

SARDAR PATEL UNIVERSITY
Programme: MSC (Applied Science)
Semester: II
Syllabus with effect from: December 2013

Paper Code: PT02CASC04	Total Credits: 4
Title Of Paper: Experimental Methods – I	

Unit	Description in detail	Weightage (%)
	Note: (Any 8 of the Following):	
1	Qualitative analysis of hydrophobic drugs by liquid chromatography mass spectroscopy method (LCMS).	
2	Determination of moisture content of given sample by Karl-Fischer Titrater.	
3	Synthesis of Urea-Formaldehyde Resins and identify % free formaldehyde from the synthesized resin.	
4	Synthesis of Phenol -Formaldehyde Resins and identify % free formaldehyde from the synthesized resin.	
5	Quantitative determination of given sample solution by UV-Vis Spectroscopy.	
6	Identify the functional groups present in the given sample by FTIR spectral techniques.	
7	Thermo gravimetric (TGA) and differential scanning calorimetric (DSC) analysis of Calcium oxalate sample.	
8	Synthesis of Melamine -Formaldehyde Resins and identify % free formaldehyde from the synthesized resin.	
9	Elemental analysis and quantitative determination of sediment using elemental analyzer	

Basic Text & Reference Books:

- Vogles Textbook of Quantitative Chemical Analysis, J Mandham, R.C.Denny, J.D. Barnes, M. Thomas, B. Sivasankar, 8th Edition, Pearson Publications.
- Textbook of Pharmaceutical Analysis, Dr S. Ravishankar, 3rd Edition, Rx Publication.

