	Programme outcomes (POs) (B.A., B.Com., B.Sc.)
ProgrammeOutcomes	**After successful completion of three years degree program in the subject B.A. the students are able to:**
	PO1: Domain knowledge: Students will possess a breadth and depth of disciplinary knowledge in the field of Humanities. PO2.Critical Thinking: Students will be able to identify and present their own perspective as well as identify and consider other perspectives; they will gain a broader outlook and be able to exercise discernment and judgment by evaluating arguments about issues. PO3: Problem solving & Analytical Skills: Students will be able to identify and define the problem/ question at issue; identify and assess the key assumptions; analyze and process data to reach conclusions; identify and assess conclusions, implications and consequences. PO4.Environment and sustainability: Students will be able to understand the issues related to environmental contexts and sustainable development PO5.Effective Communication: Students will be able to present ideas clearly and confidently with skills to negotiate with others. They will be able to evaluate primary literature, in oral and written form and subsequently articulate the information. PO6.Leadership & Team work: Students will be able to assume leadership roles and will be able to work productively in a team for group projects and group activities. Ability to work as a leader as well as in a team for group projects and group activities and participate actively, in a healthy spirit

	PO7.Ethical & Moral values: Students will bear the core values of honesty, integrity and commitment and imbibe qualities of empathy for fellow human beings. PO8.Effective Citizenship and Social Interaction: Students will develop to clearance and harmony towards cultural, regional, linguistic, communal, socioeconomic and other diversities and will respect the constitution and the national symbols of pride.

Department of Commerce and Management	**After successful completion of three years degree program in the subject of Commerce and Management the student are able to :**
Program Outcomes	1. This program will provide students with necessary knowledge about the trade and commerce in the national and international purview.
	2. This program will provide skills to students about the various aspects related to marketing manager, sales manager, and finance manager, administration of company or business.
	3. Students will be able to make their personal, educational and professional level decisions after successful completion of the program.
	4. Program will help to explore and develop the entrepreneurial capabilities of the students which will assist them in starting their own venture.
	5. This program will give through knowledge about trade, commerce, taxation, finance and industry to students.
	6. Program will provide in depth knowledge about the various subjects / topics like Languages, Business Economics, Financial Accounting, Statistics and Business Mathematics, Business Organization, Company Law, Business Management, Secretarial Practice, Business Law, Monetary Economics, Business Communication and Management, Income Tax, Skill Development, Cost Accounting, Management Process, Income Tax, Indian Economics, Marketing Management, Management Accounting, Accounting and Business Finance.
	7. Prepare students for their post graduate studies to achieve success in their education and professional career.
	8.

PROGRAMOUTCOMEFORB.SC.BOTANY

PO1: Students know about different types of lower & higherplants their evolution in from algae to angiosperm &also their economic and ecological importance.

PO2: Cell biology gives knowledge about cell organelles & their functions.

PO3: Molecular biology gives knowledge about chemical properties of nucleic acid and their role in living systems.

PO4: Genetics provides knowledge about laws of inheritance, various genetic interactions, chromosomal abrasions & multiple alleles.

PO5: Structural changes in chromosomes.

PO6: Student can describe morphological & reproductive characters of plant and also identified different plant families and classification.

PO7: They know economic importance of various plant products & artificial methods of plant propagation.

PO8: Various concepts in ecology and phytogeography.

PO9: Use modern Botanical techniques and decent equipment.

PO10: To inculcates the scientific temperament in the students and outside the scientific community

PROGRAMOUTCOMEFORB.SC.BIOCHEMISTRY

PO1: Apply domain specific knowledge and expertise to effectively address complex challenges in professional, social and personal context.

PO2: Cultivate a multidisciplinary mindset and contribute to the global knowledge base with a specific focus on advancing the knowledge and development of the country.

PO3: Develop strong communication and presentation skills to enhance employability and excel in the job market.

PO4: Foster social awareness and actively engage as responsible and proactive citizens addressing societal issues.

