WELCOME TO
DEPARTMENT OF BOTANY

NAAC Peer Team

LAXMI NARAYAN COLLEGE
JHARSUGUDA
ODISHA
http://lncollegejsg.org/default.aspx

Departmental Profile

Table of Contents

Vision

"To excel in plant science education and research, fostering a culture of inquiry and innovation. We aim to equip students with the knowledge and skills to address ecological challenges while advancing scientific understanding. Our vision is to be a leader in botanical studies, inspiring collaboration and discovery that enhances both academic and real-world applications."

We envision our Botany department as a beacon of plant science education and research. We're passionate about inspiring students to uncover the secrets of the plant world and equip them to tackle global issues like climate change and food shortages.

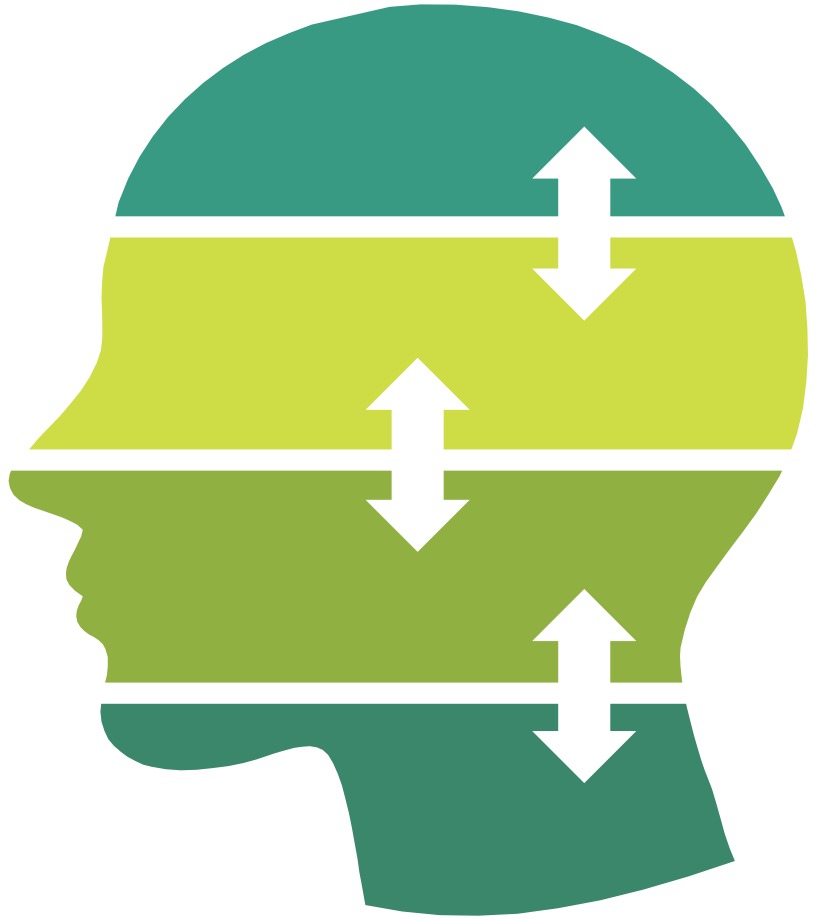
MISSION

Research Excellence:
Conduct research on local and regional flora, utilizing herbarium specimens to study plant taxonomy, distribution, and ecology.

Biodiversity Conservation:
Promote biodiversity conservation through studies that identify and protect critical habitats and endangered plant species.

Student Empowerment:
Cultivate a dynamic learning environment that empowers students through hands-on experiences, field studies, and research opportunities.

Ethnobotanical Studies:
Explore the relationships between plants and cultures, highlighting the importance of traditional knowledge in plant conservation and use.



