

**B.Sc.SEMESTER – III**  
**2024-2025**  
**NEP-2020**



**Program Specific Outcomes (PSOs)**

**SEM-III:**

**SC23MJDSCBOT301: MYCOLOGY AND PHYTOPATHOLOGY**

**Programme specific Learning Outcomes:**

On completion of the course, the students will be able to:

1. Identify true fungi and demonstrate the principles and application of plant pathology in the control of plant disease.
2. Demonstrate skills in laboratory, field and glasshouse work related to mycology and plant pathology.
3. Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies.
4. Identify the common plant diseases according to geographical locations and devise control measures.

**SEM-III:**

**SC23MJDSCBOT301A: ARCHEGONIATE**

**Programme specific Learning Outcomes:**

On completion of this course, the students will be able to:

1. Demonstrate an understanding of archegoniatae, Bryophytes, Pteridophytes and Gymnosperms.
2. Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms.
3. Understanding of plant evolution and their transition to land habitat.
4. Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, and Gymnosperms.

**SEM-III:**

**SC23MDCBOT303: MEDICINAL BOTANY**

**Programme specific Learning Outcomes:**

On completion of the course, the students will be able to:

1. Recognize the basic medicinal plants.
2. Apply techniques of conservation and propagation of medicinal plants.
3. Setup process of harvesting, drying and storage of medicinal herbs.
4. Propose new strategies to enhance growth of medicinal herbs considering the practical issues pertinent to India.

**SEM-III:**

**SC23IKSBOT305: INDIGENOUS MEDICINAL SYSTEM**

**Programme specific Learning Outcomes:**

On completion of the course, the students will be able to:

1. Recognize the basic medicinal plants in the Indian Continent.
2. Apply traditional techniques of conservation and propagation of medicinal plants.
3. Setup traditional process of harvesting, drying and storage of medicinal herbs.
4. Propose new strategies to enhance growth of medicinal herbs considering the practical issues pertinent to the India.

**SEM-III:**

**SC23SECBOT306: MUSHROOM CULTIVATION**

**Programme specific Learning Outcomes:**

On completion of the course, the students will be able to:

1. Recall various types and categories of mushrooms.
2. Demonstrate various types of mushroom cultivating technologies.
3. Examine various types of food technologies associated with mushroom industry.
4. Value the economic factors associated with mushroom cultivation
5. Devise new methods and strategies to contribute to mushroom production



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**2024-2025**  
**NEP-2020**

**Course Outcomes (COs)**

**SEM-III:**

**SC23MJDSCBOT301: MYCOLOGY AND PHYTOPATHOLOGY**

**Course outcomes:**

On completion of the course, the students will be able to:

1. Identify true fungi and demonstrate the principles and application of plant pathology in the control of plant disease.
2. Demonstrate skills in laboratory, field and glasshouse work related to mycology and plant pathology.
3. Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies.
4. Identify the common plant diseases according to geographical locations and devise control measures.

**Pedagogy:** Lectures/ Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.

**SEM-III: SC23MJDSCBOT301A: ARCHEGONIATE**

**Course outcomes:**

On completion of this course, the students will be able to:

1. Demonstrate an understanding of archegoniatae, Bryophytes, Pteridophytes and Gymnosperms.
2. Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms.
3. Understanding of plant evolution and their transition to land habitat.
4. Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, and Gymnosperms.

**Pedagogy:** Lectures/ Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.

**SEM-III:**

**SC23PMJDSCBOT 30 & 301 A: MYCOLOGY AND PHYTOPATHOLOGY & ARCHEGONIATE (Practical)**

**Course outcomes:**

After the completion of the course the students will be able:

1. Understand the instruments, techniques, lab etiquettes and good lab practices for working in a lower groups.
2. Develop skills for identifying Fungi, Lichens, Bryophytes, Pteridophytes, Gymnosperms and using them for Industrial, Agriculture and Environment purposes.
3. Practical skills in the field and laboratory experiments in Mycology, Archegoniate & Pathology.
4. Learn to identify lower group.
5. Can initiate his own Plant & Seed Diagnostic Clinic and
6. Can start own enterprise on lower group products.

**Pedagogy:** Lectures/ Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.



**SEM-III:  
SC23MDCBOT303: MEDICINAL BOTANY  
Course outcomes:**

On completion of the course, the students will be able to:

1. Recognize the basic medicinal plants.
2. This course gives a broader exposure to these very important economic plants in addition to their origin, general information, conservation and ethnobotany.
3. The students who have opted for this course will be knowledgeable on several medicinally important plants.
4. This will help them to pursue their career as economic botanist, conservation biologist, medicinal plants biologist, etc. will be able to deal with ethnobotanist, agricultural and horticultural scientist and social scientists.

**Pedagogy:** Lectures/ Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.

**SEM-III:  
SC23PMDC BOT303: MEDICINAL BOTANY (Practical)  
Course outcomes:**

After the completion of the course the students will be able to:

1. Recognize the basic medicinal plants.
2. This course gives a broader exposure to these very important economic plants in addition to their origin, general information, conservation and ethnobotany.
3. The students who have opted for this course will be knowledgeable on several medicinally important plants.
4. This will help them to pursue their career as economic botanist, conservation biologist, medicinal plants biologist, etc. will be able to deal with ethnobotanist, agricultural and horticultural scientist and social scientists.

Apply theoretical knowledge in utilization, and report generation of economical and medicinal plants. Create awareness on conservation of medicinal plants and use of natural plant products as alternatives to synthetic products.

**Pedagogy:** Lectures, Tutorials, Assignments, Demonstrations, live specimens, Herbarium specimens, Videos, Team based learning, Field visit and report writing.

**SEM-III: SC23IKSBOT305: INDIGENOUS MEDICINAL SYSTEM  
Course outcomes:**

On completion of the course, the students will be able to:

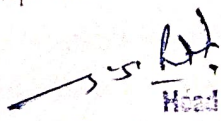
1. To study how indigenous population used nature and natural products as medicine.

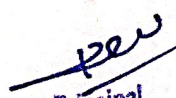
**Pedagogy:** Lectures/ Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.

**SEM-III: SC23SECBOT306: MUSHROOM CULTIVATION  
Course outcomes:**

On completion of the course, the students will be able to:

1. Recall various types and categories of mushrooms.
2. Demonstrate various types of mushroom cultivating technologies.
3. Examine various types of food technologies associated with mushroom industry.
4. Value the economic factors associated with mushroom cultivation
5. Devise new methods and strategies to contribute to mushroom production.

  
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Use of Multimedia / Assignments/ Hands-on experiments/ Demonstrations/ Field visit.