PO5: Evaluate and articulate the impact of the subject on advancements in science and technology, benefitting the general population and contributing to societal development.

PROGRAM OUTCOME FOR B. SC. CHEMISTRY

PO1: The Programme enables the students to understand basic facts and concepts in Chemistry.

PO2: To develop the ability to apply the principles of Chemistry, to develop problem solving skills, to become familiar with the emerging areas of Chemistry and their applications in various spheres of Chemical sciences and to apprise the students of its relevance in future studies.

PO3: Students know about importance of Qualitative and Quantitative analysis used for different samples like soil samples, alloys estimation, water analysis. New technological world using nanomaterials, properties of nano materials magnetic properties of materials.

PO4: Thermodynamic and Thermochemistry useful in our daily life and related with our surrounding atmosphere.

PO5: Nuclear Magnetic resonance spectroscopy allows the molecular structure of a material to be analyzed by observing the measuring the interaction of nuclear spins when placed in a powerful magnetic field and extensively used in medicine in the form of magnetic resonance imaging and for analysis of chemicals.

PO6: Bioinorganic chemistry provides knowledge about significant role of metal ions in biological system which is required for the maintenance of life.

PO7: Student can describe the process It also develops skills in the proper handling of apparatus and chemicals and also gets exposure to the different processes used in industries and their applications.

PO8: Use modern techniques used in analysis of materials and handling of the new equipment during the practical.

PO9: To inculcates the scientific temperament in the studentsduring the experiments and how to corelate with outside the scientific community

PROGRAM OUTCOME FOR B. SC. MATHEMATICS

PO1: To develop creative and critical thinking.

PO2: To develop effective communication.

PO3: To build strong leadership qualities and develop team spirit.

PO4: To learn to become better and effective citizens of the country.

PO5: To develop moral maturity and ethical behavior.

PO6: To learn about the environment and sustainability process.

PO7: To self-direct a life-long learning system.

PO8: To learn knowledge application.

PO9: To learn analytical, scientific reasoning and problem solving. PO10: To gain Information / Digital Literacy.

PROGRAM OUTCOME FOR B. SC. MICROBIOLOGY

PO1: Demonstrate laboratory skills applicable toMicrobiological and Clinical methods including laboratorysafety.

PO2: Acquire skills for accurately reporting observations and findings through oral, written and digital formats.

PO3: Apply the knowledge of microbiology from multiple fields to critically analyse and evaluate microbiological, environmental and health related issues and to create awareness and impact of microbiology outside the science community.

PO4: Practice flexible professional skills needed for careers in microbiology & related professional and scientific fields likeHealth sector, medical laboratory technology (MLT), Water testing labs, Dairy and food Industry as quality assurance and quality control professional etc, can opt for either post graduate study program, research, or for variouscompetitive exams and professional courses. Exposure provided to the students during the add-on bioinformatics certificate course would help students gain awareness of career options in the software industry too.

PO5: Students will be able to expand their learning horizons through use of multidimensional learning resources to keep themselves at par with the pace of scientific and research development worldwide.

PROGRAM OUTCOME FOR B. SC. PHYSICS

PO1: Gain a thorough understanding of the subject.

PO2: Lay the groundwork for future learning.

PO3: Learn the fundamentals of research.

PO4: Instill good moral and ethical ideals in yourself. PO5: Recognize your societal and environmental responsibility.

PO6: Develop communication and professional skills.

PO7: Acquire the ability to accept a wide range of ideas and points of view. PO8: Empower yourself to meet the demands of a changing universe.

PROGRAM OUTCOME FOR B. SC. ZOOLOGY

PO1: Classification and Identification of organisms accordingto their characteristic features.

PO2: Correlates the Morphology, physiology and biology of invertebrate and vertebrates.

PO3: Gain the knowledge of Micro-technique for preserving tissue and specimens.

PO4: Analyse interactions among the various organisms of different phylas, their distribution and relationship with the environment.

PO5: Gain knowledge about economic importance and application of knowledge agro based small industries like sericulture, apiculture, aquaculture, fish breeding, pear-culture.

