BACHELOR OF SCIENCE <u>PROGRAM EDUCATIONAL OBJECTIVES (PEOs)</u>

- PEO 1 Graduates will pursue higher studies in related fields including management
- **PEO 2** Graduates will perform as employers in private/government institutions rising up to top positions
- PEO 3 Graduates will become entrepreneurs

PROGRAM OUTCOMES [PO'S]

- **PO-01. Scientific knowledge:** Apply the knowledge of basic science fundamentals to the solution of complex scientific problems.
- **PO-02:Problem analysis:** Identify, formulate, review research literature, and analyze complex scientific problems reaching substantiated conclusions using principles of Physic, Chemistry, Mathematics, Zoology, Botany and Applied Sciences.
- **PO-03:Design/development of solutions:** Design solutions for complex scientific problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO-04.Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO-05. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern chemical IT tools including prediction and modeling to complex chemical activities with an understanding of the limitations.
- **PO-06. Social Interaction:** Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- **PO-07. Environment and Sustainability**: Understand the issues of environmental contexts and sustainable development.
- **PO-08. Ethics:** Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them
- **PO-09. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO-10: Effective Communication**: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
- **PO-11. Project management and finance:** Demonstrate scientific knowledge with the understanding of the management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO-12 Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context research, scientific and technological change.

Program Specific Outcomes

On the successful completion of the B.Sc. [PCM] Program the students are able to,

PSO-1

Understand the basic principles and theories of the main areas of the organic, inorganic, analytical, physical and biological chemistry and its applications and able to apply chemical knowledge in many applications.

PSO-2

Understand and apply the basic laws of physics in the areas of classical mechanics, Newtonian gravitation, special relativity, electromagnetism, geometrical and physical optics, quantum mechanics, thermodynamics and statistical mechanics.

PSO-3

Understands the concepts of calculus, differential equations,, algebra, analysis and mechanics. Develop power of reasoning, critical thinking, problem solving ability, developing new ideas, drawing logical conclusions and high level of numeracy.

PSO-4

To make accurate use of English and Computers in their respective fields and improve their employbility

Program Specific Outcomes

On the successful completion of the B.Sc. [CBZ] Program the students are able to,

Chemistry

PSO-1

Understand the basic principles and theories of the main areas of the organic, inorganic, analytical, physical and biological chemistry and its applications and able to apply chemical knowledge in many applications.

PSO-2 Botany

Understands the nature of basic concepts of Plant cell biology, Taxonomy ,ecology, interrelation hips of different plant groups and their evolutionary tendencies and acquire capability of applying the Knowledge in the areas of like Agriculture, Plant Medicines, Horticulture and Tissue culture.

PSO-3: Zoology

Emphasize the diversity in form and function of animals. Helps to plan, implement, monitor & evaluate ones health activities to prevent themselves from deadly diseases based on Theoretical & Practical Knowledge.

PSO-4

To make accurate use of English and Computers in their respective fields and improve their employbility