

**LESSON PLAN FOR THE TEACHERS OF DEPARTMENT OF CHEMISTRY FOR THE ACADEMIC
SESSION FROM JULY 2019 TO JUNE 2020**

| Class | Name of Teacher | Topics to be covered | No. Of lectures | Examination |
|-------------------------------------|------------------------------------|--|--------------------------|-------------|
| B.Sc Hons. Sem-1 | Dr. Sitangshu Sekhar Bhattacharjee | Theory CEMA-CC—1-2-TH: Practical CEMA-CC—1-2-P: Physical Chemistry P-1 Lab | NA 10 | |
| B.Sc Hons. Sem-2 | Dr. Sitangshu Sekhar Bhattacharjee | No Physical Chemistry | N.A. | |
| B.Sc Hons. Sem-3 | Dr. Sitangshu Sekhar Bhattacharjee | Theory CEMA-CC—3-5-TH: Chemical Thermodynamics - 1 Chemical Thermodynamics - 2 System of Variable Composition Application of Thermodynamics - 1 Practical CEMA-CC—3-5-P: Conductometric and Potentiometric Experiments | 25 10 | |
| B.Sc Hons. Sem-4 | Dr. Sitangshu Sekhar Bhattacharjee | Theory CEMA-CC—4-9-TH: Not Allotted Practical CEMA-CC—4-9-P: Experiments on Kinetic Study, Phase Diagram, Partition Coefficient, pH-metry | N.A. 30 | |
| B.Sc Hons. (1+1+1) Part - III | Dr. Sitangshu Sekhar Bhattacharjee | Theory CHT33a: Unit – I and Unit - II CHT33c: Unit – I and Unit - II | 45 45 | |

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| | Dr. Sitangshu Sekhar Bhattacharjee | Practical CHP35a: Experiments on Surface tension, viscosity, solubility. CHP35b: Experiments on potentiometry, conductometry, colorimetry and polarimetry | 20 20 | |
| B.Sc. Sem 1 | Dr. Sarmila Basu (Sarkar) | Practical [G] CEMG-CC1/GE1-P Titrimetric Experiments | 10 | |
| B.Sc. Sem 2 | Dr. Sarmila Basu (Sarkar) | Practical [H] CEMA-CC-2-4-P: Iodo/Iodimetric Titrations Estimation of Metal Content in some selective Samples Practical[G] CEMG-CC-2/GE-2: Experiments on kinetic study, Viscosity, Solubility, Buffer, Surface Tension | 10 30 | |
| B.Sc. Sem 3 | Dr. Sarmila Basu (Sarkar) | Theory [H] SEC-A-2 Analytical clinical Biochemistry Practical [G] CEMG-CC-3/GE3: Qualitative semi micro analysis of mixtures containing two radicals | 25 10 | |
| B.Sc. Sem 4 | Dr. Sarmila Basu (Sarkar) | Theory [H] SEC-B-3 Pharmaceutical Chemistry Theory[G] CEMG-CC4/GE4 Alcohols, Phenols, Ethers, Carbonyl Compounds, Carboxylic acid and their derivatives, Amino acids, Carbohydrates Practical [G] CEMG-CC-4/GE4 Qualitative analysis of Single solid Organic Compounds, Identification of pure organic compounds. | 25 14 30 | |

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| B.Sc. Hons. (1+1+1) Part - III | Dr. Sarmila Basu (Sarkar) | Theory CHT32c: Unit - II Practical CHP34b: Qualitative analysis of single solid organic compounds and organic preparation. | 14 20 | |
| B.Sc. Gen. (1+1+1) Part - III | Dr. Sarmila Basu (Sarkar) | Theory CGT 31b: Unit – II CGT 31c: Unit – I and Unit - II Practical CGP 32 : Titrimetric experiments | 10 20 14 | |
| B.Sc. Hons. Sem 1 | Dr. Arindam Rana | Theory CEMA-CC—1-1-TH: Extra Nuclear Structure of Atom Practical CEMA-CC—1-1-P: Acid-Base Titrations Redox Titrations | 14 10 | |
| B.Sc. Hons. Sem 2 | Dr. Arindam Rana | Theory CEMA-CC—2-4-TH: Chemical Bonding-2 Practical CEMA-CC—2-4-P: Iodo-/Iodimetric Titrations Estimation of Metal contents in some selective samples | 20 30 | |
| B.Sc. Hons. Sem 3 | Dr. Arindam Rana | Theory CEMA-CC—3-6-TH: Chemical Periodicity Chemistry of s-block elements Chemistry of p-block elements (Gr. 13-16) Noble Gases Practical CEMA-CC—3-6-P: Complexometric Titrations Chromatography of Metal ions Gravimetry | 30 14 | |

