## SARDAR PATEL UNIVERSITY

## **Programme: B.Sc (Chemistry)**

**Semester: III** 

Syllabus with effect from: JUNE 2012

Paper Code: US03CCHE03	Total Credit: 2
Title Of Paper: Practical	

	Description in detail	
1	<b>Inorganic Mixture:</b> Four radicals. It may include two positive Radicals and two	
	negative radicals.	
	Cd <sup>+2</sup> , Cu <sup>+2</sup> , Bi <sup>+3</sup> , Fe <sup>+2</sup> , Zn <sup>+2</sup> , Al <sup>+3</sup> , Ni <sup>+2</sup> , Mn <sup>+2</sup> , Ba <sup>+2</sup> , Sr <sup>+2</sup> , Ca <sup>+2</sup> , Mg <sup>+2</sup> , NH <sub>4</sub> <sup>+</sup> , K <sup>+</sup> ,	
	Cd <sup>+2</sup> , Cu <sup>+2</sup> , Bi <sup>+3</sup> , Fe <sup>+2</sup> , Zn <sup>+2</sup> , Al <sup>+3</sup> , Ni <sup>+2</sup> , Mn <sup>+2</sup> , Ba <sup>+2</sup> , Sr <sup>+2</sup> , Ca <sup>+2</sup> , Mg <sup>+2</sup> , NH <sub>4</sub> <sup>+</sup> , K <sup>+</sup> , Cl̄, Br̄, Ī, NO <sub>3</sub> , CO <sub>3</sub> <sup>-2</sup> , S <sup>-2</sup> , PO <sub>4</sub> <sup>-3</sup> , BO <sub>3</sub> <sup>-3</sup> , SO <sub>4</sub> <sup>-2</sup> , CrO <sub>4</sub> <sup>-2</sup> , Cr <sub>2</sub> O <sub>7</sub> <sup>-2</sup> etc.	
2	Volumetric Titration (By self preparation of solution of titrant):	
	Estimation of copper by iodometric method.	
	Determination of total hardness of water sample.	
	Determination of nickel by back titration.	
	Determination of nitrite by back titration.	
3	Preparation of standard solutions.	
4	Paper chromatography.	

## **Basic Text & Reference Books:-**

- ➤ Vogel's Testbook of Quanitative Chemical Analysis, 5<sup>th</sup> Edition By G.H.Jeffery, J.Basset, J.Mendham, R.C.Denney.
- > Vogel's Testbook Of Qualitative Inorganic Analysis By G.Svehla
- Practical Chemistry By O.P.Pandey, D.N.Bajpai & S.Giri
- An Advanced Course In Practical Chemistry By Ghoshal, Mahapatra & Nad

