



Code	Subject Title	Cr. Hrs	Semester
CHEM-322	Applied Chemistry Lab	2	VI
Year	Discipline		
3	Chemistry-I, II		

**SYLLABUS OUTLINE:****1. Preparations:**

Dentrifrice, Thermosetting and thermoplastic resins (alkyd and urea formaldehyde)

**2. Chromatography:**

Coating of TLC plates and separation of mixture of dyes.

Separation of different pigments of plant extract by TLC chromatography Packing of chromatographic column and separation of a mixture of dyes. Separation of  $\beta$ -carotene from the pulp of tomato and carrot by column chromatography.

**3. Titrimetry:**

Analysis of soda ash and caustic soda in a mixture. Determine the active material in the commercial sample of detergent by cationic titration. Determining the %age purity of sodium bicarbonate and sodium carbonate. Determination of Residual Chlorine in water. 5age of reducing sugars. Soap analysis for free and combined alkali.

**4. Spectrophotometry:**

Estimation of nickel in vanaspati ghee.

Estimation of chloride in the tannery effluent.

Estimation of Iron in Pharmaceutical Products.

Estimation of Phosphates in fertilizers.

**RECOMMENDED BOOKS:**

1. Perfumes Cosmetics and Soaps, W.A. Poucher, Chapman and Hall 7th Ed. (1974).
2. Applied Chemistry Theory and Practice, O.P. Vermani & A.K. Narula, Wiley Eastern Limited (1989).
3. T. B. of Quantitative Inorganic Analysis, Vogel's Ed-4<sup>th</sup>, Longman Group Limited (1978).
4. Practical Statistics for the Analytical Scientist, A Bench Guide, RSC Publishing, LGC Ltd 2009.