

BS (4 Years) for Affiliated Colleges



Code	Subject Title	Cr. Hrs	Semester
CHEM-414	Analytical Chemistry (Sp. Practical)	2	VII
Year	Discipline		
4	Chemistry		

SYLLABUS OUTLINE:

Molecular Spectrophotometry:

- Determination of Iron (II) using 1, 10-phenanthroline method.
- Determination of Iron (III) using thiocyanate method.
- Determination of chromium by diphenylcarbazide method.
- Determination of Fe, Pb, Cd, Zn and Cu in soil samples by AAS technique.
- Simple acid base titrations using potentiometer.
- Determination of "F" in water by using ion selective electrodes.
- Preparation of standard calibration graphs of Pb, Cd, Zn and Fe by AAS.
- Determination of Ni by DMG method spectrophotometrically.
- Determination of mixtures of complexes of Iron with Thiocyanide and 1, 10, phenanthroline.
- Determination of λ_{max} of Cr complex with diphenyl carbazide.
- Infrared Determination of a Mixture of Xylene
- Spectrophotometric determination of Lead or Leaves using Solvent Extraction.

RECOMMENDED BOOKS:

1. Vogel's text book of quantitative inorganic analysis by J. Bassett. The English language book Society and Longman.
2. Atomic and molecular spectroscopy. Basic concepts and practical application by Sune Svanberg, Springerlink Berlin Heidelberg.