

## **BCA**

### **Program Outcomes (PO):**

- Gain a complete exposure to the theories and practices of Computer Application.
- Get transformed into a skilled learner and active programmer, enabling the students to focus on their higher studies.
- Value computer professionals and programmers.
- Explore how the concepts and applications of Computer lead to innovative thinking with a problem-solving attitude.

### **Program Specific Outcomes (PSO):**

- Understand the basic computer knowledge and concept of operating systems.
- Understanding the concept of programming and develop program in C++.
- Understanding the concept of data structure and implementation with C/C++.
- Understanding the concept of DBMS and implementation in MySQL /Oracle.
- Understanding the concept of OOPs and Java programming and develop program in Java.
- Understanding the concept of web technology and its implementation with HTML/CSS/DHTML/PHP.
- Understand the basic concept of data and computer networks.
- Understanding the basic concept of digital electronics.
- Understanding the basic concept of cyber security and cyber law.
- Understanding the basic concept of Artificial Intelligence.

## **Zoology**

### **Program Outcomes (PO):**

- Demonstrate and apply the fundamental knowledge of the basic principles of major fields of Zoology and Modern tools and techniques.
- Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.
- Gain knowledge of small scale industries like sericulture, fish farming, bee keeping, aquaculture, animal husbandry, poultry farm.
- Apply the knowledge and understanding of Zoology to one's own life and work.
- Develops empathy and love towards the animals and consciousness for wild life conservation.

### **Program Specific Outcomes (PSO):**

- Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied, Zoology, Behaviour, Endocrinology, Immunology, Biostatistics, Parasitology, Biochemistry, Evolution, Developmental Biology, Animal biotechnology, Tools and Techniques of Zoology.

- Understand the applications of biological sciences in Apiculture, Aquaculture, Sericulture, Animal Husbandry, Poultry Farm.
- Understand the applications of Zoology in Medicine and daily life. Contributes the knowledge for Nation building and sustainable development.

## **Physics**

### **Program Outcomes (PO):**

The learning outcomes of the undergraduate degree course in physics are as follows:

- In-depth disciplinary knowledge: The student will acquire comprehensive knowledge and understanding of the fundamental concepts, theoretical principles and processes in the main and allied branches of physics.
- Hands-on/ Laboratory Skills: Comprehensive hands-on/ laboratory exercises will impart analytical, computational and instrumentation skills. The students will be able to demonstrate mature skills for the collation, evaluation, analysis and presentation of information, ideas, concepts as well as quantitative and/or qualitative data.
- Role of Physics: The students will develop awareness and appreciation for the significant role played by physics in current societal and global issues. They will be able to address and contribute to such issues through the skills and knowledge acquired during the programme.
- Communication and Skills: Various DSCs, DSEs, SECs, and GEs have been designed to enhance student's ability to write methodical, logical and precise reports. The courses will, in addition, guide the student to communicate effectively through presentations, writing laboratory/ project reports and dissertations.
- Critical and Lateral Thinking: The programme will develop the ability to apply the underlying concepts and principles of physics and allied fields beyond the classrooms to real life applications, innovation and creativity.
- Research skills: The course provides an opportunity to students to hone their research and innovation skills through assignment/internship/dissertation. It will enable the students to demonstrate mature skills in literature survey, information management skills, data analysis and research ethics.

## **Mathematics**

### **Program Outcomes(PO):**

PO1: Ability to develop scientific temper and acquire in-depth knowledge of algebra, calculus, real analysis, complex analysis, topology and several other branches of mathematics. This program helps learners in building a solid foundation for higher studies in mathematics.

PO2: Utilize mathematics to solve theoretical and applied problems by critical thinking, understanding, analysis and synthesis.

PO3. The skills and knowledge gained has intrinsic beauty, which also leads to proficiency in analytical reasoning. This can be utilized in modeling and solving real life problems.

PO4. Ability to apply mathematical tools in Physics, Economics, Optimization and other subjects it will also develop understanding the architecture of curves and surfaces in plane and spaces etc.

