

P.N.DAS COLLEGE
DEPT OF CHEMISTRY
ACADEMIC CALENDAR(2023-24)

	Topic coverage	Practical	NO Of Lectures Theory+ Practical	Name of the teacher
SEM-I(UNDER-NEP2020)MA-1 CREDITS:Theory-03,practical-02 AUG-JAN	Atomic structure,periodicity,acid-base,organic chemistrykinetic theory of gases,liquid state	1.Preparation of standard solution 2.Determination of surface tension and viscosity 3.Determination of single solid and liquid	45+60	Partha Pratim Bhattacharya
SEM-III(UNDER CBCS MODE)CEMGCOR03 T CREDITS:Theory-04,practical-02 AUG-JAN	Chemical energetics,chemical equilibrium, Aromatic compounds,Organometallic compounds,Alcohol,Phenol,Ethers,Carbonyl compounds.	1.Determination of enthalpy of neutralization of HCL and NaOH. 2.Measurement of pH of different solution 3.Preparation of buffer solution and find pH 4.Determination of enthalpy of ionization of ACOH.	60+60	Partha Pratim Bhattacharya.

<p>SEM-V(UNDER CBCS MODE) CEMGDSE01 T(POLYMER) CREDITS:The ory-06,Practicals-02 AUG-JAN</p>	<p>History of polymeric materials,Functionality,Kinetics of polymerization, Crystallization,Structure of polymer,polymer solution,Preparation of some important polymer like NYLON,NOVALAC,SILICON POLYMER,ETC</p>	<ol style="list-style-type: none"> 1.Determination of molecular weight by viscometry 2.Determination of molecular weight by end group analysis 3.Preparation of urea-formaldehyde resin. 4.Redox polymerization of acrylamide 5.Testing mechanical property of polymer 	<p>60+60</p>	<p>Partha Pratim Bhattacharya.</p>
<p>SEM-II(UNDER NEP) MA-2, CREDITS: Theory-03, Practical-02 FEB-JUN</p>	<p>Chemical bonding & molecular structure, stereochemistry, chemical energetics, equilibrium, .</p>	<ol style="list-style-type: none"> 1.Estimation of Fe(ii) in Mohr's salt 2.Estimation of Cu(II) By iodometrically. 3.Detection of special elements(N,Cl) &COOH, -OH, ArNH₂, -ArNO₂. 4.Determination of solubility product of KHTa 	<p>45+60</p>	<p>Partha Pratim Bhattacharya.</p>

<p>SEM-IV (UNDER CBCS MODE) CEMGCOR04T CREDITS: Theory-04, Practical-02 FEB-JUN.</p>	<p>Solution Phase diagrams Conductance EMF Analytical chemistry Environmental chemistry Chemical Analysis</p>	<p>1. Conductometric titration a. strong acid vs strong base b. weak acid vs strong base 2. Potentiometry a. potassium dichromate vs Mohr's salt b. weak acid vs strong base 3. Construction of phase diagram of a binary system.</p>	<p>60+60</p>	<p>Partha Pratim Bhattacharya</p>
<p>SEM-VI (UNDER CBCS MODE) CEMGDSE03T CREDITS: Theory -04, Practical-02</p>	<p>Silicate industry Fertilizer Surface coating Battery Alloys Catalysis Chemical explosives.</p>	<p>1. Analysis of cement 2. Preparation of ZnO 3. Estimation of calcium in calcium ammonium nitrate 4. Estimation of phosphoric acid in superphosphate 5. Determination of composition of dolomite.</p>	<p>60+60</p>	<p>Partha Pratim Bhattacharya.</p>