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| B.Sc. Hons. Sem 4 | Dr. Arindam Rana | Theory CEMA-CC—4-10-TH: Coordination Chemistry-II Practical Not Allotted | 20 N.A. | |
| B.Sc Hons. (1+1+1) Part - III | Dr. Arindam Rana | Theory CHT31a: Unit – II CHT31b: Unit – II CHT31c: Unit – II CHT31d: Unit – I | 14 14 14 14 | |
| B.Sc. Gen. (1+1+1) Part - III | Dr. Arindam Rana | Theory CGT 31b: Unit – I | 10 | |
| B.Sc. Hons, SEM-1 | Dr. Biswajit Panda | THEORY CEMA-CC-1-1-Th: General Treatment Of Reaction Mechanism I CEMA-CC-1-2-Th Stereochemistry I General Treatment Of Reaction Mechanism I Bonding and Physical Properties PRACTICAL CEMA-CC-1-1, CEMA-CC-1-2 Separation of organic solid mixture based on solubility Determination of boiling point of organic liquid | 2 15 3 10 15 | |
| B.Sc. Hons, SEM-2 | Dr. Biswajit Panda | THEORY CEMA-CC-2-3 General Treatment of Reaction Mechanism-II, Free Radical Substitution Reaction & Elimination Reaction | 15 15 | |

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| | | PRACTICAL CEMA-CC-2-3-P Organic Preparations | 30 | |
| B.Sc. Hons, SEM-3 | Dr. Biswajit Panda | THEORY CC-3-7 TH Chemistry of alkenes and alkynes Aromatic Substitution Organometallics PRACTICAL CC-3-7 P Quantitative Estimation, Identification of a Pure Organic Compound, Solid & Liquid | 12 8 4 15 | |
| B.Sc. Hons, SEM-4 | Dr. Biswajit Panda | THEORY CEMA-CC-4-8-Th The Logic of Organic Synthesis, Nitrogen Compounds, Rearrangements, Asymmetric Synthesis PRACTICAL CEMA-CC-4-8-P Qualitative Analysis Of single solid organic compound | 10 20 5 30 | |
| B.Sc Hons. (1+1+1) Part - III | Dr. Biswajit Panda | THEORY CHT 31a: Unit – I and Unit - II CHT 32c : Unit – I PRACTICAL CHP 34a : Spectroscopic analysis of organic Compounds | 30 15 20 | |

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| | Dr. Biswajit Panda | CHP 34b: Qualitative analysis of single solid organic compounds and organic preparation. | 14 | |
| B.Sc Gen. (1+1+1) Part - III | Dr. Biswajit Panda | THEORY CGT 31b : Unit - II | 10 | |
| B.Sc Hons. Sem 1 | Dr. Pampa Guha | Theory CEMA-CC—1-1-TH: Acid-Base reactions Practical CEMA-CC—1-1-P: Acid-Base Titrations Redox Titrations | 15 10 | |
| B.Sc Hons. Sem 2 | Dr. Pampa Guha | Theory CEMA-CC—2-4-TH: Chemical Bonding-1 Practical CEMA-CC—2-4-P: Iodo-/Iodimetric Titrations Estimation of Metal contents in some selective samples | 30 30 | |
| B.Sc Hons. Sem 3 | Dr. Pampa Guha | Theory CEMA-CC—3-6-TH: Chemistry of p-block elements (Gr. 17) Inorganic Polymers Practical CEMA-CC—3-6-P: Complexometric Titrations Chromatography of Metal ions Gravimetry | 20 14 | |
| B.Sc Hons. Sem 4 | Dr. Pampa Guha | Theory CEMA-CC—4-10-TH: Transition Elements Lanthanoids and Actinoids Reaction Kinetics and Mechanism Practical Inorganic preparations Instrumental Techniques | 30 30 | |

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| B.Sc. Hons. (1+1+1) Part - III | Dr. Pampa Guha | Theory CHT 31a Unit II CHT 31b Unit II CHT 31c Unit I CHT 31d Unit II | 10 15 15 14 | |
| B.Sc Gen. (1+1+1) Part - III | Dr. Pampa Guha | Theory CGT 31a Unit I CGT 31b Unit I CGT 31c Unit I | 20 10 15 | |
| B.Sc. Hons. Sem 1 | Dr. Subhasis Samai | Theory [H] CEMA-CC—1-1A-TH: Bonding and Physical Properties Practical [H] CEMA-CC—1-1-P: Organic Chemistry: O(1A) Lab Separation of Organic Compounds | 14 10 | |
| B.Sc. General Sem 1 | Dr. Subhasis Samai | Theory [G] CEMG-CC1/GE1 Fundamental Organic chemistry | 14 | |
| B.Sc Hons. Sem 2 | Dr. Subhasis Samai | Theory [H] CEMA-CC-2-3-TH: General Treatment of Reaction Mechanism Practical [H] CEMA-CC-2-3-P: Organic Preparations | 14 30 | |
| B.Sc Hons. Sem 3 | Dr. Subhasis Samai | Theory [H] CEMA-CC—3-7-TH: Carbonyl and Related compounds Practical [H] CEMA-CC—3-5-P: Conductometric and Potentiometric Experiments | 14 14 | |

