

**VISVODAYA GOVT. DEGREE COLLEGE, VENKATAGIRI
SPSR. NELLORE DISTRICT**

DEPARTMENT OF CHEMISTRY

SEMESTER – I : IN-ORGANIC & ORGANIC CHEMISTRY

- CO1:** To gain the knowledge about group 13, 14 and 15 and know the chemistry of boron and silicon compounds.
- CO2:** To understand the properties of organometallic compounds and how to distinguish oxides.
- CO3:** To be able to generate types of reactions and reagents involved in organic chemistry.
- CO4:** To provide a basic knowledge of for the students on alicyclic and alicyclic hydrocarbons.
- CO5:** To understand the structure of Benzene which provides a strong basic knowledge for the students for their further studies.

SEMESTER – II : PHYSICAL AND GENERAL CHEMISTRY

- CO1:** To gain the knowledge about structure of crystals and illustrating different crystals.
- CO2:** To give the knowledge on gaseous state which help the students in further studies.
- CO3:** To understand the ways in which solutions and liquid state.
- CO4:** Gain the knowledge about surface chemistry which is more helpful pharmaceuticals.
- CO5:** To gain the skills about stereo chemistry of carbon compounds.

SEMESTER – III : IN-ORGANIC & ORGANIC CHEMISTRY

- CO1:** To study of 'd' block elements which is colored complex in dye industries thermal and electrical conductivity of metals will help the students in building their career in battery industry.
- To gain the knowledge of complex formation by 'd', block elements.
- CO3:** To adequate the knowledge and skill about the alkyl halides which are rapidly used in different types of pesticides.
- CO4:** To acquire the complete knowledge of carbonyl compounds and their reactions which are very applicable in green synthesis.
- CO5:** To understand types of carboxylic acid and preparation of unsaturated carboxylic acids in industrial level.

SEMESTER – VI : IN-ORGANIC, ORGANIC & PHYSICAL CHEMISTRY

- CO1:** To gain knowledge about labile and inert complexes and essential elements biological significance of Na, K, Mg, Ca, Fe, Co, Ni, Zn and Cu.
- CO2:** To Understand chemical kinetics and how to calculate order of reaction. To understand the laws of photo chemistry and are useful in every life such as fluorescence, phosphorescence, photo sensitization etc..
- CO3:** To know the knowledge about heterocyclic compounds which are present in alkaloids, vitamins pigments.
- CO4:** To be able to identify and recognize the types of carbohydrates they know uses of carbohydrates in many ways.
- CO5:** Gain complete knowledge about proteins and their significance.

SEMESTER – IV : IN-ORGANIC, ORGANIC & PHYSICAL CHEMISTRY

- CO1:** To learn about various spectrophotometers used in structure elucidations of newly extracted compounds.
- CO2:** To gain knowledge about different spectroscopes involved in various spectral analysis and applications.
- CO3:** To understand what are the properties in dilute solutions in different ways and their applications
- CO4:** To be able to generate an electric current in electro chemical cell and know about fuel cells, batteries etc...
- CO5:** They were know preparation of freezing mixtures.

SEMESTER – V: IN-ORGANIC, PHYSICAL & ORGANIC CHEMISTRY

- CO1:** To learn how the coordination compounds play roles in plants and human being.
- CO2:** To understand magnetic susceptibility of metals and thermo dynamic stability.
- CO3:** To understand structure and antiaromaticity of retro hydrocarbons and its importance.
- CO4:** To gain knowledge about ammonium derivatives which are played in research like PTC.
- CO5:** To gain knowledge of the laws of thermo dynamics which are applicable in chromatography or separation techniques.