

Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim, Goa		
Name of Faculty: Dr. Dattaprasad D. Narulkar	Subject: Chemistry	
Paper code: CHC-203 Inorganic Chemistry - I	Program: S.Y.BSc.	Division:
Academic year: 2024 - 2025	Semester: IV	Total Practical/Labs: 15 (30 hours)
Credits: 1		
Course Objectives: <ul style="list-style-type: none">• To apply the fundamental theoretical aspects of qualitative inorganic analysis.• 2. To use various titrimetric techniques to estimate the analytes.• 3. To use gravimetric methods to estimate metal ions.• 4. To prepare inorganic coordination compounds.		
Expected Course Outcome: At the end of the course students will be able: CO1: perform a qualitative analysis of inorganic mixtures. CO2: prepare coordination compounds of transition elements. CO3: determine unknown concentration of analytes using volumetric and gravimetric procedures.		
Student Learning Outcome: At the end of the course students will be able: LO1: to acquire the knowledge and skill of basic volumetric and gravimetric estimations. LO2: to get hands on experience on the purification techniques for organic compounds. LO3: to get hands on experience on the identification of chemical nature of organic compounds.		

Month	Practical/Labs Scheduled Date	No. of Practical /Labs planned	List of Experiments	Reference books
December	10/12/2024	1	Estimation of the amount of nickel in the given nickel sulphate solution (EDTA method).	Ref 1 and 2
	17/12/2024	1	Estimation of Fe (II) ions by titrating it with $K_2Cr_2O_7$ using the internal indicator.	Ref 1 and 2
January	07/01/2025	1	Estimate the amount of Ni as bis(dimethylglyoximate) nickel (II) in the given solution of nickel chloride using counter poise method.	Ref 1 and 2
	14/01/2025	1	Preparation of chrome red	Ref 1 and 2.
	21/01/2025	1	Preparation of tris-(ethylenediamine)nickel (II)chloride	Ref 1 and 2
	28/02/2025	1	Estimation of Mn as manganese pyrophosphate present in the given manganese sulphate solution.	Ref 1 and 2
	04/02/2025	1	Semi-micro qualitative analysis - I	Ref 1 and 2
February	11/02/2025	1	Semi-micro qualitative analysis - I	Ref 1 and 2
	18/02/2025	1	Semi-micro qualitative analysis - II	Ref 1 and 2
	25/02/2025	1	Semi-micro qualitative analysis - II	Ref 1 and 2
	04/03/2025	1	Semi-micro qualitative analysis - III	Ref 1 and 2

March	11/03/2025	1	Semi-micro qualitative analysis - III	Ref 1 and 2
	18/03/2025	1	Semi-micro qualitative analysis - IV	Ref 1 and 2
	25/03/2025	1	Semi-micro qualitative analysis - IV	Ref 1 and 2
April	01/04/2025	1	Repeat Practical	
	08/04/2025	1	Repeat Practical	

References

1. Vogel's Text book of Qualitative analysis
2. Vogel's Textbook of Quantitative Analysis

* Assessment Rubrics	
Component	Max Marks
ISA	15
Practical	25
Semester End Exam	60
Total	100