



Birla Institute of Technology & Science, Pilani

Pilani Campus

PHY F244 : Modern Physics Laboratory | SEM - II | 2024-2025

Observation Sheet

Date: 18/02/25

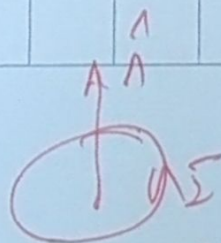
Exp No. : 06 Exp Name : Magnetic Susceptibility by Quincke's tube

Group No. : 01

S.N.	Name	ID	Signature	Viva Marks	Faculty Signature with Date
1.	Abhay Badani	2023BSAA1111P		4	3/11/25
2.	Aarav Shah	2023BSAA1325P		3.5	Wardha
3.	Aaditya Thakkar	2023BSAD1128P		3.5	18/02/25
4.					

Calibration of Magnetic Field Using Gauss Meter					
I (A)	B (G)	R (mSD)	R (VSD)	ΔB	
1.0	1700	7.10	14		
1.2	1990	7.10	34		
1.4	2270	7.15	04		
1.6	2580	7.15	24		
1.8	2890	7.20	00		
2.0	3190	7.20	16		
2.2	3500	7.20	36		
2.4	3800	7.25	15		
2.6	4100	7.30	02		
2.8	4390	7.3	45		
3.0	4670	7.35	25		
Ref					
0.0	0080	7.1	00		

Least Count = 0.01 mm



$$\vec{B} = \frac{\mu_0}{4\pi} \frac{I A n}{r^3}$$