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**Total Practicals/Labs: 30 hrs** 

Name of the college: Govt college of Arts Science and Commerce, Sanquelim.				
Name of Faculty: Varsha K sail	Subject: Inorganic chemistry			
Paper code:CHC-301 Program: TY BSc Division: Batch i				

Semester: V

## Credits:02

Academic year: 2025- 2026

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	Practic Schedu Date	als/Labs ıled	No. of Practicals/La bs planned	List of Experiments	Reference books
June	23/06/2	28/06/	1 practical		1. G.H. Jeffery, J. Bassett, J.
	5	25	session of 2		Mendham, R. C. Denney,
			hours each	Volumetric Analysis 1. Determination of the strength of the given H2O2 solution using N/20 KMnO4	Vogel's Textbook of Quantitative Chemical Analysis, 5 <sup>th</sup> Edn. ELBS
				solution.	
	30/07/2	5/7/25	1 practical session of 2 hours each	Volumetric Analysis 1. Determination of the strength of the given H2O2 solution using N/20 KMnO4	
july				solution.	
	7/7/25	12/7/2 5	1 practical session of 2 hours each	Estimation of the amount of aluminium in the given aluminium sulphate solution by EDTA method (Back titration).	

	14/7/25	19/7/2	1 practical session of 2 hours each	Estimation of the amount of aluminium in the given aluminium sulphate solution by EDTA method (Back titration).	
	21/7/25	26/7/2 5	1 practical session of 2 hours each	Gravimetric Analysis  3. Estimation of iron as Fe2O3 and Ba as BaSO4 from the given solution of ferric chloride, barium chloride and free HCI	2.S. Ratan, Experiments in Applied Chemistry, 3 <sup>rd</sup> Edn. S.K. Kataria & Sons 3.O. P. Pandey, D. N. Bajpai and S. Giri, Practical Chemistry, Revised Edn. S. Chand.
	28/7/25	2/8/25	1 practical session of 2 hours each	Estimation of iron as Fe2O3 and Ba as BaSO4 from the given solution of ferric chloride, barium chloride and free HCl	
August	4/8/25	9/8/25	1 practical session of 2 hours each	4. Estimation of barium as BaCrO4 and Fe as Fe2O3 from the given solution of barium chloride, ferric chloride and free HCl	
	11/8/25	16/8/2	1 practical session of 2 hours each	4. Estimation of barium as BaCrO4 and Fe as Fe2O3 from the given solution of barium chloride, ferric chloride and free HCl	
	18/8/25	23/8/2	1 practical session of 2 hours each	5. Estimation of Zn as zinc pyrophosphate in the solution of zinc chloride containing free HCl.	

	25/8/25	30/8/2	1 practical session of 2 hours each	5. Estimation of Zn as zinc pyrophosphate in the solution of zinc chloride containing free HCl.	
Sept	1/9/25	6/9/25	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.	
	8/9/25	13/9/2	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.	
	11-09-	16-09- 23	1 practical session of 2 hours each	Inorganic Preparations (ANY TWO)  7. Bis-(ethylenediamine)copper (II) sulphate.	
	25-09- 23	30-09- 23	1 practical session of 2 hours each	7. Bis-(ethylenediamine)copper (II) sulphate.	
Oct	02-10- 23	07-10- 23	1 practical session of 2 hours each	8. Preparation of diaquabis- (acetylacetonato)nickel (II)	
	09-10- 23	14-10- 23	1 practical session of 2 hours each	9. Preparation of tris- (ethylenediamine)nickel (II) thiosulphate	