Chemistry-Allied Department

Programme outcomes of Chemistry:

Understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.

Programme specific outcomes

PSO's	Upon completion, students of chemistry will be able to:
PSO-1	Have a firm foundation in the fundamentals and application of current and scientific theories in various branches of chemistry.
PSO-2	Present the concepts of chemistry effectively and efficiently.
PSO-3	Predict the structure and mechanism of Chemical compounds.
PSO-4	Recognise and analyse qualitative and quantitative problems and plan strategies for their solution.
PSO-5	Explain the laboratory skills needed to design and interpret chemical research.
PSO-6	Carry out scientific experiments as well as record and analyse the results of such experiments.
PSO-7	Develop skills in the safe-handling of chemicals and their usage in day today life
PSO-8	Develop entrepreneurial skills, empowered to fulfil the professional requirement and become self-dependent.

Semester-I

Allied Chemistry -I (For Physics, Botany and Zoology)

Subject Code: SACH11

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To learn about atomic structure and bonding.	PSO-2	U
CO-2	To learn the principles of reactions of organic compounds	PSO-3	An
CO-3	To study about photochemical reactions.	PSO-2	U
CO-4	To learn about the importance of polymers and polymer science	PSO-2	U
CO-5	To study about lubricants and some cosmetics in the modern world.	PSO-5	Ap

Semester-I

Allied Chemistry Practical -I (For Physics, Botany and Zoology)

Subject Code: SACHP1

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Critical capacity to understand the procedures in order to define the common methods of analysis.	PSO-2	U
CO-2	Use correct titrimetric procedure when carrying out titrations	PSO-5	An
CO-3	Prepare the standard solution of different strength.	PSO-5	U
CO-4	Explain the acid base, permanganometry titrations with examples.	PSO-6	An
CO-5	Apply knowledge of concentrations of solutions to everyday examples and estimate the strength of the given unknown solution	PSO-6	Ap

Semester-II

Allied Chemistry -II (For Physics, Botany and Zoology)

Subject Code: SACH21

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To learn the chemistry of basic aromatic compounds	PSO-1	U
CO-2	To understand the nuclear particles and few nuclear reactions	PSO-3	U
CO-3	To know about carbohydrates, amino acids, proteins and nucleic acid.	PSO-2	An
CO-4	To study about fuels, fertilizers, cement and glass.	PSO-2	Ap
CO-5	To know about some common diseases and the drugs used.	PSO-5	U

Semester-II

Allied Chemistry Practical -II (For Physics, Botany and Zoology)

Subject Code: SACHP2

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To analysis inorganic simple salt containing one acidic radical and one basic radical	PSO-3	An
CO-2	Identify the interfering radical present in the given inorganic salt mixture	PSO-2	U
CO-3	Separate the radicals into groups	PSO-1	U
CO-4	Prepare a sodium carbonate solution in ppm units	PSO-1	U
CO-5	Acquire skill to analyze the given sample qualitatively and quantitatively.	PSO-3	Ap

Semester-III

Non-Major Elective-I for 2nd year Maths Students

Food Science

Subject Code: SNCH3A

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	List the important nutrients of healthy diet	PSO-1	U
CO-2	Analyses the food additives.	PSO-2	An
CO-3	Evaluate the adulterants present in food	PSO-1	Ev
CO-4	Explain the different food preservation techniques	PSO-4	U
CO-5	Summarize the various quality standards.	PSO-5	U

Semester-IV

Non-Major Elective-II for 2nd year Maths Students

Applied Chemistry

Subject Code: SNCH4B

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To explain the manufacture of soap and detergents.	PSO-1	An
CO-2	Explain the different fertilizers and applications.	PSO-3	Ap
CO-3	To learn about the importance of polymers and polymer science	PSO-2	U
CO-4	To study about the chemical pharmacy and their uses.	PSO-2	U
CO-5	To know about some uses in everyday life.	PSO-5	Ap

Semester-I

Allied Chemistry -I (For Physics, Botany and Zoology)

Subject Code: AACH11

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To learn about atomic structure and bonding.	PSO-2	U
CO-2	To learn the principles of reactions of organic compounds	PSO-3	An
CO-3	To study about photochemical reactions.	PSO-2	U
CO-4	To learn about the importance of polymers and polymer science	PSO-2	U
CO-5	To study about lubricants and some cosmetics in the modern world.	PSO-5	Ap

Semester-I

Allied Chemistry Practical -I (For Physics, Botany and Zoology)

Subject Code: AACHP1

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Critical capacity to understand the procedures in order to define the common methods of analysis.	PSO-2	U
CO-2	Use correct titrimetric procedure when carrying out titrations	PSO-5	An
CO-3	Prepare the standard solution of different strength.	PSO-5	U
CO-4	Explain the acid base, permanganometry titrations with examples.	PSO-6	An
CO-5	Apply knowledge of concentrations of solutions to everyday examples and estimate the strength of the given unknown solution	PSO-6	Ap

Semester-II

Allied Chemistry -II (For Physics, Botany and Zoology)

