |  |  |  |  |
| 05 |  |  |  |  |  |  |

Mean (G) =  Mean (K) = A/div

**Result:**

The resistance of the given galvanometer = .

The figure of merit of the given galvanometer = A/div