GOVERNMENT DEGREE COLLEGE FOR WOMEN, MADANAPALLE

ANNAMAYYA DISTRICT, ANDHRA PRADESH-517325
AFFILIATED TO SRI VENKATESWARA UNIVERSITY, TIRUPATHI
NAAC ACCREDITED 'B' GRADE

DEPARTMENT OF CHEMISTRY
COURSE OUTCOMES

SL NO	SEMESTER	COURSE TITLE	OUTCOMES *After successful completion of this course, students will be able to:*
1	I	Chemistry Course – I **Inorganic &Physical Chemistry**	**1**. Understand the basic concepts of p-block elements **2**. Explain the difference between solid, liquid and gases in terms of inter molecular interactions. **3**. Apply the concepts of gas equations, Ph and electrolytes while studying other chemistry courses.
2	II	Chemistry Course – II **Organic & General Chemistry**	**1**. Understand and explain the differential behaviour of organic compounds based on fundamental concepts learnt. **2**. Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved. **3**. Learn and identify many organic reaction mechanisms including Free Radical Substitution, Electrophilic Addition and Electrophilic Aromatic Substitution. **4**. Correlate and describe the stereo chemical properties of organic compounds and reactions.
3	III	Chemistry Course – III **ORGANIC CHEMISTRY & SPECTROSCOPY**	**1**. Understand preparation, properties and reactions of halo alkanes, halo arenes and oxygen containing functional groups. **2**. Use the synthetic chemistry learnt in this course to do functional group transformations. **3**. To propose plausible mechanisms for any relevant reaction
4	IV	Chemistry Course – IV **INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY**	**1**. To learn about the laws of absorption of light energy by molecules and the subsequent photo chemical reactions. **2**. Understand the concept of quantum efficiency and mechanisms of photo chemical reactions.

5	IV	Chemistry Course – V **INORGANIC &PHYSICAL CHEMISTRY**	**1**. Understand concepts of boundary conditions and quantization, probability distribution, most probable values, uncertainty and expectation values **2**. Application of quantization to spectroscopy. **3**. Various types of spectra and their use in structure determination.
6	V	Chemistry Course – **6 B** **Analytical Methods in Chemistry-1**	**1**. Identify the importance of solvent extraction and ion exchange method. **2.** Acquire knowledge on the basic principles of volumetric analysis and gravimetric analysis. **3.** Demonstrate the usage of common laboratory apparatus used in quantitative analysis. **4**. Understand the theories of different types of titrations. **5.** Gain knowledge on different types of errors and their minimization methods.
7	V	Chemistry Course – **7 B** **Analytical Methods in Chemistry-2**	**1**. Identify the importance of chromatography in the separation and identification of compounds in a mixture **2.** Acquire a critical knowledge on various chromatographic techniques. **3.** Demonstrate skills related to analysis of water using different techniques. **4.** Understand the principles of spectrochemistry in the determination of metal ions. **5.** Comprehend the applications of atomic spectroscopy.