SARDAR PATEL UNIVERSITY

Programme & Subject: M.Sc (Defence Science)

Semester: II

Syllabus with Effect from: June - 2014

Paper Code: PT02CDSC04	Total Credit: 4	
Title Of Paper: Experimental Methods - I	Total Credit: 4	

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

