## Name of Program: Bachelor in Science (B.Sc. Non-Medical)

## Program Outcomes

1. Students become eligible to join as Quality Control Manager in private Sector (Industries) as well as government sector.
2. Students can join as Medical Representative.
3. Students can join M.Sc. in Physics, Chemistry, Mathematics, Information Technology and Nuclear Medicines.
4. Students become eligible to serve in DRDO, defense, public sector and private Sector.

## Program Specific Outcomes

1. They can pursue Post Graduation in any subject which they have studied in B.Sc.
2. Students can go for higher studies in courses like B.Ed, MA, MBA, LLB, etc.

## Course Outcomes of English Compulsory

1. It helps the students to use correct English in oral as well as written form.
2. The students are equipped to define, classify and understand the methods of communication and improve their LSRW Skills.
3. The course prepares the students to meet the challenges of modern competitive society. It makes them more confident to face interviews, group discussions and enhance their capability of acquiring jobs in different fields.
4. The students are also trained in business communication skills.
5. The course takes an integrated approach to the appropriate use of English in different situations and for different purposes.
6. It helps the students to improve their vocabulary thereby developing their overall confidence and personality.
7. The students learn to interpret the literary works by critical analysis and compare literary works of the great writers, essayists and dramatists.
8. The students are empowered to be active participants in the critical social issues.

## Course Outcomes of Punjabi Compulsory

1. This course provides inspiration to the students to be and act like civilized and sensitive human beings. The literature in this course is of social, political and cultural relevance.
2. It helps to acknowledge and understand rich heritage of folk-literature of Punjab through idioms and proverbs.
3. The students come to understand and analyse the theoretical and behavioral aspects of language.

## Course Outcomes of Physics

1. Astronomy is a combination of Physics, Chemistry and Mathematical principles/rules. It deals with detailed study of the physical, chemical and dynamic properties of celestial
objects. It also deals with the phenomena over and above earth's atmosphere. There is associated study of calculations of orbits, gravitational forces, satellites, meteors, galaxies, comets, stars, planetary objects, planets, satellites etc. In Astrophysics, students come to explore and ensure properties/nature of the astronomical objects with the help of laws of Physics and Chemistry.
2. Computer Science involves both Computer science and Electronics. It includes testing and designing of computer components.
3. Students come to know that electronics and Communication deal with electronic devices and software interfaces. It helps to increase productivity in various industries such as oil, energy, agriculture, and telecommunication media including television, radio and computers.
4. Principles of mechanics and energy to design machines and devices right from automobiles, trucks, and airplanes to trains tractors, fax machines, etc. are also taught.
5. The students go for atmospheric studies to know and predict weather and climate. It is the examination of the atmospheric and climate conditions affecting the earth and its population.

## Course Outcomes of Mathematics

1. Students get acquainted with in-depth knowledge of calculus, algebra, numerical analysis, graph theory and probability.
2. Students learn to solve systems of linear equations by use of the matrix, compute limits, derivatives, definite and indefinite integrals of algebraic, logarithmic and exponential functions. They can also analyze functions and their graphs as informed by limits and derivatives.
3. Students learn to produce rigorous proofs of results that arise in the context of calculus, analysis and algebra.
4. Learners are able to write solutions to problems and proofs of theorems that meet rigorous standards based on content, organization and coherence, argument and support, and style and mechanics.
5. Students learn to analyze, test, and interpret technical arguments, and form independent judgments.
6. Students become capable of communicating mathematical ideas using numerical, graphical and symbolic representations both orally and in writing to a range of audience and even to non-experts also.
7. Students learn to work effectively in a multi-disciplinary environment and learn independently to use emerging technologies and computing concepts.
8. They are able to organize, present, manipulate and statistically analyze data both graphically and numerically to understand real world problems.
9. Learners learn to construct abstract models using appropriate mathematical and statistical tools.
10. The students learn to use computers and software as exploratory, visualization, modeling and computational tools.

## Course Outcomes of Computer Science

1. Students are equipped with basic and fundamentals of information technologies, basic programming concepts of procedure oriented language C and operating system.
2. Students come to understand Object Oriented Concept using C++, computer Organization, Data Structure with C and Data Base Concepts.
3. Learners acquire information about relational Data Base Management System, software project development, electronic commerce and web development (HTML, CSS, JavaScript, PHP).
4. Students learn to develop and debug codes in C and $\mathrm{C}++$.
5. Students are able to design web based application using PHP, HTML, DHTML, CSS and javascript.

## Course Outcomes of Chemistry

1. Students learn to think scientifically, rationally and independently.
2. As students acquire laboratory skills, they become able to analyze, classify and characterize different chemical compounds.
3. Students become self-sufficient in understanding and handling the various issues related to soil, water and air pollution.
4. Students gain insight of all basic elements of which the whole universe is made up of such as plastics, dyes, glass, paint etc.
5. On the basis of their practical experience in laboratory, students are able to demonstrate the applications of Chemistry in different spheres of life viz. kitchen chemistry, medicines, agriculture etc.
6. Students come to understand the formulations of various drugs, detergents, shampoos etc.