PO6: Understand concept of genetics and its importance in human health.

PO7: Understand the use of biotechnology, biostatistics and bioinformatics.

SCHEME OF TEACHING, EXAMINATION AND SYLLABUS AS PER NEP 2020 for M. Sc. CHEMISTRY

Choice Based Credit System (Semester Pattern) Effective from 2023-2024

Program Specific Outcomes (PSO) – M.Sc. Chemistry

- PSO1- To have sound knowledge about the fundamentals and applications of knowledge associated with the profession of chemistry, including specialized areas of inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, and elective subject of polymer chemistry.
- PSO2- Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions. Find, analyze, evaluate and apply information systematically and to make defensible decisions. Learn, select, and apply appropriate methods and procedures resources, and modern chemistry-related to computing tools with an understanding of the limitations. Interpret analytical data for structure elucidation using NMR, IR, UV and Mass spectroscopy.
- PSO3- Understand the impact of the professional Chemistry solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable

development. Develop an understanding of eco-friendly chemical processes and impact of chemistry on health and environment.

- PSO4 - Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-access and use feedback effectively from others to identify learning needs and to satisfy these needs ongoing basis.
- PSO5-Practices analytical skills such as synthesizing, separating, characterizing chemical compounds using laboratory and instrumentation techniques.
- PSO6-Grow research skills through dissertation/Project work in diverse fields of chemistry such as organic, nanoscience, analytical, physical etc. Review scientific literature and findings in methodical manner and dealing out of information obtained to comprehend scope for originality.
- PSO7 - Obtain cutting-edge level of familiarity in natural products as well as various biological systems from the Chemical biology aspects.
- PSO8 - Develop responsiveness in academic and research ethics, scientific misconduct, misrepresentation and manipulation of data. Coherent communication skills through seminars and the accumulating of information in the form of assignments. Create potential to participate for the available employment opportunities or work independently in research, industries and other analytical based fields.

M.Sc. Chemistry

Program Outcome (PO)

PO1- It helps to grab research opportunities to pursue Ph.D.

PO2- It helps to develop the ability to crack the target of CSIR-NET examination.

PO3- It creates job opportunities at pharmaceuticals as chemists, in material industries, in food products, in petrochemicals.

PO4- It develops the skill in problem solving and analytical reasoning as applied to scientific problems.

PO5- It develops the skill in handling sophisticated instruments like Spectrophotometer, Titration analyzer, Polarimeter, Refractometer, Flame-photometer.

PO6- It helps to carry out scientific experiments, to record the data and analyze the results.

SCHEME OF TEACHING, EXAMINATION AND SYLLABUS AS PER NEP 2020 for M. Sc. BOTANY

Choice Based Credit System (Semester Pattern) Effective from 2023-2024

Program Outcomes (POs)

- PO 1- Courses offered give students a general understanding of the fundamental principles of life that extend from the tiniest microbes to plants, animals, and human beings.
- PO 2- Students can describe the structure and function of cellular components and explain how they interact in a living cell. They can also describe how cells interact to develop tissues and organs, and how these contribute to a functional organism.
- PO 3-Students can demonstrate an understanding of the mechanisms driving evolution, and can describe similarities and differences of the major taxonomic groups.
- PO 4 -Students will become proficient in handling relevant scientific instruments and have an understanding of the principles of working.
- PO 5- Students can formally communicate the results of biological investigations using both oral and written communication skills.
- PO 6- Students also obtain the knowledge, skills, and motivation necessary to lifelong learning and problem solving attitude.
- PO 7- Specialized courses emphasizing teaching and research in various life science disciplines are also offered. Disciplines range from basic science to applied science

SCHEME OF TEACHING, EXAMINATION AND SYLLABUS AS PER NEP 2020 for M. Sc. Microbiology

Choice Based Credit System (Semester Pattern) Effective from 2023-2024

PSO1 - Constructing a summative project or paper that draws on current research, scholarship and/or techniques in Microbiology.

