


Koyana Education Society's
Balasaheb Desai College, Patan
Department of Chemistry
Monthly Teaching Plan Year-2023-2024
January- 2024 Semester II , IV & VI

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

Dates	Unit	Sub unit	Teaching Method Aids
B.Sc.-I			
02/01/2024	Topic-III: Chemical Kinetics	3.9 Numerical problems.	Lecture
06/01/2024		3.9 Numerical problems.	Lecture
09/01/2024	Unit 1: Basic Mathematical Concepts	1.1 Logarithm: Basic rules and calculations.	Lecture
13/01/2024		1.2 Graph - Quadrants, drawing of linear graph, Slopes and Intercept.	Lecture
16/01/2024		1.3 Derivative and Integration: Basic rules.	Lecture using ICT
20/01/2024	Unit 5: Electrochemistry	5.1 Introduction, types of cell, phenomenon of electrolysis, Faradays Laws of electrolysis.	Lecture
23/01/2024		5.2 Types of conductors.	Lecture
27/01/2024		5.3 Explanations of Conductance, specific conductance, equivalence and molecular conductance.	Lecture
30/01/2024		5.4 Variation of specific conductance, equivalence and molecular conductance with dilution, equivalent conductance at infinite dilution.	Lecture using ICT
B.Sc.-III			
04/01/2024	Unit 4. Chemical Kinetics	4.2 Simultaneous reactions such as i. Opposing reaction: (Derivation of rate equation for first order opposed by first order expected).	Lecture using ICT
05/01/2024		ii. Side reaction.	Lecture
11/1/2024		iii. Consecutive reactions.	Lecture
12/1/2024		iv. Chain reaction.	Lecture
18/01/2024		v. Explosive reaction (Derivation of rate equation and Numerical problems are not expected).	Lecture
19/01/2024	Unit 3. The Solid State	3.1 Introduction: Space lattice, lattice sites, lattice planes, unit cell.	Lecture
25/1/2024		3.2 Laws of crystallography: i. Law of constancy of interfacial	Lecture using ICT

		angles ii. Law of rational indices iii. Law of crystal symmetry.	
M.Sc.-I			
3/01/2024	UNIT-IV: CHEMICAL KINETICS	Ionic reaction: Primary and secondary salt effect	Lecture
10/01/2024		Catalysis: Classification of catalysis,	Lecture
17/01/2024		mathematical expression of autocatalytic reactions	Lecture
24/01/2024		Michaelis–Menten enzyme catalysis,	Lecture
31/01/2024		Homogeneous catalysis: acid and base catalyzed reactions	Lecture
M.Sc.-II			
04/01/2024	X-ray Spectroscopy	X-ray emission	Seminar using ICT
11/01/2024		Uses of X-Ray Spectroscopy	Seminar using ICT
18/01/2024		Introduction	Seminar using ICT
25/01/2024		X-Ray Generation	Seminar using ICT


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