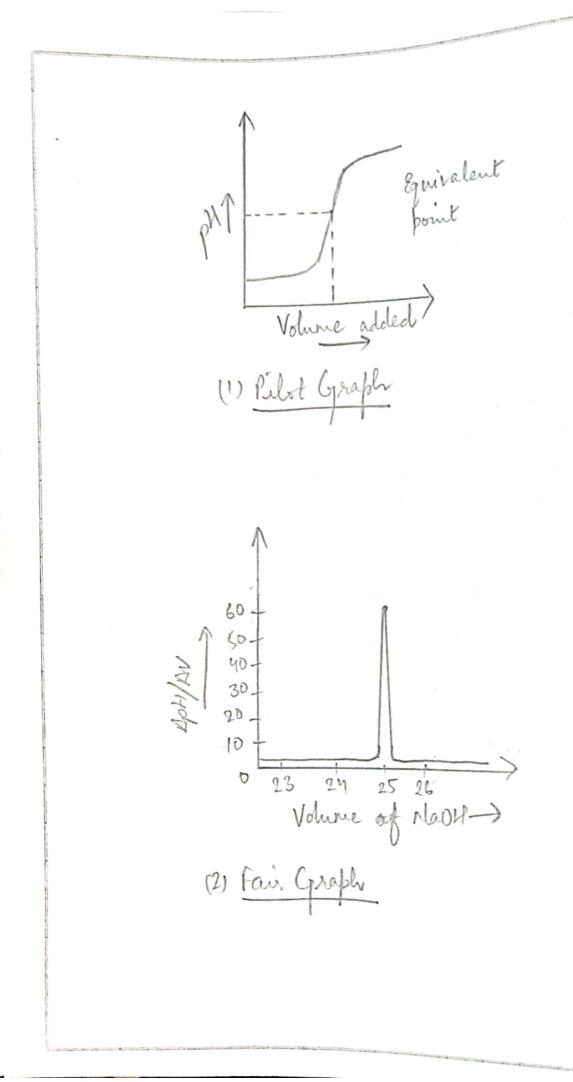
DETERMINATION OF STRENGTH OF AN ACID VSINCE PM METER # AIM: To find the theught of given hydrochloric acid orbition by titating it against sodium hydroxide (OVN) using off meter. # PRINCIPLE: Then an alkali is added to an acid solution, the pH of the solution increases storely, but at vicinity of the end point, the rate of change of pH of the solution is very rapid. From the charp break in the curve, we can find out the and point, from which the strength of HCl can be calculated. # PROCEDUFE: Thist standardize the pH meter using different buffers of known pH, then wash the glass electrode and reference electrode with distilled water and them with the acid solution. The given acid is made up to 100 ml using distilled water. The given acid is made up to 100 ml using distilled water. The given acid is made up to 100 ml using distilled water. The given acid is made up to 100 ml using distilled water. The given acid is made up to 100 ml acid solution. The given acid is made up to 100 ml acid solution. The given acid is made up to 100 ml acid solution is added, to that the glass electrode as well as the reference dectrode is completely diffeed. Note the pH of the func acid solution and run clown into the beaker in small increments (Iml).		Date 4.72-21
AM: To find the strength of given hydrochloric acid solution by tiliating it against sodium hydroxids (OVN) using off meter. * PRINCIPLE: * Other an alkali is added to an acid solution, the pH of the solution increases storyly, but at vicinity of the end point, the rate of change of pH of the solution is very rapid. From the charp break in the curve, we can hid out the and point, from which the alrength of HCl can be calculated. * PROCEDUFE: * First standardize the pH meter using different buffers of known pH, Then wash the glass electrode and reference electrode with distilled water and then with the acid solution. * The given acid is made up to 100 ml using distilled water. * 10 ml of this made up solution is pipetted out into a 250 ml clean beaker and 100 ml of distilled water is added, to that the glass electrode as nell as the reference electrode is completely diffeed. * Note the pH of the fune acid solution fill the burstle with abandard standard NaOH solution and run clown into the	EXP	t. No
by tiliating it against sodium hydroxide (OIN) using off meter. * PRINCIPLE: - When an alkali is added to an acid solution, the pH of the solution increases storoly, but at vicinity of the end point, the rate of change of pH of the solution is very rapid. From the sharp break in the curve, we can hid out the end point, from which the strength of HCl can be calculated. * PROCEDUFE: - first standardise the pH meter using different buffers of known pH, Then wash the glass electrode and reference electrode with distilled water and them with the acid solution. - The given acid is made up solution is pipettical out into a 250 ml clean beaker and 100 ml of distilled water is added, so that the glass electrode as well as the reference electrode is completely diffeed. - Note the pH of the func acid solution and run down into the		DETERMINATION OF STRENGTH OF AN ACID USING PH METER
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standard standard NaOH solution and run down into the		the glass electrode as well as the reference electrode is
i de l'apparents (1 ml)	7	standard standard NaOH solution and run down into the
		i de l'accoments (Ind)
-) Stor the solution well using glass rod. Note down the pH of	7	Stir the solution well using glass rod. Note down the pH of every successive addition.
every successive addition.		every successive addition.
I continue the titration till beyond the neutralisation point as	7	Continue the titration till beyond the neutralisation point as
Teacher's Signature	-	Teacher's Signature



		Date								
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indicated by an about change in pH. 3 Not a graph between volume of NaDH against pM. The midfoint of the 15' shaped curve of the graph gives the equivalence point. 3 Near the end foint add very small amount of NaDH, because thange in pH will be very much appreciable when the acid is neutralised, purther addition of such a small quantity of 0.01 ml raises the pH about 9 to 10.										
simil close reason of flot of find o	In order to get an accurate and point, perform one more similar titration by adding 02 nd of standard NaDH solution dove to the end plant (1 nd on either ride of the range) and measure the pM of every addition. 9 Plot a fair graph between volume of NaOH against ApH/DV. 9 find out the exact and point from the fair graph gives the equivalence point.									
	TABLE-1: (PILOT TITEATION) (HU VI NAOH)									
S.Na. 1 2 3 4 5 6 7	Volume of NaOH (ml) 1 2 3 4 5	PH 2.05 2.09 2.11 2-20 2-25 2-30 2-40 Teacher's Signature								
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				1			1			
	14	12.4	6.70	0.30	0.2	1.5				
	15	12.6	7.00	0.30	0.2	1.2				
	16	12-8	7-28	0.28	DIL	1.4				
	17	13.0	7.46	0.18	0.2	0.9				
	. 1				1					
*		LATIONS:								
->	Volur	re of Na	DH , V =	11.6 ml	(from fa	in graph,				
	Stren	gth of Na	DM, N,=	0.1N (g	inen)					
	Volu	he of HCL,	N2 = 10 m	e o						
	Volume of NaDM, V = 11.6 ml (from fair graph) Strength of NaDM, N = 0.1 N (given) Volume of HCL, V = 10 ml Strength of HCL, N = N, XV, = 0.1 X 11.6 => 0.116 N,									
		, v	-	V2	10		,			
	450.116	···					-			
	PESUL		ρ τ Ι	1 0 1 -		ad tim				
9	The Strength of given hydrochloric acid solution is 0.116 N.									
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	Teacher's Signature									