## **Hindi**

वर्षीय स्नातक पाठ्यक्रम पूर्ण करने पर विद्यार्थी -

1. भाषा और साहित्य के व्यापक स्वरूप तथा उसके महत्व को समझने में सक्षम हो सकेंगे।
2. भारतीय ज्ञान परम्परा की निरंतरता, उसके महत्व एवं उस ज्ञान परम्परा से स्वयं एवं समाज को समृद्ध करने की दिशा में अग्रसर हो सकेंगे।
3. प्राचीन, मध्यकालीन एवं आधुनिक भारतीय साहित्य की अवधारणा को समझ सकेंगे।
4. अपने विचार एवं भावों को मौखिक और लिखित रूप में अभिव्यक्त करने हेतु सक्षम हो सकेंगे।
5. मानविकी और समाज विज्ञान के विषयों के अंतर्संबंधों को समझ कर अपना दृष्टिकोण व्यापक कर सकेंगे।
6. साहित्य और लोकतत्व एवं लोकजीवन से जुड़कर अपने व्यक्तित्व का विकास कर सकेंगे।
7. विद्यार्थियों में तर्कों एवं प्रमाणों द्वारा प्रत्येक क्षेत्र में निर्णय लेने की क्षमता का विकास हो सकेगा।
8. लैंगिक संवेदनशीलता एवं सद्भाव का विकास हो सकेगा।
9. नवीन संदर्भों में शोधदृष्टि विकसित होगी।
10. आधुनिक तकनीक के साथ हिन्दी के रिश्ते को समझने की क्षमता का विकास होगा।
11. साहित्य के साथ मानव जीवन, विज्ञान तथा पर्यावरण को परिभाषित कर सकेंगे।
12. रोजगार के अवसरों की तलाश, सौंपी गई जिम्मेदारियों के निर्वहन एवं स्वयं का व्यवसाय शुरू करने संबंधी क्षमताओं की समझ का विकास हो सकेगा।

## **English**

### **Program Outcomes (PO):**

PO-1 Utilize efficiently the acquired knowledge of humanities to face the challenges of life.

PO-2 Implement the contributions of great thinkers and transform the society in accordance with local, national and global needs.

PO-3 Prioritize cultural, ethical and moral values through learning experiences for a sustainable development.

PO-4 Understand the cultural values of different countries through their literature. Develop global leadership competencies

PO-5 Enhance leadership qualities, team spirit and communication skills for a better developmental career.

PO-6 Apply the comprehensive learning to attain self-confidence and self-reliance in their chosen career and higher education.

PO-7 Emerge with competency to view challenges and experiences with multiple perspectives through critical thinking.

PO-8 Develop LSRW skills to communicate effectively and appropriately in person and online to facilitate inter-personal relationship with every section of the society.

PO-9 Nurture social concerns and social justice for effective civic life participation and to enhance value systems for assessing moral dimensions at every walk of life.

PO-10 Acquire the ability to simultaneously engage in independent multidisciplinary learning which facilitates lifelong learning.

### **Programme Specific Outcomes (PSOs)**

PSO - 1 Master communication skills for employability and higher education.

PSO - 2 Ascertain specialized knowledge of literature and its backgrounds.

PSO - 3 Interact confidently at the interface between life and self.

PSO-4 Understand the basic tenets of Literature.

PSO-5 Analyse cross-cultural nuances and to assess the underlying human values that connect peoples of all races.

PSO-6 Determine the criss-crossing influencing factors in the fields of History, Literatures of the East and the West, Writings of Men and Women, Psychology and Socio Economics.

PSO-7 Understand the applications of Literary Theories to creatively analyse literature with prismatic interpretation.

PSO-8 Extend the envisioned emotional, social and psychological mellowness in the affairs of the society

PSO-9 Apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.

PSO -10 Identify, analyze, interpret and describe the critical ideas, values, and themes that appear

### **Chemistry**

#### **PROGRAMME OUTCOMES (PO)**

PO-1: B.Sc. Chemistry curriculum is so designed to provide the students a comprehensive understanding about the fundamentals of chemistry covering all the principles and perspectives.

PO-2: The branches of Chemistry such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Analytical Chemistry expose the diversified aspects of chemistry where the students experience a broader outlook of the subject.

