## OBSERVATIONS:

Jo find rise in capillary tube,

Microscopic reading without field (h,) = 6.624 cm

TR = MSR + (VSC × LC)

LC = 0.001 cm 1213, -10 ; a second miles of the second

| and some of the least the same |                   |           |  |           |  | 111                   | , , ,            |
|--------------------------------|-------------------|-----------|--|-----------|--|-----------------------|------------------|
| S.No                           | Cuvient (i)       | Field (H) | Travelling microscope<br>readings (h2) |           |  | Difference<br>h=h1-h2 | h/H <sup>2</sup> |
|                                | Ampère            | Granss    | MSR                                    | VSC (div) | TR   | × 10-2 m              | (m-1)            |
| 1                              | The second second | 1060      |  | 2         | CONTRACTOR OF THE PERSON NAMED IN CONTRA | 0.028                 | 2.50 × 10-6      |
| 2                              | 10                | 1930      | 6.75                                   | 20        | 6.77   | 0.176                 | 3.90 × 10-6      |
| 3                              | 15000             | 2760      | 6:8                                    | 50        | 6.805  | D. 181                | 2.40 × 10-6      |
| 4                              | 20                | 36 70     | 6. 93                                  | 22        | 6:972  | 0.348                 | 2.60×10-6        |
| 5                              | 25                | 4170      | 7.05                                   | 1         | 7.651  | 0.427                 | 2.50 × 10-6      |
| 6                              | 30                | 5,270     | 7.2                                    | 3         | 7.203  | 0.379                 | 2.10×10-6        |
|                                |                   |           |  |           | 10   | 1000                  | -                |

Mean h/H<sup>2</sup> = 2.63 × 10<sup>-6</sup>

and motorin the status as in

of converge per betalte in investment in i

OBSERVATION :-

1. density of the liquid (or) Solution

= 1480 kg/m³

= 1480 kg/m³

a density of air = 1 kg/m³

## Calculation 8-

The magnetic Susceptibility of the given Solution,

$$\chi = a \frac{(f-a)gh}{H^2}$$

 $\sigma = 1 \text{ kg / m}^3$   $f = 1480 \text{ kg / m}^3$   $g = 9.81 \text{ m/s}^2$ 

1  $a(1480-1) \times 9.81 \times 2.65 \times 10^{-6}$  $\Rightarrow 0.076$ 

2 2 (1479) × 9.81 × 3.90 × 10<sup>-6</sup>  $\Rightarrow 0.07$ 

3.  $a(1479) \times 9.81 \times 2.40 \times 10^{-6}$  $\Rightarrow 0.06$ 

4.  $a(1479) \times 9.81 \times 2.60 \times 10^{-6}$  $\Rightarrow 0.075$ 

Mean - 18.89 kgm-15-2gauss-2