## Koyana Education Society's Balasaheb Desai College, Patan Department of Chemistry Monthly Teaching Plan Year-2023-2024

Semester III & V August - 2023

Name of the Teacher- Prof.Dr.V.A.Kalantre

Name (	Name of the Teacher- Prof.Dr.V.A.Kalantre  Sub unit		Teaching Method
Dates	Unit		Aids
B.ScII			Lecture
01/08/2023	Unit 1: Electrolytic Conductivity	determination of degree of ionization of weak electrolyte	-
07/08/2023		solubility and solubility products of sparingly soluble salts.	Lecture
08/08/2023		1.4 Conductometric titrations (only acid -base titrations with mixture of strong and weak acid).	Lecture with using ICT
14/08/2023		1.4 Conductometric titrations (only acid -base titrations with mixture of strong and weak acid).	Lecture with using ICT
21/08/2023		Advantages of conductometric titrations.	Lecture
22/08/2023		1.5 Numerical problems.	Lecture
28/08/2023		1.5 Numerical problems.	Lecture
B.ScIII			
03/08/2023	Unit 5. Electromotive force	5.1 Introduction	Inductive & Deductive
04/08/2023		5.2 Thermodynamics of electrode potentials, Nernst equation for electrode and cell potentials in terms of activities	Lecture using ICT
10/08/2023		5.3 E.M.F. series. 5.4 Types of electrodes: Description in terms of construction, representation, half cell reaction and emf equation for i) Metal – metal ion electrode.	Lecture using ICT
11/08/2023		ii) Amalgam electrode. iii) Metal – insoluble salt electrode.	Lecture using IC1

		Lecture
17/08/2023	<ul><li>iv) Gas – electrode.</li><li>v) Oxidation – Reduction electrode.</li></ul>	Decialo
18/08/2023	<ul><li>5.5 Reversible and Irreversible cells.</li><li>i. Chemical cells without transference.</li></ul>	Lecture
24/08/2023	ii. Concentration cells with and without transference. iii. Liquid – Liquid junction potential: Origin, elimination and determination.	Lecture
25/08/2023	iii. Liquid – Liquid junction potential: Origin, elimination and determination.	Lecture
31/08/2023	5.6 Equilibrium constant from cell emf, Determination of the thermodynamic parameters such as $\Delta G$ , $\Delta H$ and $\Delta S$ .	Lecture

P G Center
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