BCHY101P FAT

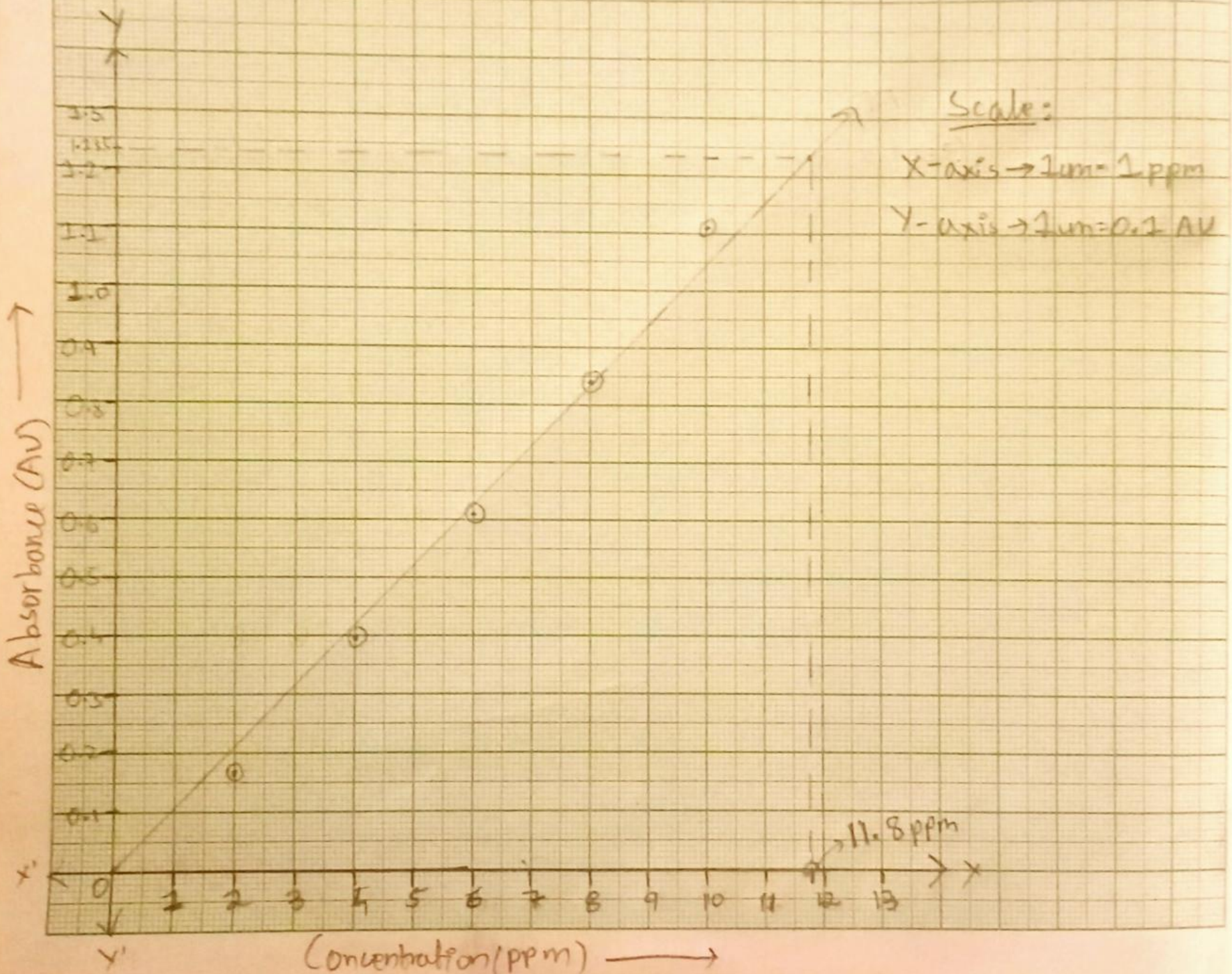
- **Procedure:**

→ Take 6 standard 50mL Volumetric flasks (including unknown).
→ To every flask add:
a) 0.5mL DMG solution
b) 0.5 mL Potassium Ferrocyanide ($K_3[Fe(CN)_6]$) solution using a burette.
→ Add Ni stock solution (1000ppm) from burette to get 2, 4, 6, 8 and 10 ppm of steel containing Ni(II) solutions.
→ All the solutions flask are shaken well and made up to 50mL mark with 1N NaOH solution.
→ Allow the flasks to rest atleast 15 minutes after adding all the reagents for complete complex formation.
→ Record the absorbance reading in Table.

Concentration (ppm)	Absorbance
2.0000	0.1648
4.0000	0.3920
6.0000	0.6100
8.0000	0.8400
10.0000	1.1100
Unknown = 11.8000	1.2350

Concentration Vs. Absorbance (Ni(II))

Beer's Law



Result: According to graph
concentration of unknown solution = 11.8 ppm