SARDAR PATEL UNIVERSITY Programme & Subject: M.Sc (Materials Science) Semester: III Syllabus with Effect from: June - 2013

per Code: PS03CMTS04	Total Credits 4
le Of Paper: Practical – I (List Of Experiments For M.Sc. (Materials Science	Total Credit: 4
Description in detail	Weightage (%)
Chemical Analysis of Alloys	
Volumetric	
Gravimetric	
Phase diagram	
Porosity of ceramics	
Conductometric Analysis	
Cell constant	
Analysis for strong acid & strong base	
Analysis for weak acid & strong base	
Analysis for Mixture of acids	
Solubility of sparingly soluble salts	
pH metry	
Analysis of strong acid & strong base	
Analysis for weak acid & strong base	
Analysis for Mixture of acids	
Spectrophotometric Analysis	
λmax	
Strength of unknown solution	
Refractrometry	
Refractive Index & Molar reflectivity	
Analysis of unknown mixture	100%
Viscometry	
Relative viscosity	
Mol. Weight of Polymers	
Corrosion	
Zinc and Al in acid & base	
Anodization of Aluminium and its corrosion studies	
Flame photometry	
Estimation of Na+ ion	
Estimation of K+ ion	
Selective Electrode Analysis	
Gas chromatography	
Particle size distribution	
Specific Gravity of powder sample.	
FTIR	
Langmur Adsorption Isotherm	
Studies on carbon - Ash content	
Carbon content	
Surface complex	
Calorific value by Bomb calorimeter	

