

# Department of Botany University of Kashmir



## **Criterion 1**

- Programme Objectives
- Programme Outcomes





## **Programme Objectives**

### 1. Foundational Knowledge:

• Equip students with a comprehensive understanding of plant biology, including plant structure, function, growth, reproduction, diversity, ecology and molecular biology.

## 2. Critical Thinking and Problem-Solving:

 Foster the ability to critically analyse and assess complex biological problems and develop innovative solutions.

#### 3. Interdisciplinary Integration:

• Encourage the integration of knowledge from related fields such as genetics, biochemistry, and environmental science to address broader biological questions.

#### 4. Sustainability and Conservation:

o Promote an understanding of plant diversity, ecosystem services, and the importance of conservation in the context of global environmental challenges.

### 5. Ethical and Social Responsibility:

o Instill a sense of ethical responsibility and awareness of the societal impact of botanical research and its applications.

#### 6. Professional Development:

o Prepare students for careers in academia, industry, government, and non-governmental organizations, or for further studies leading to a Ph.D. or other advanced degrees.

## **Programme Outcomes**

#### 1. In-depth Knowledge:

o Graduates will possess an advanced understanding of key concepts in botany, including plant physiology, taxonomy, ecology, genetics, and biotechnology.

## 2. Research Competence:

o Graduates will be capable of designing and executing original research projects, utilizing modern techniques and methodologies in botany and related disciplines.

#### 3. Analytical Skills:

o Graduates will demonstrate the ability to critically evaluate scientific data, synthesize information from various sources, and apply it to solve biological problems.

## 4. Practical Expertise:

o Graduates will have hands-on experience with laboratory and field techniques, including the use of advanced instrumentation and technologies in plant science.

#### 5. Career Readiness:

Graduates will be prepared to enter the workforce as botanists, ecologists,
conservationists, or educators, or to pursue further academic qualifications.