Subject Code: AACH21

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To learn the chemistry of basic aromatic compounds	PSO-1	U
CO-2	To understand the nuclear particles and few nuclear reactions	PSO-3	U
CO-3	To know about carbohydrates, amino acids, proteins and nucleic acid.	PSO-2	An
CO-4	To study about fuels, fertilizers, cement and glass.	PSO-2	Ap
CO-5	To know about some common diseases and the drugs used.	PSO-5	U

Semester-II

Allied Chemistry Practical -II (For Physics, Botany and Zoology)

Subject Code: AACHP2

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To analysis inorganic simple salt containing one acidic radical and one basic radical	PSO-3	An
CO-2	Identify the interfering radical present in the given inorganic salt mixture	PSO-2	U
CO-3	Separate the radicals into groups	PSO-1	U
CO-4	Prepare a sodium carbonate solution in ppm units	PSO-1	U
CO-5	Acquire skill to analyze the given sample qualitatively and quantitatively.	PSO-3	Ap

Semester-III

Non-Major Elective-I for 2nd year Maths Students

Food Science

Subject Code: ANCH31

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	List the important nutrients of healthy diet	PSO-1	U
CO-2	Analyses the food additives.	PSO-2	An
CO-3	Evaluate the adulterants present in food	PSO-1	Ev
CO-4	Explain the different food preservation techniques	PSO-4	U
CO-5	Summarize the various quality standards.	PSO-5	U

Semester-IV

Non-Major Elective-II for 2nd year Maths Students

Applied Chemistry

Subject Code: ANCH42

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To explain the manufacture of soap and detergents.	PSO-1	An
CO-2	Explain the different fertilizers and applications.	PSO-3	Ap
CO-3	To learn about the importance of polymers and polymer science	PSO-2	U
CO-4	To study about the chemical pharmacy and their uses.	PSO-2	U
CO-5	To know about some uses in everyday life.	PSO-5	Ap

Semester-I

Allied Chemistry -I (For Physics, Botany and Zoology)

Subject Code: CACH11

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Apply theories of chemical bonding predict the geometry of molecules and their stability	PSO-2	An
CO-2	Analyze the types of reagents and intermediates involved in different organic reactions.	PSO-3	An
CO-3	Explain the methods of preparation and uses of important drugs for long life.	PSO-5	U
CO-4	Outline the preparation, properties and applications of cement, glass and explosives.	PSO-2	Ap
CO-5	Discuss the methods of preparation and importance of drugs for long life	PSO-1	Ap

Semester-I

Allied Chemistry Practical -I (For Physics, Botany and Zoology)

Subject Code: CACHP1

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Critical capacity to understand the procedures in order to define the common methods of analysis.	PSO-2	U
CO-2	Use correct titrimetric procedure when carrying out titrations	PSO-5	An
CO-3	Prepare the standard solution of different strength.	PSO-5	U
CO-4	Explain the acid base, permanganometry titrations with examples.	PSO-6	An
CO-5	Apply knowledge of concentrations of solutions to everyday examples and estimate the strength of the given unknown solution	PSO-6	Ap

Semester-II

Allied Chemistry -II (For Physics, Botany and Zoology)

Subject Code: CACH21

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Analyse the chemical and biological applications of coordination compounds.	PSO-2	An
CO-2	Explain the electronic effects and apply these to organic compounds.	PSO-3	U
CO-3	Define electromotive force and analyse its uses.	PSO-2	An
CO-4	Discuss structure and biological functions of carbohydrates, Amino acids.	PSO-2	U
CO-5	Analyse common diseases and important tablets used to cure the diseases.	PSO-5	An

Semester-II

Allied Chemistry Practical -II (For Physics, Botany and Zoology)

Subject Code: CACHP2

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	To analysis inorganic simple salt containing one acidic radical and one basic radical	PSO-3	An
CO-2	Identify the interfering radical present in the given inorganic salt mixture	PSO-2	U
CO-3	Separate the radicals into groups	PSO-1	U
CO-4	Prepare a sodium carbonate solution in ppm units	PSO-1	U
CO-5	Acquire skill to analyze the given sample qualitatively and quantitatively.	PSO-3	Ap

Semester-III

Non-Major Elective-I for 2nd year Maths Students

Food Science

Subject Code: CNCH31

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	List the important nutrients of healthy diet	PSO-1	U
CO-2	Analyses the food additives.	PSO-2	An
CO-3	Evaluate the adulterants present in food	PSO-1	Ev
CO-4	Explain the different food preservation techniques	PSO-4	U
CO-5	Summarize the various quality standards.	PSO-5	U

Semester-IV

Non-Major Elective-II for 2nd year Maths Students

Chemistry in Ever Day Life

Subject Code: CNCH42

CO No	Course Outcomes	PSOs addressed	Cognitive Level
CO-1	Study on the chemicals used in cosmetics	PSO-1	U
CO-2	Know about soaps and detergents.	PSO-3	U
CO-3	Explain about the nutrients from food materials.	PSO-2	U
CO-4	Discuss the fertilizers and pesticides necessary for the grow of plants	PSO-2	Ev
CO-5	Know about the drugs.	PSO-5	An