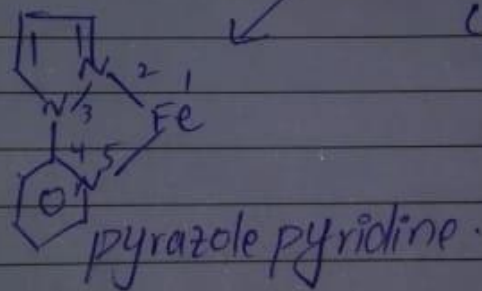
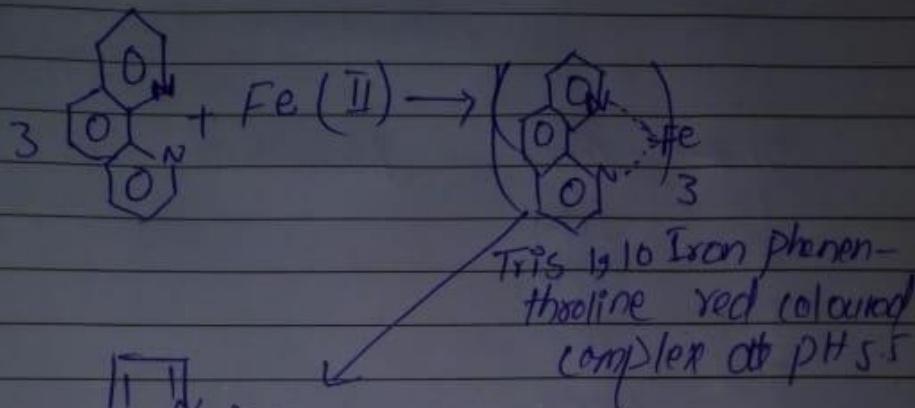


Determine the A/L of iron by Spectrophotometric Method

Determine the Amount/L of Fe(II) ion
in Spectrophotometrically.

Theory

Fe^{+3} Complexed with a ligand
1,10phenanthroline.



Sample Iron — Ferrous
Tap water.

Chemicals Required

① St. soln of Fe(II) ion $\rightarrow 100\text{ppm}$.

$\text{FeSO}_4 + \text{H}_2\text{O} + \text{H}_2\text{SO}_4$ to completely homogenized.
So that 100% transparent.

② 1% soln. of 1,10 phenanthroline.

③ CH_3COONa (1g)

④ water.

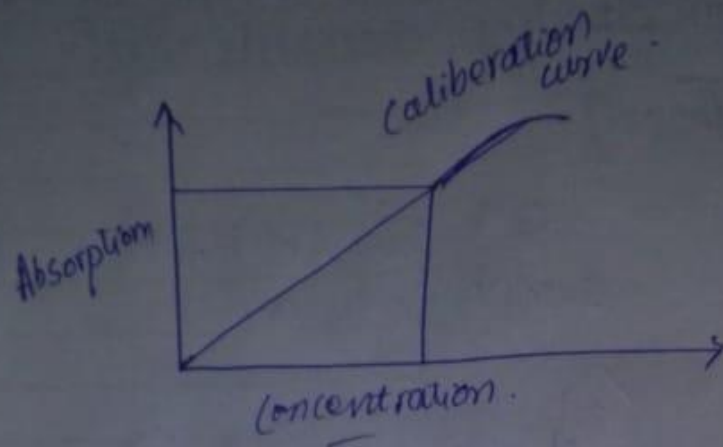
Procedure :-

\rightarrow Take at least 5 100ml volumetric flask.

\rightarrow label them as 1ppm, 2ppm, 3ppm, 4ppm and unknown.

In each flask add 1ml, 2ml, 3ml, 4ml and unknown. and add 2g CH_3COONa in each. add 5ml 1% phenanthroline and colour change, measure absorption at 540nm.

Result ??



Sr #	Conc.	Absorption.
1	1 ppm	
2	2 ppm	
3	3 ppm	
4	4 ppm	
5	unknown.	

Calculate
A / L.