## ACADEMIC PLANNER & UNITIZATION OF SYLLABUS

## **Department of Chemistry**

# **Bankura Christian College**

ACADEMIC YEAR: 2023-24 (Semester 2<sup>nd</sup> /4<sup>th</sup> /6<sup>th</sup>)

4<sup>th</sup> Semester (Hons ) Practical (March,2023 to June, 2024)

Name of faculty member: Dr.Mahendra Ghosh

**Subject: Chemistry** 

# **Core P8(Physical Chemistry)**

#### Unit - 1

- (a) Theoretical discussion of Determination of solubility of sparingly soluble salt in water, in electrolyte with common ions and in neutral electrolyte (using common indicator)
- (b) Determination of solubility of sparingly soluble salt in water, in electrolyte with common ions and in neutral electrolyte (using common indicator)

## Unit - 2

- (a) Theoretical discussion of Study of phenol-water phase diagram
- (b) Study of phenol-water phase diagram
- (c) Theoretical discussion of Potentiometric titration of Mohr's salt solution against standard K2Cr2O7solution
- (d)Potentiometric titration of Mohr's salt solution against standard K2Cr2O7solution

#### Unit - 3

- (a)Theoretical discussion of Determination of Ksp for AgCl by potentiometric titration of AgNO3solution against standard KCl solution
- (b) Determination of Ksp for AgCl by potentiometric titration of AgNO3solution against standardKCl solution
- (c)Theoretical discussion of Effect of ionic strength on the rate of Persulphate- Iodide reaction
- (d) Effect of ionic strengthon the rate of Persulphate- Iodide reaction

## Unit-4

pH-metric titration of acid (mono- and di-basic) against strong base

MONTH/YEAR	WEEK	PORTIONS
March 2023	3 <sup>rd</sup>	(a)Theoretical discussion of Determination of solubility of sparingly soluble salt in water, in electrolyte with common ions and in neutral electrolyte (using common indicator)
	4 <sup>th</sup>	(b) Determination of solubility of sparingly soluble salt in water, in electrolyte with common ions and in neutral electrolyte (using common indicator)
	5 <sup>th</sup>	Repeat
April 2023	1 <sup>st</sup>	(a) Theoretical discussion of Study of phenol-water phase diagram
	2 <sup>nd</sup>	(b) Study of phenol-water phase diagram
	3 <sup>rd</sup>	(c) Theoretical discussion of Potentiometric titration of Mohr's salt solution against standard K2Cr2O7solution
	4 <sup>th</sup>	(d)Potentiometric titration of Mohr's salt solution against standard K2Cr2O7solution

May 2023	1 <sup>st</sup>	(a)Theoretical discussion of Determination of Ksp for AgCl by potentiometric titration of AgNO3solution against standard KCl solution
	2 <sup>nd</sup>	(b) Determination of Ksp for AgCl by potentiometric titration of AgNO3solution against standard KCl solution
	3 <sup>rd</sup>	(c)Theoretical discussion of Effect of ionic strength on the rate of Persulphate– Iodide reaction
	4 <sup>th</sup>	(d) Effect of ionic strengthon the rate of Persulphate- Iodide reaction
June2023	1 <sup>st</sup>	pH-metric titration of acid (mono- and di-basic) against strong base
	$2^{\mathrm{nd}}$	Revision of Unit-1&2
	3 <sup>rd</sup>	Revision of Unit-3&4