CY-217 Analytical Chemistry-II

Electrochemical Methods of Analysis: Principle and cassification of electrochemical methods.
Potentiometric Methods of Analysis: Potentiometric measurements, Reference Electrodes (NHE, SCE, Ag/AgCI), metallic Indicator Electrodes, membrane electrodes, Quantitative and Qualitative applications.
Coulometric Methods of Analysis: controlled-potential coulometry, controlled-current coulometry, Quantitative and Qualitative applications.
Voltametric Methods of Analysis: Voltametric measurements, current in voltammetry, shapes of voltammograms, voltametric techniques: polarography, Amperometry, Quantitative and Qualitative applications.
Chromatographic Methods of Analysis: Principles of chromatography, classification, techniques of chromatography, General Theory of column chromatography (chromatographic resolution, capacity factor, column selectivity, column efficiency, peak capacity, non-ideal behavior)
Gas Chromatography: Mobile phase, chromatographic columns, stationary phases, temperature control, sample introduction, detectors for gas chromatography, Quantitative and Qualitative applications.
High-Performance Liquid Chromatography: HPLC columns, stationary phases, mobile phases, HPLC plumbing, sample introduction, Detectors for HPLC, Qualitative and quantitative applications.