

## **B. Sc II Botany**

### **PROGRAM SPECIFIC OUTCOMES (PSO) OF BOTANY:**

To life science plant sciences is one of the most important basic and applied Subject. Plants synthesize their own food material using water and carbon dioxide in presence of sunlight and releasing oxygen as byproduct. Plants are basis of biodiversity and they fulfill basic needs of all living organism via food, oxygen, etc. We can't imagine life on Earth without plants. This course has been designed to give the fruitful knowledge and commercial skills in the various aspects of plant science. After successful completion of this program students will be able.

PSO 1: To understand the various aspect of plant systematics and anatomical features of higher plant.

PSO 2: To understand the basics of genetics and molecular biology

PSO 3: To understand the plant ecology, phytogeography, center of origin of cultivated plants and utilization of plants.

PSO 4: To understand vital physiological processes in plants and skills of nursery and garden technique



## **B. Sc. I Zoology**

### **Program Outcomes**

- **Program Outcomes (POs): B. Sc. I Zoology**

**PO1:** The students will learn about the basic concepts of Zoology and a platform for the entry of students in post-graduation studies, competitive examinations, paramedical fields, and agricultural business will be prepared.

**PO2:** Students will understand the concepts in zoology and be able to understand, classify, describe, and discuss different aspects of zoology like animal Phyla, conservation of animals, animal physiology, etc.

**PO3:** Students can apply their knowledge to solve problems related to genetics, and ecology and become competent to apply their knowledge of physiology, ethology, and entomology in their day-to-day life.

**PO4:** The students acquire various practical skills and dissection skills.

**PO5:** The students will be able to diagnose problems related to environmental issues, health and hygiene, agriculture and pest management, conservation of natural resources, etc., and try to solve them with scientific aptitude.

**PO6:** The students will apply their knowledge of zoology for the development of entrepreneurship and also practice it in their day-to-day lives.

- **Program Specific Outcomes (PSOs): B. Sc. I Zoology**

**PSO 1:** The students will learn about animal diversity, cell biology, genetics, ecology, ethology, evolution, and entomology.

**PSO 2:** The students will understand various basic concepts and be able to describe them.

**PSO 3:** The students can apply their knowledge to classify, distribute, and organize the animals.

**PSO 4:** The students can solve the problems related to patterns of heredity, pedigree analysis, etc.

**PSO 5:** The students will acquire skills like sketching the diagrams, karyotype analysis, dissection, and other practical skills.



## **B.Sc-I Drug Chemistry Program Outcome**

### **1.Comprehensive Knowledge of Natural Drug Resources:**

Students will gain a deep understanding of natural drug resources, including their identification, extraction, and applications in pharmaceutical sciences.

### **2.Advanced Analytical Skills:**

Students will develop advanced analytical skills necessary for the qualitative and quantitative analysis of drugs and excipients

### **3.Proficiency in Chemistry of Active Pharmaceutical Ingredients (APIs):**

Students will acquire comprehensive knowledge of the chemistry involved in APIs, including the synthesis, structure, and properties of commonly used drugs.

### **4.Understanding Drug Effects on the Human Body:**

Students will learn about the pharmacodynamics and pharmacokinetics of drugs, understanding their effects on the human body and the mechanisms of action.

### **5.Assessment of Drug Toxicity and Impurity Profiles:**

Students will be able to assess the toxicity and impurity profiles of drugs, ensuring safety and efficacy in pharmaceutical applications.

### **6.Knowledge of Pharmaceutical Excipients:**

Students will gain insights into various pharmaceutical excipients, their roles in drug formulations, and their impact on drug stability and delivery.



## **B Sc Computer Science Program Outcomes**

In Computer Science (CS), program outcomes refer to the specific skills, knowledge, and competencies that students are expected to develop by the end of their degree program. These outcomes typically align with accreditation standards such as those set by the Accreditation Board for Engineering and Technology (ABET) or other educational institutions.

Here are the typical program outcomes for a Computer Science program:

### **1. Problem-Solving and Analytical Thinking**

Ability to apply knowledge of mathematics, science, and engineering to solve complex computing problems.

Use computational thinking to break down problems, design algorithms, and develop efficient solutions.

### **2. Software Development and Design**

Ability to design, implement, and evaluate software systems or components that meet desired needs.

Proficiency in various programming languages, tools, and methodologies for creating reliable and maintainable software systems.

### **3. System Design and Integration**

Ability to design and integrate computer-based systems into larger systems, considering the constraints and trade-offs.

Understanding the implications of system integration, ensuring compatibility, and addressing system-level issues such as security, performance, and reliability.

### **4. Computational Theory**

Understanding of the theoretical foundations of computer science, such as algorithms, data structures, automata theory, and computational complexity.

Ability to analyze the efficiency and limitations of algorithms and systems.

### **5. Communication Skills**

Ability to communicate complex technical information clearly and effectively, both in written and oral forms, to diverse audiences. Work effectively in teams, demonstrating leadership, responsibility, and collaboration.



## 6. Ethics and Professionalism

Understanding the ethical, social, and legal issues surrounding the practice of computing.

Awareness of professional responsibility and the impact of computing on society, including privacy concerns, security issues, and digital rights.

## 7. Lifelong Learning and Adaptability

Ability to engage in continuous learning to keep up with emerging technologies and trends in computer science.

Adaptability to new tools, technologies, and methodologies throughout their professional careers.

## 8. Project Management and Teamwork

Ability to manage projects, including the ability to scope, plan, and execute projects in a team environment.

Apply principles of software engineering and project management to produce successful outcomes.

## 9. Security and Privacy

Understanding of security concepts and the application of best practices for developing secure systems.

Knowledge of encryption, authentication, and other techniques to ensure privacy and data protection.

## 10. Application of Theory in Real-World Scenarios

Apply theoretical knowledge to solve real-world problems in areas like machine learning, artificial intelligence, cloud computing, and more.

Design and execute experiments, analyze data, and draw valid conclusions.

These outcomes prepare students to enter the workforce as computer science professionals or pursue advanced study. They emphasize a combination of technical proficiency, critical thinking, and professional skills.