

10/12/22

Conductometric

Aim:

Calculate the given hydrochloric acid's strength by conductometric titration.

Principle:

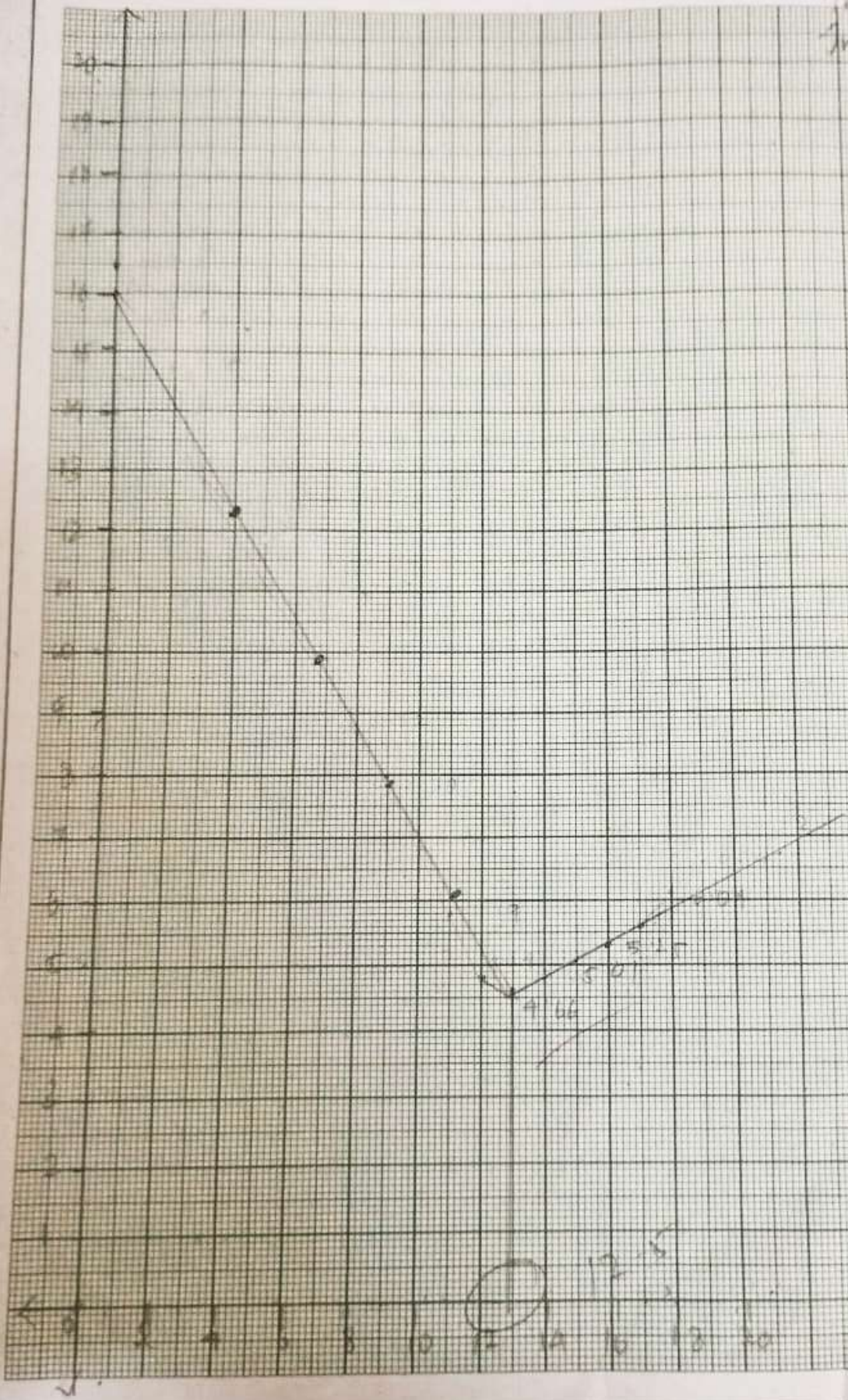
250ml of given hydrochloric acid pipetted out 20ml of hydrochloric acid then add 30ml of distilled water and dip the conductometric cell tip in 20ml of hydrochloric acid.



S.No	CONTENTS	TITRATION
1.	Burette solution	Standard NaOH solution
2.	Baker's solution	20ml of HCl + 30ml of distilled water.
3.	Instruments	Conductivity meter
4.	Electrode	Conductivity cell
5.	End point	Conductance decreases slowly the suddenly increases
6.	Equivalent weight of HCl = 36.5	

Titration of HCl (vs) NaOH		
S.No	Volume of NaOH added (ml)	Conductance (μ)
1	0	16.23
2	1	15.41
3	2	14.75
4	3	12.88
5	4	12.31
6	5	11.84
7	6	10.89
8	7	9.82
9	8	8.72
10	9	7.70
11	10	6.85
12	11	5.79
13	12	4.84
14	13	4.66
15	14	4.86
16	15	5.01
17	16	5.25
18	17	5.57
19	18	6.09
20	19	6.54
21	20	7.02

Scale
 1 cm = 1000 m
 1 mm = 100 m



12.5
 0.5
 26.5