



Birla Institute of Technology & Science, Pilani
Pilani Campus

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

Date: 4th Feb 2025

Exp No. : 2 Exp Name : Frank-Hertz Experiment

Group No. : 1

S.N.	Name	ID	Signature	Viva Marks	Faculty Signature with Date
1.	Aarav Shah	2023B5AD132SP		5	 4/2/25
2.	Aditya Thakur	2023B5AD1123P		5	
3.	Abhay Badoni	2023B5AA1111P		5	
4.					

(V _{g2K})	V _{G1K} = 1.5V V _{G2K} = 7.5V I (nA)	V _{G1K} = 2.5V V _{G2K} = 7.5V	V _{G1K} = 1.5V V _{G2K} = 5V
V _{G2K} (V)			
5.5	0	0	0.06
6	0	0	0.44
9	0.12	0.1	14.45
12	1.65	5.88	21.71
15	7.67	12.23	24.23
18	10.65	15.49	24.31
21	9.25	12.71	18.31
24	5.61	8.58	20.92
27	15.13	18.94	31.65
30	21.51	23.63	32.84
33	14.71	14.11	18.54
36	10.12	10.03	32.76
39	33.1	31.14	48.53
42	37.3	34.83	44.5
45	16.71	15.13	22.1

	R-I		R-II		R-III	
$V_{ek}(V)$	$I(nA)$		$I(nA)$		$I(nA)$	
48	21.1		16.47		49.8	
51	53.8		45.81		67.8	
54	55.9		48.23		58.1	
57	22.3		19.74		33.2	
60	31.3		26.16		69.1	
63	72.4		62.13		86.8	
66	75.5		64.32		78.1	
69	39.3		33.86		57.2	
72	42.4		34.73		81.9	
75	87.9		75.73		109.9	
78	100		85.8		105.4	