PROGRAM OUTCOMES (POs)

1. Critical Thinking: Acquire knowledge of theoretical and practical aspects; enhance innovative ideas in science and technology, develop and investigate throughout their learning from different perspectives.

2. Effective Communication: Able to understand, converse, and direct the scientific knowledge gained.

3. Social Interaction: Able to analyse the different aspects and interpret the data by following the scientific methods and hence solve the different problems in the society at large.

4. Effective Citizenship: Helps in understanding different areas of science such as Chemistry, Botany, Physics and Mathematics as this course forms the basis of science and develops the method of understanding and selflessness.

5. Ethics: As a result of gaining scientific knowledge, they recognize different value systems and moral dimensions of the decisions taken and accept the responsibilities.

6. Environment and Sustainability: Understand the issues of environmental perspective and discover ways for sustainable development.

7. Self-directed and Life-long Learning: In the process, students acquire skills, design, apply and utilize the technology in day-to-day life.

Program Specific Outcomes (PSOs) - Department of Chemistry

1. Students will be able to acquire core knowledge in the key areas of Chemistry, develop written & oral communication skills in communicating chemistry related topics

2. Design & conduct experiments, demonstrate their understanding of the scientific methods & processes.

3. Develop proficiency in acquiring data using a variety of instruments, analyse & interpret the data, learn applications of numerical techniques.

4. Realize & develop an understanding of the impact of Chemistry on society.

Program Specific Outcomes (PSOs) - Department of Microbiology

1. Establish a strong foundation in the core principles of microbiology, including microbial diversity and classification, biochemistry, physiology, genetics and molecular biology.

2. Acquire proficiency in essential laboratory skills and techniques such as microbial culture, staining, biochemical tests, instrumentation and molecular techniques.

3. Be cognisant of the role of microorganisms in the environment and in human health; and in various fields and industries such as pharmaceuticals, food and beverage, dairy, agriculture and biotechnology.

4. Utilize biostatistics and bioinformatics tools for data analysis and interpretation.

Program Specific Outcomes (PSOs) - Department of Botany

1. Acquire competency in the subject and its allied branches so as to identify major groups of plants and compare their characteristics.

2. Understand plant developmental processes and their metabolic activities, concepts in plant breeding, molecular biology, genetic engineering and plant tissue culture.

3. Develop and use bio-fertilizers; gain insights into various aspects of the environment and its conservation.

4. Understand the ecology of plants and their economic and medicinal value, various concepts in microbiology and how to prevent and manage plant diseases; have in-depth knowledge of gardening, floriculture and horticulture.

5. Study plants in their natural habitat through field visits as well as acquire skills to handle scientific instruments and plan and perform laboratory experiments.

6. Acquire in-depth subject knowledge of fundamental concepts as well as advanced and emerging areas of Botany and its applied aspects along with necessary skills for critical thinking and problem solving capabilities to integrate with academia and industry.

Program Specific Outcomes (PSOs) - Department of Mathematics

1. Acquire knowledge of basic Mathematical concepts.
2. Understand and develop Mathematical arguments in a logical manner.
3. Acquire problem solving, reasoning and critical thinking skills.
4. Apply knowledge of Mathematics in solving real life problems.