## Koyana Education Society's Balasaheb Desai College, Patan Department of Chemistry

## Monthly Teaching Plan-Year-2023-2024

## January – 2024

Semester – III & V

## Name of the Teacher- Prof. Dr. M. R. Kadam

Dates	Unit	Sub unit	Teaching Method and Aids	
B.ScI Theo	and Thus			
03/01/2024		Definition and Explanation of terms - Molecular weight, Equivalent weight, Molarity, Normality,		
04/01/2024	Unit II: Fundamentals of	Molality, Molarity of mixed solution, Acidity of base, Basicity of acid, ppt, ppm, ppb solutions,	Teaching method	
10/01/2024	Industrial Chemistry and IPR	Mole Fraction, Weight fraction, Percentage composition by W/W, W/V, V/V,		
11/01/2024	IPK	Problems based on Normality, Molarity, mole fraction, mixed solution, etc.	Lecture,	
17/01/2024		IPR- Introduction to IPR and its significance in presence scenario		
18/01/2024		Introduction, Basic Principle, Basic terms, Classification.	Inductive	
24/01/2024	Unit III:	Paper Chromatography: Principle, Methodology: types of papers and treatment, sample loading, choice of solvent, development-ascending, descending, circular,	Deductive	
25/01/2024	Chromatography	Paper Chromatography: location of spots, determination of Rf value, Applications, advantages and disadvantages	Discussion	
31/01/2024		Thin layer chromatography- Principle, Solvent system, stationary phases, preparation of TLC plate, Detecting reagents, methodology-sample loading, development, detection of spot	Teaching Aids  Computer	
B.ScIII The	eory		LCD	
01/01/2024		Introduction: Manufacture of Ammonia (NH <sub>3</sub> ) Physico-chemical principles.	PPT	
08/01/2024		Manufacture of Ammonia by Haber's process.	Google	
09/01/2024	Unit II.  Manufacture of	Manufacture of Sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ): Physico-chemical principles.	Classroom	
15/01/2024	Industrial Heavy	Manufacture Sulphuric acid by Contact process.		
16/01/2024	Chemicals	Manufacture of Nitric acid (HNO <sub>3</sub> ) Physico-chemical principles.	YouTube	
29/01/2024		Manufacture Nitric acid by Ostwald's process (Ammonia oxidation process)		

B.ScIII Practical								
02/01/2024		Determination of amount of zinc in the						
05/01/2024		given solution containing (Mg <sup>2+</sup> andZn <sup>2+</sup> ) using anion exchange resin and standard solution of EDTA.	Teaching					
09/01/2024		Determination of titratable acidity in the	Methods					
12/01/2024	Inorganic Chemistry	given sample of milk	Lecture					
16/01/2024	Chemistry	Determination of percentage of Calcium in						
19/01/2024		the given sample of milk powder.	Demonstration					
23/01/2024		Determination of percentage purity of	Hands on training					
30/01/2024		potassium (trioxalato-aluminate) (III).	<b>.</b>					
B.ScII Prac	Lecture							
05/01/2024	Organic	Organic Qualitative Analysis: Acetanilide						
12/01/2024	Chemistry	Organic Qualitative Analysis: Carbon tetrachloride	Teaching Aids					
19/01/2024		Organic Qualitative Analysis: Naphthalene	Practical					
B.ScI Pract								
03/01/2024		Organic Qualitative Analysis: Benzoic acid	Handbook					
10/01/2024		Organic Qualitative Analysis: Beta- Naphthol	Laboratory					
17/01/2024	Organic Chemistry	Organic Qualitative Analysis: Aniline	Equipment					
24/01/2024	Chemisuy	Organic Qualitative Analysis: Bromobenzene	- Equipment					
31/01/2024		Organic Qualitative Analysis: Acetanilide						

Cl	ass		Action				
		Planed	Missed	Extra taken	Actual taken	Syllabus Remaining	Taken
В. S	Sc. I	29	0	0	29	00 Lecture	Completed
B. S	Sc. II	12	0	0	12	00 Lecture	Completed
B. S	c. III	46	1	1	46	00 Lecture	as per plan

Dr. M.R. Kadam

PRINCIPAL
Balasaheb Desai Collage
Patan, Dist: Satara