MAHARANA PRATAP MAHAVIDYALAYA, JUNGLE DHUSAN, GORAKHPUR Chemistry Department

LESSON PLAN (Practical): 2024-25 Class: B. Sc. IV Semester **Subject: Chemistry Course (CHE 204): Instrumental Analysis** DATE TEACHER'S NAME **CHAPTER LECTURE TOPIC** 17/01/2024 Mrs. Divya Dubey Seat allotment 1 General Introduction 17/01/2024 2 Seat allotment Dr. Ram Sahay General Introduction 18/01/2024 3 Mrs. Namrata Mishra Unit-IV, Chromatographic To separate and identify the amino acids present in Separations the given mixture by paper chromatography and to report their R_f value To separate and identify the amino acids present in 18/01/2024 Unit-IV, Chromatographic Dr. Ram Sahay Separations the given mixture by paper chromatography and to report their R_f value To separate and identify the amino acids present in 24/01/2024 5 Unit-IV ,Chromatographic Mrs. Divya Dubey Separations the given mixture by paper chromatography and to report their R_f value 24/01/2024 Unit-IV, Chromatographic To separate and identify the amino acids present in 6 Dr. Ram Sahay Separations the given mixture by paper chromatography and to report their R_f value 7 Mrs. Namrata Mishra Unit-IV, Chromatographic To separate and identify the amino acids present in 25/01/2024 Separations the given mixture by paper chromatography and to report their R_f value To separate and identify the amino acids present in Unit-IV. 25/01/2024 8 Chromatographic Dr. Ram Sahay **Separations** the given mixture by paper chromatography and to report their R_f value 31/01/2024 Unit-IV, Separation of a mixture of o-and p-nitrophenol or o-9 Chromatographic Mrs. Divya Dubey p-aminophenol Separations and by thin layer Chromatography(TLC) Chromatographic Separation of a mixture of o-and p-nitrophenol or o-31/01/2024 10 Unit-IV, Dr. Ram Sahay Separations p-aminophenol bv thin layer Chromatography(TLC) 01/02/2024 Mrs. Namrata Mishra Unit-IV, Chromatographic Separation of a mixture of o-and p-nitrophenol or o-11 Separations and p-aminophenol thin layer Chromatography(TLC) 01/02/2024 12 Unit-IV. Chromatographic Separation of a mixture of o-and p-nitrophenol or o-Dr. Ram Sahay **Separations** p-aminophenol and bv thin layer Chromatography(TLC) 07/02/2024 13 Unit-IV, Chromatographic Separation of a mixture of o-and p-nitrophenol or o-Mrs. Divya Dubey Separations p-aminophenol and thin layer Chromatography(TLC)

Unit-I, Molecular

Unit-I, Molecular

Unit-I, Molecular

Unit-I, Molecular

Unit-I, Molecular

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Unit-I, Molecular

Unit-I, Molecular

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Dr. Ram Sahay

Dr. Ram Sahay

Dr. Ram Sahay

Dr. Ram Sahay

Mrs. Divya Dubey

Mrs. Divya Dubey

Mrs. Namrata Mishra

Mrs. Namrata Mishra

Determination of molecular weight of a non-volatile

solute by Rast Method/ Beckmann freezing point method

Determination of molecular weight of a non-volatile

solute by Rast Method/ Beckmann freezing point method

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Determination of molecular weight of a non-volatile

solute by Rast Method/ Beckmann freezing point method

Determination of molecular weight of a non-volatile

apparent

apparent

degree

degree

solute by Rast Method/ Beckmann freezing point method

dissociation of an electrolyte (e.g., NaCl) in

aqueous solution at different concentrations by

dissociation of an electrolyte (e.g., NaCl) in

aqueous solution at different concentrations by

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21/02/2024	22	Dr. Ram Sahay	Unit-I, Molecular Weight Determination	Determination of the apparent degree of dissociation of an electrolyte (e.g., NaCl) in aqueous solution at different concentrations by ebullioscopy
22/02/2024	23	Mrs. Namrata Mishra	Unit-I, Molecular Weight Determination	Determination of the apparent degree of dissociation of an electrolyte (e.g., NaCl) in aqueous solution at different concentrations by ebullioscopy
22/02/2024	24	Dr. Ram Sahay	Unit-I, Molecular Weight Determination	Determination of the apparent degree of dissociation of an electrolyte (e.g., NaCl) in aqueous solution at different concentrations by ebullioscopy
28/02/2024	25	Mrs. Divya Dubey	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
28/02/2024	26	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
01/03/2024	27	Mrs. Namrata Mishra	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
01/03/2024	28	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
07/03/2024	29	Mrs. Divya Dubey	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
07/03/2024	30	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of pKa values of indicator using spectrophotometry
08/03/2024	31	Mrs. Namrata Mishra	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
08/03/2024	32	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
21/03/2024	33	Mrs. Divya Dubey	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
21/03/2024	34	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
22/03/2024	35	Mrs. Namrata Mishra	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
22/03/2024	36	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of chemical oxygen demand (COD).
04/04/2024	37	Mrs. Divya Dubey	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
04/04/2024	38	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
05/04/2024	39	Mrs. Namrata Mishra	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
05/04/2024	40	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
11/04/2024	41	Mrs. Divya Dubey	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
11/04/2024	42	Dr. Ram Sahay	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
12/04/2024	43	Mrs. Namrata Mishra	Unit II, Spectrophotometry	Determination of Biological oxygen demand (BOD).
12/04/2024	44		Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of the same compound explaining the relative
		Dr. Ram Sahay		frequencies of the absorptions (C-H, O-H, N-H, C-O, C-N, C-X, C=C, C=O, N=O, CC, stretching frequencies, characteristic bending vibrations are included
19/04/2024	45	Mrs. Namrata Mishra	Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of the same compound explaining the relative frequencies of the absorptions (C-H, O-H, N-H, C-O, C-N, C-X, C=C, C=O, N=O, CC, stretching frequencies, characteristic bending vibrations are included

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19/04/2024	46		Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of the same compound explaining the relative
		Dr. Ram Sahay		frequencies of the absorptions (C-H, O-H, N-H, C-
		Dr. Kam Sanay		O, C-N, C-X, C=C, C=O, N=O, CC, stretching
				frequencies, characteristic bending vibrations are
				included
25/04/2024	47		Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of
				the same compound explaining the relative
		Mrs. Divya Dubey		frequencies of the absorptions (C-H, O-H, N-H, C-
				O, C-N, C-X, C=C, C=O, N=O, CC, stretching
				frequencies, characteristic bending vibrations are
				included
25/04/2024	48		Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of
				the same compound explaining the relative
		Dr. Dom Cohon		frequencies of the absorptions (C-H, O-H, N-H, C-
		Dr. Ram Sahay		O, C-N, C-X, C=C, C=O, N=O, CC, stretching
				frequencies, characteristic bending vibrations are
				included
26/04/2024	49	Mrs. Namrata Mishra	Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of
				the same compound explaining the relative
				frequencies of the absorptions (C-H, O-H, N-H, C-
				O, C-N, C-X, C=C, C=O, N=O, CC, stretching
				frequencies, characteristic bending vibrations are
				included
26/04/2024	50		Unit III, Spectroscopy	Assignment of labelled peaks in the IR spectrum of
				the same compound explaining the relative
		Du Davis Calaria		frequencies of the absorptions (C-H, O-H, N-H, C-
		Dr. Ram Sahay		O, C-N, C-X, C=C, C=O, N=O, CC, stretching
				frequencies, characteristic bending vibrations are
				included
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