P.N.DAS COLLEGE

DEPT OF CHEMISTRY

ACADEMIC CALENDAR (2024-25)

| Semester Details | Topic coverage | Practical | NO Of Lectures Theory + Practical | Name of the teacher |
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| **SEM-I (UNDER-NEP2020) MA-1 CREDITS: Theory-03, practical-02 AUG-JAN** | Atomic structure, periodicity, acid-base, organic chemistry kinetic 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 NEP MODE) CREDITS: Theory-04, practical-02** | | | | |

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| **SEP-JAN** | | | | |
| **SEM-V (UNDER CBCS MODE) CEMGDSE01T(POLYMER) CREDITS: Theory-06, Practicals-02** **SEP-JAN** | 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 | 1.Determination of molecular weight by viscometry<br>2.Determination of molecular weight by end group analysis<br>3.Preparation of urea-formaldehyde resin.<br>4.Redox polymerization of acrylamide<br>5.Testing mechanical property of polymer | 60+60 | Partha Pratim Bhattacharya. |

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| **SEM-II (UNDER NEP) MA-2, CREDITS: Theory- Practical- FEB-JUN** | Chemical bonding & molecular structure, stereochemistry, chemical energetics, equilibrium, . | 1.Estimation of Fe(ii) in Mohr's salt<br>2.Estimation of Cu(II) By iodometrically .<br>3.Detection of special elements(N,Cl) & COOH, -OH, $ArNH_2$, -$ArNO_2$.<br>4.Determination of solubility product of KHTa | 45+60 | Partha Pratim Bhattacharya . |
| **SEM-IV (UNDER NEP MODE)**<br><br>**CREDITS:**<br>**Theory-**<br>**Practical-**<br>**FEB-JUN.** | | | | |

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| **SEM-VI (UNDER CBCS MODE)**<br>**CEMGDSE03T**<br>**CREDITS: Theory-04, Practical-02** | Silicate industry<br>Fertilizer<br>Surface coating<br>Battery<br>Alloys<br>Catalysis<br>Chemical explosives. | 1.Analysis of cement<br>2.Preparation of ZnO<br>3.Estimation of calcium in calcium ammonium nitrate<br>4.Estimation of phosphoric acid in superphosphate<br>5.Determination of composition of dolomite. | 60+60 | Partha Pratim Bhattacharya. |