**Syllabus for Lecturer, Chemistry**

**The syllabus includes broadly all basic concepts, syllabi of B.Sc. and M.Sc., organic, inorganic and physical chemistry.**

**Atomic structure, periodic table, chemical bonding and molecular structure, s p d f block elements, coordination chemistry, nuclear chemistry, bio inorganic chemistry, organo-metalics, non aqueous solvents, metal clusters, boranes, carboranes, symmetry group theory, acid base chemistry.**

**Atomic spectroscopy, NMR, IR, UV spectroscopy, stereochemistry, alkanes, alkenes, alkines, carbonyl compounds, amides, amines, heterocyclic, polynuclear aromatic compounds, natural products, organic reagents, pericyclic reactions, name reactions, type of reactions, biomolecules, medicinal chemistry, green chemistry.**

**Solutions, chemical energetics, chemical equilibrium, chemical kinetics, thermodynamics, distribution law, surface chemistry, electrochemistry, solid, liquid and gaseous state, analytical chemistry, phase equilibrium, potentiometric and conductometric titration, chromatography.**