

**M.S. RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE**

**Course Outcomes for Msc(Chem) Program**

Program	CourseCode	CourseName	COCode	CO
M.Sc Chemistry	C-102	Organic Chemistry I	C-102-4	Students attained the detail knowledge of biomolecules like carbohydrates & vitamins .
M.Sc Chemistry	C-102	Organic Chemistry I	CO3	
M.Sc Chemistry	C-102	Organic Chemistry I	C-102-5	student attained the knowledge of synthesis of heterocyclic compounds and their biological uses
M.Sc Chemistry	C-201	InorganicChemistry-II	C201	Electronic spectra of coordination compounds; students gained knowledge about spectroscopic ground state, Orgel diagrams, Tanabe-Sugano diagrams, spectral properties of Lanthanides and actinides metal complexes
M.Sc Chemistry	C-201	InorganicChemistry-II	C201	Magnetic properties of coordination compounds; students gained knowledge about types of magnetic behaviour, susceptibility and its determination, photochemical reactions of transition metal complexes
M.Sc Chemistry	C-202	Organic Chemistry II	C202_1	Students gained detailed knowledge on rearrangement reaction of organic compounds and their mechanism
M.Sc Chemistry	C-202	Organic Chemistry II	C202_3	Students gained knowledge on Vitamins, synthesis and their biological roles
M.Sc Chemistry	C-202	Organic Chemistry II	C202_2	Students gained detailed knowledge on Amino acids and peptides synthesis
M.Sc Chemistry	C-203	Physical Chemistry II	C203_1	1. Students gained knowledge in thermodynamics-I: partial molar properties, phase rule, introduction to statistical thermodynamics
M.Sc Chemistry	C-203	Physical Chemistry II	C203_2	2. Students are able to understand concept of distribution laws of statistical thermodynamics and non equilibrium thermodynamics
M.Sc Chemistry	C-203	Physical Chemistry II	C203_3	3. Students gained knowledge in Electrochemistry: Debye-Huckel theory of strong electrolytes, Thermodynamics of electrified interfaces
M.Sc Chemistry	C-203	Physical Chemistry II	C203_4	4. Students gained knowledge in Electrochemistry-II; Structure of electrical double layers, overpotential, polarography
M.Sc Chemistry	C-301-OC	Organic Reaction Mechanisms		Organic Reaction Mechanism- Offers aliphatic substitution reactions, free radical chemistry, photochemistry and pericyclic chemistry and structural, mechanistic, functional and regulatory aspects of enzymes and coenzymes. Students are getting exposed to various sort of reactions with different mechanistic approach. All these preliminary concepts will be

					continued through Organic reaction paper-II. This paper gives the knowledge of advanced biochemical reaction, photochemistry and pericyclic chemistry to students by the end of the course
M.Sc Chemistry	C-302-OC	Chemistry of Natural Products	C-302 - 1	Students attained the knowledge of Terpenoids and carotenoids	
M.Sc Chemistry	C-302-OC	Chemistry of Natural Products	C-302-2	Students attained the knowledge of Alkaloids i.e.nomenclature, Isolation, structure elucidation, synthesis and biosynthesis.	
M.Sc Chemistry	C-302-OC	Chemistry of Natural Products	C-302-3	Students attained the Detailed knowledge of porphyrins-haemin and chlorophyll and vit B12	
M.Sc Chemistry	C-302-OC	Chemistry of Natural Products	C-302-4	student learned the detailed knowledge of synthesis of oligonucleotides	
M.Sc Chemistry	C-302-OC	Chemistry of Natural Products	C-302-5	Students attained the detail knowledge of synthesis of prostaglandins and Insect Pheromones	
M.Sc Chemistry	C-303-OC	Organic Spectroscopy	CO1	Organic Spectroscopy- Offers UV- Vis spectroscopy, Infrared Spectroscopy, NMR spectroscopy and Mass Spectroscopy. Students are getting exposed to various spectroscopic techniques which are essential for structural elucidation. This paper gives the knowledge of organic spectroscopy to students by the end of the course	
M.Sc Chemistry	C-305-OC	Organic Chemistry Practicals-I	CO1	Organic chemistry practicals I- At the end of the course students are able to carryout single step synthesis.	
M.Sc Chemistry	C-306-OC	Organic Chemistry Practicals-II	CO1	Organic chemistry practicals II- At the end of the course students are able to identify the functional group by qualitative analysis	
M.Sc Chemistry	C-307-OC	Organic Chemistry Practicals-III	CO1	Organic chemistry practicals III- At the end of the course students are able to carryout Multi-step synthesis.	
M.Sc Chemistry	C-308-OC	Organic Chemistry Practicals-IV	CO1	Organic chemistry practicals IV- At the end of the course students are able to estimate the functional group quantitatively by various methods.	
M.Sc Chemistry	C-403-OC	Organic Synthesis	C-403-III	Students attained the detail knowledge of use of reagents in Oxidation reactions	
M.Sc Chemistry	C-403-OC	Organic Synthesis	C-403-II	Students attained the detail knowledge of use of the reagents in organic synthesis.	
M.Sc Chemistry	C-403-OC	Organic Synthesis	C-403-IV	Students attained the detail knowledge of use of reagents in Reduction reactions.	
M.Sc Chemistry	C-404-OC	Medicinal Organic Chemistry	CO1	Students attained the detail knowledge on steroids	
M.Sc Chemistry	C-404-OC	Medicinal Organic Chemistry	CO2	Students attained the detail knowledge on antibiotics	
M.Sc Chemistry	C-404-OC	Medicinal Organic Chemistry	CO3	Students attained the detail knowledge on synthesis of drugs and their mode of action	

