

**Name of course: B.A. (H) English**

**Programme outcome:**

- The programme educates students in both the artistry and utility of the English language through an artistic/aesthetic study of language through texts and the various historical and contemporary forms of culture. The creative faculties of learners get continuously enhanced.
- The programme also graduates students with capabilities of performing research, scrutiny, and undertake analysis of compositions/art works (book reviews & film reviews for instance), and pursue criticism of literary and cultural texts from various genres in different historical and stylistic perspectives and genres (art criticism, writing feature articles for instance).
- The programme also creates a solid coordination between knowledge and character building. Students encounter a plethora of characters be it typecast or radical, or socio-culturally located, and undertake in-depth critiques on all possible scrutiny into character-selves-something which enables students in having a better control and better furnish or even facilitate themselves with character building and being responsible citizen/humans in the world.
- Study gendered explorations of human relations in classical literature in multiple genres, and to examine a woman writer's standpoint on love, war and the primacy of the gendered self.
- This course is designed to help undergraduate students develop and research composition, argument, and writing skills that will enable them to improve their written abilities for higher studies and academic endeavours.

**Name of course : B. A. (H) History**

**Programme outcome:**

- Knowledge of multiple perspectives through which significant developments in the history of the Indian subcontinent from earliest times up to the period after independence.
- The course intends to provide an extensive survey of early Indian history to the students and familiarize them with the tools of studying ancient Indian history.
- The inter-disciplinary approach of the course provides the students a point of beginning from where they can build an understanding of the discipline of history. Spanning a very long period of India's ancient past - from prehistoric times to the end of Vedic cultures in India - the course dwells upon major landmarks of ancient Indian history from the beginning of early human hunter gatherers to food producers.
- This course will equip the students with adequate expertise to analyze the further development of Indian culture which resulted in an advanced Harappan civilization. In course of time students will learn about the processes of cultural development and regional variations
- Discuss the landscape and environmental variations in Indian subcontinent and their impact on the making of India's history.
- Describe main features of prehistoric and proto-historic cultures.

- List the sources and evidence for reconstructing the history of Ancient India.
- Analyse the way earlier historians interpreted the history of India and while doing so they can write the alternative ways of looking at the past.
- List the main tools made by prehistoric and proto-historic humans in India along with their find spots.
- Interpret the prehistoric art and mortuary practices.
- Discuss the beginning and the significance of food production.
- Analyse the factors responsible for the origins and decline of Harappan Civilization.
- Discuss various aspects of society, economy, polity and religious practices that are reflected in the Early Vedic and Later Vedic texts.
- Describe the main features of the megalithic cultures of the Central India, Deccan and South India. Name of course: Name of course :

### **B.Sc. (H) Botany**

#### **Programme outcome:**

- The programme is designed to equip students with essential knowledge and technical skills to study plants and related subjects in a holistic manner.
- The main aim is to train the learners in all areas of plant biology using appropriate combinations of core and elective papers with significant inter-disciplinary components.
- Students would be exposed to cutting-edge technologies that are currently used in the study of plant life forms, their evolution and interactions with other organisms within the ecosystem.
- Students would also become aware of the social and environmental significance of plants and their relevance to the national economy
- Students will be able to understand and explain different specializations of Botany such as systematics, evolution, ecology, developmental biology, physiology, biochemistry, plant interactions with microbes and insects, morphology, anatomy, reproduction, genetics, cell and molecular biology of plants.
- Students will be trained in various analytical techniques of plant biology, use of plants as industrial resources or as support system for human livelihood and will be well versed with the use of transgenic technologies for both basic and applied research in plants.
- Students will be able to identify various life forms of plants, design and execute experiments related to basic studies on evolution, ecology, developmental biology, physiology, biochemistry, plant interactions with microbes and insects, morphology, anatomy, reproduction, genetics, microbiology, molecular biology, recombinant DNA technology, transgenic technology. Students are also familiarized with the use of bioinformatics tools and databases and in the application of statistics to biological data.
- Students will acquire core competency in the subject Botany and in allied subject areas. They will be able to use the evidence based

comparative studies approach to explain the evolution of organism and understand the genetic diversity and its significance.

- The students will be able to explain various physiological and metabolic processes unique to plants. They would be able to elaborate on the concepts of gene, genome and the molecular processes of replication, transcription and translation.
- They will be able to understand adaptation, development and behavior of different forms of life. The students will get an understanding of functioning of ecosystem and tracing the energy pyramids through nutrient flow. ► Students will be able to demonstrate the experimental techniques and methods in plant sciences and have innovative research ideas

**Name of course: B.Sc. (H) Chemistry**

**Programme outcome:**

- The Learning Outcomes-based Curriculum Framework (LOCF) for the B.Sc. (Hons.) degree in Chemistry provides a broad structural framework that can accommodate the current curricular needs as well as gives sufficient flexibility to include changes in content that assume importance as the frontiers of science grow.
- The inherent flexibility in framework allows design of course basket in tune with individual preferences. The basic uniformity in core course design ensures smooth movement across universities in the country.
- The B.Sc. (Hons) programme in Chemistry is designed to develop in students in depth knowledge of the core concepts and principles that are central to the understanding of this core science discipline. Undergraduates pursuing this programme of study go through laboratory work that specifically develops their quantitative and qualitative skills, provides opportunities for critical thinking and team work, and exposes them to techniques useful for applied areas of scientific study.