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| B.Sc Hons. Sem 4 | Dr. Subhasis Samai | Theory [H] CEMA-CC—4-8-TH: Organic Spectroscopy | 14 | |
| | | Practical [H] CEMA-CC—4-8-P: Qualitative analysis of Single solid Organic Compounds | 30 | |
| B.Sc Hons. (1+1+1) Part III | Dr. Subhasis Samai | Theory [H] CHT 32a: Unit – II CHT 32b: Unit – I and Unit – II | 20 | |
| | | Practical [H] CHP 34a: Spectroscopic analysis of organic Compounds | 20 | |
| B.Sc Hons. Sem 1 | Amal Kumar Gooyee | Theory [H] CEMA-CC—1-2-TH: Kinetic Theory of Gas | 20 | |
| | | Practical [H] CEMA-CC—1-2-P: Physical Chemistry P-1 Lab | 10 | |
| B.Sc Hons. Sem 3 | Amal Kumar Gooyee | Theory [H] CEMA-CC—3-5-TH: Electrochemistry | 20 | |
| | | Practical [H] CEMA-CC—3-5-P: Conductometric and Potentiometric Experiments | 14 | |
| B.Sc Hons. Sem 4 | Amal Kumar Gooyee | Theory [H] CEMA-CC—4-9-TH: Crystal Structure | 15 | |
| | | Practical [H] CEMA-CC—4-9-P: Experiments on Kinetic Study, Phase Diagram, Partition Coefficient, pH-metry | 30 | |
| B.Sc Hons. (1+1+1) Part III | Amal Kumar Gooyee | Practical [H] CHP 35a: Experiments on Surface tension, viscosity, solubility. | 20 | |
| | | CHP35b: Experiments on potentiometry, conductometry, colorimetry and polarimetry | 20 | |

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| B.Sc Hons. Sem 1 | Mr. Manish Das | Theory [H] CEMA-CC—1-2-TH: Transport process, Chemical kinetics Practical [H] CEMA-CC—1-2-P: Physical Chemistry P-1 Lab Experiments on Kinetic Study, Viscosity Theory [G] CEMG-CC1/GE1 Chemical kinetics, Atomic Structure, Acids and Bases, Periodic table Practical [G] CEMG-CC1/GE1 Titrimetry | 30 10 30 10 | |
| B.Sc Hons. Sem 2 | Mr. Manish Das | Theory [G] CEMG-CC2/GE2 Solutions, Phase Equilibrium, Solids, Error analysis Practical [G] CEMG-CC2/GE2 Experiments on Kinetic Study, Viscosity, Solubility, Buffer, Surface Tension | 14 30 | |
| B.Sc Hons. Sem 3 | Mr. Manish Das | Theory [H] CEMA-CC—3-5-TH: Electrochemistry 1. Conductance and transport number Practical [H] CEMA-CC—3-5-P: Conductometric and Potentiometric Experiments Theory [G] CEMG-CC3/GE3 Comparative study of p-block elements, Transition elements, Coordination Chemistry Practical [G] CEMG-CC3/GE3 NIL | 14 10 14 N.A. | |

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| B.Sc Hons. Sem 4 | Mr. Manish Das | Theory [H] CEMA-CC—4-9-TH: Application of Thermodynamics-II Colligative properties Phase equilibrium Practical [H} CEMA-CC—4-9-P: Experiments on Kinetic Study, Phase Diagram, Partition Coefficient, pH-metry Practical [G] CEMG-CC4/GE4 NIL | 14 30 N.A. | |
| B.Sc Hons. (1+1+1) Part III | Mr. Manish Das | Theory CHT 33b: Unit – I and Unit - II Practical [H] CHP 35a: Experiments on Surface tension, viscosity, solubility. CHP35b: Experiments on potentiometry, conductometry, colorimetry and polarimetry | 40 20 20 | |
| B.ScGen. (1+1+1) Part III | Mr. Manish Das | Theory [H] CGP 31a: Unit - II Practical [H] CGP 32: Titrimetric experiments | 14 14 | |
| B.Sc Hons. Sem 1 | Dr. Manabendra Nath Bishnu | Theory [H] CEMA-CC—1-1-TH: Redox Reactions | 15 | |
| B.Sc Hons. Sem 2 | Dr. Manabendra Nath Bishnu | Theory [H] CEMA-CC—2-4-TH: Radioactivity | 10 | |

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| B.Sc Hons. Sem 3 | Dr. Manabendra Nath Bishnu | Theory CEMA-CC—3-6-TH: Coordination Chemistry-I | 15 | |
| B.Sc Hons. Sem 4 | Dr. Manabendra Nath Bishnu | Theory CEMA-CC—4-10-TH: Coordination Chemistry-II | 20 | |
| B.Sc Hons. (1+1+1) Part III | Dr. Manabendra Nath Bishnu | Theory CHT 31a: Unit – I CHT 31c: Unit – I | 15 10 | |



Signature of Head of the Department
Department of Chemistry
City College, Kolkata

