

**SARDAR PATEL UNIVERSITY**  
**Programme: B.Sc (Chemistry)**  
**Semester: VI**  
**Syllabus with effect from: November/December-2013**

<b>Paper Code: US06CCHE07</b>	<b>Total Credit: 2</b>
<b>Title Of Paper: Physical Chemistry Practical</b>	

	<b>Description in detail</b>	
1	<b>Chemical kinetics</b> of a reaction between $K_2S_2O_8$ and KI in an aqueous system.	
2	The <b>study of Decomposition Rate</b> of hydrogen peroxide in presence of catalyst and catalyst with promoter.	
3	The <b>study of Rate of Reaction</b> between hydrogen peroxide and KI in an aqueous media.	
4	To <b>determine the Rate Constant</b> for the reaction between $KBrO_3$ and KI in an aqueous media.	
5	The <b>Distribution coefficient</b> of Benzoic acid distributed between water and kerosene	
6	To study the <b>Adsorption</b> of acid on Activated charcoal.	
7	To <b>determine Molecular weight</b> of polymer by using <b>Ubbelhold Viscometer</b>	
8	To <b>determine the Composition</b> of Binary liquid mixture through the viscosity measurement.	
9	To <b>determine the Molar and Specific Refraction</b> of pure liquids through the measurement of refractive index.	
10	To <b>determine the Composition of a Binary liquid mixture</b> by Refractrometry.	
11	To <b>determine the Concentration</b> of $KMnO_4 / K_2Cr_2O_7$ by Colourimetry.	
12	To study the effect of addition of NaCl and Succinic acid on <b>Critical Solution Temperature (CST)</b> of phenol –Water system.	
13	<b>Viva Voce</b>	

**Basic Text & Reference Books :-**

- Experimental Physical Chemistry by R.C.Das & B.Behera
- Advanced Physical Chemistry by J.B.Yadav