**Name of course: B.Sc. (H) Physics**

**Programme outcome:**

- The learning outcomes-based curriculum framework for a degree in B.Sc. (Honours) Physics is intended to provide a comprehensive foundation to the subject, and to help students develop the ability to successfully continue with further studies and research in the subject.
- The framework is designed to equip students with valuable cognitive abilities and skills so that they are successful in meeting diverse needs of professional careers in a developing and knowledge-based society. The curriculum framework takes into account the need to maintain globally competitive standards of achievement in terms of the knowledge and skills in Physics, as well develop scientific orientation, enquiring spirit, problem solving skills and values which foster rational and critical thinking.
- Due to the large diversity in India, a central university like the University of Delhi gets students from very different academic backgrounds, regions and language zones. While maintaining high standards, the learning outcome-based curriculum provides enough flexibility to teachers and colleges to respond to diverse needs of

students. The learning outcome-based curriculum framework for undergraduate courses in Physics also allows for flexibility and innovation in the programme design to adopt latest teaching and assessment methods and include introduction to new areas of knowledge in the fast evolving subject domains.

- The process of learning is defined by the following steps which form the basis of final assessment of the achievement at the end of the program.

(i) Development of an understanding and knowledge of basic Physics. This involves exposure to basic facts of nature discovered by Physics through observations and experiments. The other core component of this development is introduction to physics concepts and principles, their theoretical relationships in laws of Physics, and deepening of their understanding via appropriate problems.

(ii) The ability to use this knowledge to analyze new situations and learn skills and tools like laboratory techniques, computational methods, and mathematics to find solutions, interpret results and make meaningful predictions.

(iii) The ability to synthesize the acquired knowledge and experience for an improved comprehension of the physical problems and to create new skills and tools for their possible solutions.

The B.Sc. (Hons.) Physics programme builds on the basic Physics taught at the +2 level in all the schools in the country. Ideally, the +2 senior secondary school education should achieve a sound grounding in understanding the basic Physics with sufficient content of topics from modern Physics and contemporary areas of exciting developments in physical sciences.

The curricula and syllabi should be framed and implemented in such a way that the basic connection between theory and experiment and its importance in understanding Physics is made clear to students. This is very critical in developing a scientific temperament and the urge to learn and innovate in Physics and other sciences. Unfortunately, our school system in most parts of the country lacks the facilities to achieve the above goal, and it is incumbent upon the college/university system to fill the gaps in the scientific knowledge and understanding of the country's youth who complete school curricula and enter university education.

Physics is an experimental and theoretical science that studies systematically the laws of nature operating at length scales from the sub-atomic domains to the entire universe.

The scope of Physics as a subject is very broad. The core areas of study within the disciplinary/subject area of the B.Sc. (Hons.) Physics programme are: Classical and Quantum Mechanics, Electricity and Magnetism, Thermal and Statistical Physics, Wave theory and Optics, Physics of the Materials, Digital Electronics, and specialized methods of Mathematical Physics and their applications in different branches of the subject. Along with the theoretical course work students also learn physics laboratory methods for different branches of physics, specialized measurement techniques, analysis of observational data, including error estimation, and scientific report writing.

- The latest addition to Physics pedagogy incorporated in the LOCF framework is computational physics, which involves adaptation of Physics problems for algorithmic solutions, and modelling and simulation of physical phenomenon.

- The elective modules of the framework offer students choice to gain knowledge and expertise in more specialized domains of Physics like Nuclear and Particle physics, Nanophysics, Astronomy and Astrophysics, etc. and interdisciplinary subject areas like Biophysics, Geophysics, Environmental Physics, Medical Physics, etc.
- The physics-based knowledge and skills learnt by students also equip them to be successful in careers other than research and teaching in Physics.

