

	Practical Plan	
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Name of the college: Govt college of Arts Science and Commerce, Sanquelim.

Name of Faculty: Varsha K sail **Subject:** Inorganic Chemistry - III

Paper code:CHC-308 **Program:** TY BSc **Division:** Batch i

Academic year: 2026- 2027 **Semester:** V **Total Practicals/Labs:** 30 hrs

Credits:02

Course Objectives. To use various titrimetric techniques to estimate the analytes.
2. To perform gravimetric methods to estimate metal ions.
3. To prepare coordination compounds.

Expected Course Outcome: . To use various titrimetric techniques to estimate the analytes. 2. To perform gravimetric methods to estimate metal ions. 3. To prepare coordination compounds.

Student Learning Outcome: . To use various titrimetric techniques to estimate the analytes. 2. To perform gravimetric methods to estimate metal ions. 3. To prepare coordination compounds.

Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
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June	19th	27th	1 practical session of 2 hours each		1. G.H. Jeffery, J. Bassett, J. Mendham, R. C. Denney, Vogel's Textbook of Quantitative Chemical Analysis, 5 th Edn. ELBS
				Bis-(ethylenediamine)copper (II) sulphate.	
july	29 th June	4 th July	1 practical session of 2 hours each	Preparation of tris-(ethylenediamine)nickel (II) thiosulphate OR Preparation of diaquabis-(acetylacetonato)nickel (II)	
	6th	11th	1 practical session of 2 hours each	1.Estimation of iron as Fe ₂ O ₃ from the given solution of ferric chloride, barium chloride and free HCl	
	13th	18th	1 practical session of 2 hours each	1.Estimation of iron as Fe ₂ O ₃ from the given solution of ferric chloride, barium chloride and free HCl	
	20 th	25 th	1 practical session of 2 hours each	Estimation of barium as BaCrO ₄ and Fe as Fe ₂ O ₃ from the given solution of barium chloride, ferric chloride and free HCl.	2.S. Ratan, Experiments in Applied Chemistry, 3 rd Edn. S.K. Kataria & Sons 3.O. P. Pandey, D. N. Bajpai and S. Giri, Practical Chemistry, Revised Edn. S. Chand.
	27th	1 st Aug	1 practical session of 2 hours each		

August	3 rd	8 th	1 practical session of 2 hours each	Estimation of barium as BaCrO ₄ and Fe as Fe ₂ O ₃ from the given solution of barium chloride, ferric chloride and free HCl.	
	10 th	14 th 15 th Holiday	1 practical session of 2 hours each	Estimation of Zn as zinc pyrophosphate in the solution of zinc chloride containing free HCl.	
	17 th	22 nd	1 practical session of 2 hours each	Estimation of Manganese as manganese pyrophosphate from the given solution of MnSO ₄ .H ₂ O/ MnSO ₄ .4H ₂ O/ MnCl ₂ .4H ₂ O.	
	24 th 26 th holiday	29 th	1 practical session of 2 hours each	Estimation of Manganese as manganese pyrophosphate from the given solution of MnSO ₄ .H ₂ O/ MnSO ₄ .4H ₂ O/ MnCl ₂ .4H ₂ O	
Sept	31 st Aug	5 th	1 practical session of 2 hours each	6. Estimation of Ni as Ni-DMG in the solution of nickel chloride containing copper chloride and free HCl.	
	7 th	12 th	1 practical session of 2 hours each	Estimation of Ni as Ni-DMG in the solution of nickel chloride containing copper chloride and free HCl.	
	14 th	19 th	1 practical session of 2 hours each	Holidays	
	21 st	26 th	1 practical session of 2 hours each	Volumetric Analysis 1. Determination of the strength of the given H ₂ O ₂ solution using N/20 KMnO ₄ solution.	

Oct	28 th	3 rd oct	1 practical session of 2 hours each	Volumetric Analysis 1. Determination of the strength of the given H ₂ O ₂ solution using N/20 KMnO ₄ solution.	
	5 th	10 th	1 practical session of 2 hours each	Estimation of the amount of aluminium in the given aluminium sulphate solution by EDTA method (Back titration).	
	12 th	14 th		Repatation session.	