B.Sc.SEMESTER – IV
2024-2025
NEP-2020

Program Specific Outcomes (PSOs)

SEMESTER: IV
MAJOR DISCIPLINE SPECIFIC CORE COURSE:
SEM- IV: SC23MJDSCBOT401: ANATOMY OF ANGIOSPERMS
Programme speci ic Learning Outcomes:
On completion of the course, the students will be able to:
1. Develop an understanding of concepts and fundamentals of plant anatomy examine the internal anatomy of plant systems and organs.
2. Develop critical understanding on the evolution of concept of organization of shoot and root apex.
3. Analyze the composition of different parts of plants and their relationships
4. Evaluate the adaptive and protective systems of plants.

SEM- IV: SC23MJDSCBOT401A: ECONOMIC BOTANY
Programme speci ic Learning Outcomes:
On completion of the course, the students will be able to:
1. Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
2. Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership.
3. Develop a basic knowledge of taxonomic diversity and important families of useful plants
4. Increase the awareness and appreciation of plants & plant products encountered in everyday life.
5. Appreciate the diversity of plants and the plant products in human use.

MINOR DISCIPLINE SPECIFIC CORE COURSE:
SEM- IV: SC23MiDSCBOT402: APPLIED BOTANY
Programme speci ic Learning Outcomes:
On completion of the course, the students will be able to:
1. Understand core concepts of Economic Botany and ecosystems.
2. Increase the awareness and appreciation of plants & plant products encountered in everyday life
3. Appreciate the diversity of plants and the plant products in human use.

SKILL ENHANCEMENT COURSE:
SEM- IV: SC23SECBOT406: PLANT BREEDING
Programme speci ic Learning Outcomes:
On completion of the course, the students will be able to:
1. Understand the concept of different natural resources and their utilization.
2. Critically analyze the sustainable utilization land, water, forest and energy resources.
3. Evaluate the management strategies of different natural resources.
4. Re lect upon the different national and international efforts in resource management and their conservation.

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Course Outcomes (COs)

SEM- IV: SC23MJDSCBOT 401: ANATOMY OF ANGIOSPERMS

On completion of the course, the students will be able to:
1. Develop an understanding of concepts and fundamentals of plant anatomy examine the internal anatomy of plant systems and organs.
2. Develop critical understanding on the evolution of concept of organization of shoot and root apex.
3. Analyze the composition of different parts of plants and their relationships.
4. Evaluate the adaptive and protective systems of plants.

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

SEM- IV: SC23MJDSCBOT 401A: ECONOMIC BOTANY

On completion of the course, the students will be able to:
1. Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
2. Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership
3. Develop a basic knowledge of taxonomic diversity and important families of useful plants
4. Increase the awareness and appreciation of plants & plant products encountered in everyday life
5. Appreciate the diversity of plants and the plant products in human use.

Pedagogy: Lectures/ Use of Multimexperiments/ Demonstrations/ Field visit.
edia / Assignments/ Hands-on

SEM- IV: SC23PMJDSCBOT 401 & 401 A:
ANATOMY OF ANGIOSPERMS & ECONOMIC BOTANY (Practical)

After the completion of the course the students will be able:
1. Develop an understanding of concepts and fundamentals of plant anatomy examine the internal anatomy of plant systems and organs.
2. Analyze the composition of different parts of plants and their relationships.
3. Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
4. Increase the awareness and appreciation of plants & plant products encountered in everyday life.
5. Appreciate the diversity of plants and the plant products in human use.

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

SEM- IV: SC23MiDSCBOT 402: APPLIED BOTANY

On completion of the course, the students will be able to:
1. Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
2. Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership
3. Develop a basic knowledge of taxonomic diversity and important families of useful plants
4. Increase the awareness and appreciation of plants & plant products encountered in everyday life
5. Appreciate the diversity of plants and the plant products in human use.

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

SEM- IV: SC23PMiDSCBOT 402: APPLIED BOTANY (Practical)

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

1. Understand core concepts of Economic Botany and relate with environment, populations, communities, and ecosystems.
2. Develop critical understanding on the evolution of concept of organization of apex new crops/varieties, importance of germplasm diversity, issues related to access and ownership
3. Develop a basic knowledge of taxonomic diversity and important families of useful plants
4. Increase the awareness and appreciation of plants & plant products encountered in everyday life
5. Appreciate the diversity of plants and the plant products in human use.

Pedagogy: Lectures/ Use of Multimedia / Assignments/ Handsexperiments/ Demonstrations/ Field visit.

SEM- IV: SC23SEC BOT406: PLANT BREEDING

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

1. Understand the fundamental concepts of pharmacognosy.
2. Develop the skills of alkaloids extraction.
3. Examine the alkaloids.
4. Evaluate the process of screening alkaloids.

Pedagogy: Lecturexperiments/ Demonstrations/ Field visit. es/ Use of Multimedia / Assignments/ Hands-on

Head
Department of Botany
The HNSB. Ltd. Science College
Himatnagar-383001

The HNSB. Ltd. Science College GUJ. STATE ESD JUNE 1993 Himatnagar

Principal
The HNSB. Ltd. Science College
Himatnagar-383 001