PO-3: The syllabi of the B.Sc. Chemistry course are discretely classified to give stepwise advancement of the subject knowledge right through the four years of the term.

PO-4: The practical exercises done in the laboratories impart the students the knowledge about various chemical reagents and reactions. They are also trained about the adverse effects of the obnoxious chemicals and the first aid treatment.

### **PROGRAMME SPECIFIC OUTCOMES (PSO)**

PSO-1: The students will understand the existence of matter in the universe as solids, liquids, and gases which are composed of molecules, atoms and sub atomic particles.

PSO-2: Students will learn to estimate inorganic salt mixtures and organic compounds both qualitatively and quantitatively using the classical methods of analysis in practical classes.

PSO-3: Students will grasp the mechanisms of different types of reactions both organic and inorganic and will try to predict the products of unknown reactions.

PSO-4: Students will learn to synthesize the chemical compounds by manoeuvring the addition of reagents under optimum reaction conditions

### **BOTANY**

#### **Program Outcomes (PO):**

1. Demonstrate and apply the fundamental knowledge of the basic principles of major fields of biology
2. Apply knowledge to solve the issues related to plant sciences with the help of computer technology
3. Apply knowledge for conservation of endemic and endangered plant species

#### **Program Specific Outcomes (PSO):**

1. Collaborate effectively on team-oriented projects in the field of life sciences.
2. Communicate scientific information in a clear and concise manner both orally and in writing.
3. Explain Biodiversity, climate change and plant pathology.
4. Apply Biotechnology, Ecology, Genetics and Plant breeding techniques in plant sciences.
5. Apply knowledge of Medicinal and Economic botany in day to day life.
6. Apply the knowledge to develop the sustainable and eco-friendly technology.

### **Commerce**

#### **Program Outcomes (PO):**

- Develop a strong foundational understanding of commerce, accounting, business, and finance, including the principles of economics, marketing, and taxation, applicable in both national and global contexts.
- Apply analytical and critical thinking skills to solve complex business problems, conduct financial analysis, and make data-driven decisions using both qualitative and quantitative information.

- Cultivate entrepreneurial acumen, innovation, and leadership qualities for establishing and managing business ventures, especially in the context of Start-Up India and Atmanirbhar Bharat initiatives.
- Demonstrate competence in using digital tools, accounting software, and management information systems (MIS) to perform business operations efficiently in the digital era.
- Understand and apply ethical principles in professional practices; promote sustainable business practices and demonstrate responsibility towards society and the environment.
- Exhibit effective oral and written communication, team collaboration, and presentation skills essential for professional success and workplace adaptability.
- Develop abilities in business research methods and apply appropriate techniques for collecting, analyzing, and interpreting data to derive meaningful insights.
- Recognize and adapt to cultural diversity and global business dynamics, and develop the ability to work in international and multicultural environments.
- Engage in continuous learning and self-improvement through professional courses, certifications, and higher education in commerce, accounting, and related fields.
- Acquire knowledge and skills from allied disciplines such as economics, law, management, computer applications, and soft skills to become a well-rounded graduate.

### **Program Specific Outcomes (PSO):**

- Apply principles of accounting, financial reporting, cost accounting, and auditing to prepare and analyse financial statements and evaluate organizational performance.
- Demonstrate comprehensive knowledge of commercial laws, taxation, and regulatory policies governing business operations in India and the global economy.
- Acquire core managerial skills in areas such as human resource management, marketing, operations, and business strategy to effectively lead and manage business functions.
- Understand the structure and functioning of banking, insurance, stock markets, and other financial services sectors, enabling students to pursue careers in finance and banking.
- Utilize business analytics tools, data interpretation techniques, and accounting software (e.g., Tally, Excel, ERP systems) to improve decision-making and operational efficiency.
- Identify business opportunities, prepare business plans, and apply innovation and risk-taking skills necessary for launching and managing start-ups and MSMEs.
- Gain practical knowledge of direct and indirect taxation, GST, and corporate compliance, enabling students to work as tax consultants or in accounting firms.
- Develop an understanding of ethical business conduct, corporate governance, and sustainability practices in line with environmental, social, and governance (ESG) frameworks.