**Name of course: B.Sc. (H) Zoology**

**Programme outcome:**

- The BSc. Zoology programme is designed to help the students to Gain basic knowledge of various disciplines of Zoology and General biology meant for a graduate and for higher studies. Inculcate interest in nature and its living creatures.
- Make them understand the unity of life with the rich diversity of organisms and their ecological environment and their significances.
- Acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation. Increase their awareness for the conservation of the biosphere.
- Students enrolled in B.Sc. (Hons.) degree program in Zoology will study and acquire complete knowledge of disciplinary as well as allied biological sciences. At the end of graduation, they should possess expertise which will provide them competitive advantage in pursuing higher studies from India or abroad and seek jobs in academia, research or industries.
- Students should be able to identify, classify and differentiate diverse chordates and non-chordates based on their morphological, anatomical and systemic organization. They will also be able to describe economic, ecological and medical significance of various animals in human life. This will create a curiosity and awareness among them to explore the animal diversity and take up wild life photography or wild life exploration as a career option. The procedural knowledge about identifying and classifying animals will provide students professional advantages in teaching, research and taxonomist jobs in various government organizations; including Zoological Survey of India and National Parks/Sanctuaries.
- Acquired practical skills in biotechnology, biostatistics, bioinformatics and molecular biology can be used to pursue career as a scientist in drug development industry in India or abroad. Our students will be acquiring basic experimental skills in various techniques in the fields of genetics; molecular biology; biotechnology; qualitative and quantitative microscopy; enzymology and analytical biochemistry. These methodologies will provide an extra edge to our students, who wish to undertake higher studies.
- In-depth knowledge and understanding about comparative anatomy and developmental biology of various biological systems; and learning about the organization, functions, strength and weaknesses of various systems will let students critically analyse the way evolution has shaped these traits in the human body. Students undertaking skill enhancement courses like aquaculture, sericulture

and apiculture will inculcate skills involved in rearing fish, bees and silk moth which would help them in starting their own ventures and generating self employment making them successful entrepreneurs.

- Acquired skills in diagnostic testings, haematology, histopathology, staining procedures etc. used in clinical and research laboratories will provide them opportunity to work in diagnostic or research laboratory. Deep understanding of different physiological systems and methods available to measure vital physiological parameters and to comprehend the mechanism behind occurrence of different life threatening disease via laboratory examination, assessment of basic physiological functions by interpreting physiological charts will help to find their career options.
- Students undertaking wild life management courses would gain expertise in identifying key factors of wild life management and be aware about different techniques of estimating, remote sensing and Global positioning of wild life. This course will motivate students to pursue a career in the field of wildlife conservation and management.

**Name of course: B.Sc. Prog Life Science**

**Programme outcome:**

B. Sc. (Program) Life Sciences is structured to offer a broad outline within which a holistic biology program could be developed.

It is expected to upgrade the understanding levels of students and to maintain the requisite standard of Life Sciences/Biology Programs across the country.

- It allows the review of the learning outcomes, qualification descriptors, and course-level learning outcomes periodically. Further, it offers innovation and flexibility in designing the syllabi and methods to be adopted facilitating learning assessment.
- Further objective is to enhance the subject knowledge, encouraging the students to be critical thinkers and have a problem-solving approach. Overall, this modified course has been designed to upgrade skills related to biological science giving the students' a competitive edge in securing a career in industry, academia, pharmaceutical research, and as an entrepreneur.
- In B.Sc. (Program) Life Sciences will study and acquire complete knowledge of disciplinary and allied biological sciences. At the end of graduation, they would have expertise which will provide them competitive advantage in pursuing higher studies from India and abroad or seek jobs in academia, research or industries. Students should be able to identify, classify and differentiate in types of chordates and non-chordates based on their morphological, anatomical and systemic organization.
- This will create a curiosity and awareness among them to explore the animal diversity and take up wildlife photography or wildlife exploration as a career option. The procedural knowledge about identifying and classifying animals will help students professional advantages in teaching, research and taxonomist jobs in various Government organizations, such as Zoological Survey of India or National Sanctuaries. Acquired practical skills in biochemistry and

biotechnology can be used in pursuing career as a scientist in pharmaceutical industry in India or abroad. Students will be gaining basic experimental skills in genetics, biotechnology, qualitative and quantitative microscopy, and also enzymology that will give them an edge to pursue higher studies.

- The skill enhancement courses will hone skills in rearing fish, bees and silk moth for generating self-employment. Students can acquire expertise to join clinical and research laboratories for diagnostic assays, hematology, histopathology, staining procedures etc. They will be able to examine and assess some basic physiological functions and interpret physiological charts.

**Name of the course: B.Com (Hons.)**

**Programme outcome:**

B.Com (Hons.) Programme aims to equip students with the knowledge, skills and attitude to meet the challenges of the modern-day business organizations. The curriculum of B.Com. (Hons.) degree provides a carefully selected subject combination of Accounting, Economics, Finance, Management, Tax, Marketing and Law etc.

The programme aims to nurture the students in intellectual, personal, interpersonal and social skills with a focus on Holistic Education and development to make informed and ethical decisions and equips graduates with the skills required to lead management position.

This programme brings out reflective and scientific thinking in the students which makes them inquisitive and curious to get deep insights of the business world and tackle the complex situations with much knowledge and wisdom.

**Name of course : B.Com (P)**

**Programme outcome:**

- This course provides conceptual knowledge of financial accounting and the techniques for preparing accounts in different types of business organizations.
- Understand the theoretical framework of accounting and to prepare financial statements.
- Explain and determine depreciation and value of inventory
- Learn accounting for hire purchase transactions, leases, branches and departments.\
- Understand the concepts of partnership firm and prepare accounts for dissolution of a partnership firm Develop the skill of preparation of trading and profit and loss account and balance sheet using computerized accounting.