PSO 2 - Explaining the theoretical basis of the tools, technologies and methods which are common to Microbiology.

PSO3 - Developing to present and articulate their knowledge of Microbiology.

PSO4 - Acquiring knowledge and understanding of the Microbiology concepts as applicable to diverse areas such as Medical, Industrial, Environment, Genetics, Agriculture, food and others.

PSO5- Handling of Microbial and Biochemical systems.

PSO6-Demonstrating key practical skills/competencies in working with microbes for study and use in the laboratory as well as outside, including the use of good microbiological practices.

PSO7- Developing a broader perspective of the discipline of Microbiology to enable them to identify challenging social problems and plan his professional career to develop innovative solutions for such problems.

SCHEME OF TEACHING, EXAMINATION AND SYLLABUS AS PER NEP 2020 for M. Sc. ZOOLOGY

Choice Based Credit System (Semester Pattern) Effective from 2023-2024

Program Outcomes (POs)

- PO 1- M.Sc. program produces post-graduates who have great readiness in playing active role either in government or non-government organization by designing processes/strategies that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO 2-Students developed analytical and creative thinking from the conducive research environments and interacting with scholars/ faculties that will help in identifying the assumptions that frame our thinking and actions, checking out the degree to which

these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

- PO 3- To use research-based knowledge and research methods including review research literature, accession of primary literature, identify relevant works for a particular topic, design of experiments, analysis, evaluation and interpretation of scientific data, and synthesis of the information to provide valid conclusions in real situations.
- PO 4- To empower students to create, select, and apply appropriate techniques, resources, and ICT tools for understanding of the science.
- PO 5- Apply ethical principles and commit to professional ethics and responsibilities and norms of the work/research practice. Also, to promote learning and research aptitude and attitude to serve the society.
- PO 6- Students are encouraged to develop an analytical mind as they ask questions, take part in topic-based quiz and debates, and are made aware of recent study and research on relevant topics.
- PO 7- To enhance the ability of writing research project activities, problem-solving, to design and carry research project.
- PO 8- M.Sc. program produces post-graduates who have great confidence which allows them to have a positive and realistic perception of themselves and their abilities in the scientific and social environment.
- PO 9- Students acquiring skill-based education will make them self-employable and can generate employment.
- PO 10- Students are encouraged to develop analytical and critical thinking minds which will help to develop scientific temperament in the community.

M.Sc. Zoology

Program Outcome (PO)

PO1: Understand the Structure and Functions of Nonchordates and Chordates, General Physiology, Advanced Reproductive Biology, Molecular Biology and Biotechnology.

PO2: Perform the laboratory procedures in the areas of Nonchordate and Chordate Taxonomy, General Physiology and Molecular Biology.

PO3: Analyse the relationship among man and parasites. Understand the concepts of Immunology. Understand the Ecosystems and Communities, Adaptations and Animal Behaviour.
PO4: Perform the laboratory procedures in Immunology and Environmental Biology.

PO5: It helps to provide holistic career development in securing job for lifelong learning.

PO6: It develop research attitude in various branches of Zoology.

M. Sc. PHYSICS

Choice Based Credit System (Semester Pattern)

Program Outcomes (POs)

- PO 1 -Courses offered in the Physical Sciences/ Pure Sciences give students a capacity of demonstrating comprehensive knowledge and general understanding of the fundamental principles of the physical and chemical processes around them.
- PO 2 - Students will demonstrate an understanding of the analytical methods required to interpret and analyze results and draw conclusions as supported by their data.
- PO 3 - Students will demonstrate proficiency in the acquisition of data using a variety of laboratory instruments and in the analysis and interpretation of such data
- PO 4 - Students will become proficient in handling relevant scientific instruments and have a understanding of the principles of working.
- PO 5 - Students can formally communicate the results of investigations using both oral and written communication skills.

PO 6 - Students also obtain the knowledge, skills, and motivation necessary to lifelong learning and problem solving attitude.