

PSO, PO, Co of Chemistry (Gen)

PROGRAMME SPECIFIC OUTCOME

Chemistry has a unique place in our pattern of understanding of the universe. It is the science of molecules.

Three year undergraduate course in chemistry(G) enriches theoretical as well as practical knowledge in laboratory. The Programme Specific Outcome(PSO) can be summed up in the following manner :

- The syllabus under CBCS curriculum in UG level for SEM- 1 to SEM -4 in chemistry (G) deals with the study of basic concept of Organic, Inorganic, and Physical chemistry.
- Organic chemistry began as a tentative attempt to understand the chemistry of life, then it becomes the chemistry of carbon compounds. It gives information about life making new molecules, not available from the molecules actually present in living beings. This creation of new molecules has given us numerous materials such as different types of plastic, new dyes, new drugs to cure diseases.
- Inorganic chemistry can be described broadly as the chemistry of “ everything else”. It includes all the remaining elements in the periodic table. It also includes carbon which plays a major role in many inorganic compounds. Organometallic chemistry is a very large and rapidly growing field, containing direct metal-carbon bonds and includes catalysis of many organic reactions. Bioinorganic chemistry bridges both inorganic and organic compounds. Environmental chemistry includes the carbon, nitrogen, and phosphorous cycle and the study of both inorganic and organic compounds.
- Physical chemistry is concerned with the study of the physical properties, structure of matter and the laws governing the chemical interaction. The key concept discussed are chemical thermodynamics, chemical kinetics. Kinetic theory of gases, phase equilibria, spectroscopy etc.

Outcome of the Course [CO]

Three- year degree course in CHEMISTRY GENERAL

- The basic concept of Organic, Inorganic and Physical chemistry are understood by the students
- Chemical formula, equation, working theory, preparation of organic compound identification of inorganic radicals as well as analytical concept, practical knowledge helps in further studies or in industrial jobs.
- Another part of CBCS curriculum involves the Skill Enhancement Elective Course and Discipline Specific Elective course. These courses teaches the knowledge of different human drugs and pharmaceuticals, pesticide chemistry etc.
- There are ample opportunities for higher studies after completion of this course and the job prospect is also excellent in industry and also in health care.
- The students are able to employ critical thinking and efficient problem solving skills in four basic areas of chemistry (Analytical, Inorganic, Organic, and Physical)

- They get an idea of the chemical properties of amino acids, cofactors, sugars and the basic principles of protein and polysaccharide structure.
- The curricula also provide a platform to a student to receive an exposure to Clinical Biochemistry, Pharmaceutical Chemistry, Pesticide Chemistry, Analytical Chemistry etc. that obviously prepare students for the future job market .