DEPARTMENT OF BOTANY

TEACHING STAFF	READER	LECTURER
SANCTIONED	01	02
PRESENT	00	02

OUR STAFF MEMBERS

MS. ROJISMITA MAJHI

M.Sc, B.ed

HOD

BOTANY

rojismitamajhi0597@gmail.com

http://lncollegejsg.org/CMS/Staffresume/Rojismita(Botany).pdf

MR. BINOD PARIDA

M.Sc, M.Phil

LECTURER

bndparida@gmail.com

http://lncollegejsg.org/CMS/Staffresume/Binod(Botany).pdf

MS. GOPESHWARI SAHU

M.Sc

LAB ASSISTANT

sahugopeswari@gmail.com

http://lncollegejsg.org/CMS/Staffresume/gopeshwari(Botany).pdf

DEPARTMENT OF BOTANY

NON TEACHING STAFF	LAB ASSISTANT	LAB ATTENDANT	GARDENER
SANCTIONED	01	02	01
PRESENT	01	01	01

MR. GOUTAM BAG - LAB ATTENDANT
MR. DAMBARUDHAR SINGH - GARDENER

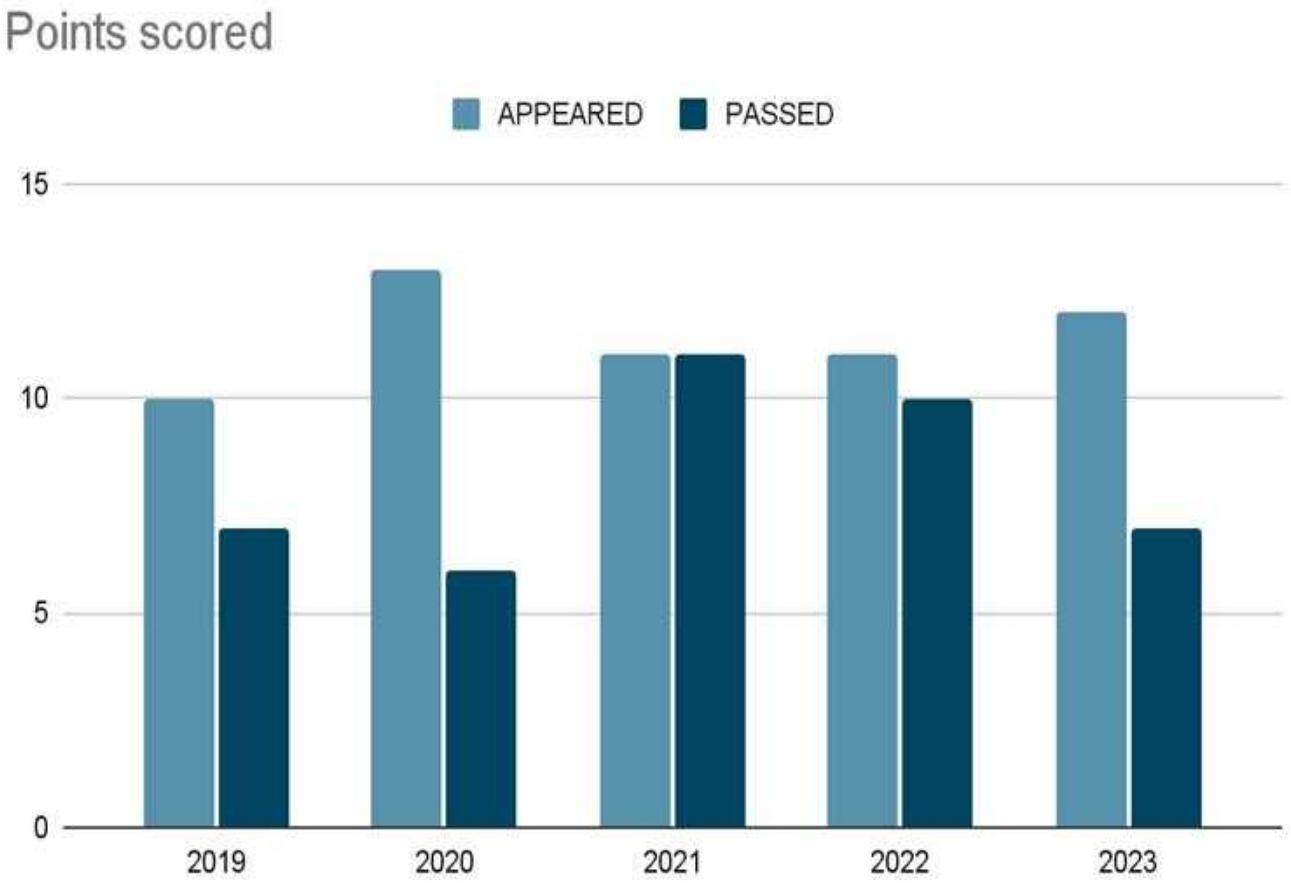
STUDENT STRENGTH

SESSION	+3 (HONS)		
	1st Year	2nd Year	3rd Year
2018-19	12	10	10
2019-20	12	12	10
2020-21	13	11	12
2021-22	14	13	11
2022-23	8	13	12

RESULT STATISTICS

Year	Student Appeared	Passed	Failed	Passed %
2018-19	10	7	3	70
2019-20	13	6	7	46.15
2020-21	11	11	0	100
2021-22	11	10	1	90.90
2022-23	12	7	5	58.33

RESULT ANALYSIS



TOPPERS LIST

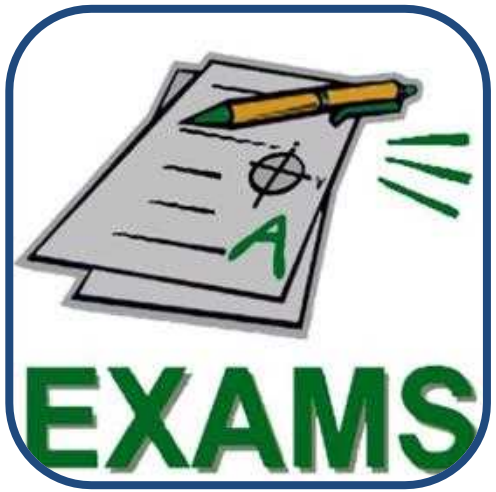
SESSION	NAME & ROLL NO.
2018-19	AKANKSHYA DAS (UNIV RANK 5) (Roll - S03616BOT001)
2019-20	GHANASHYAM JAYPURIA (Roll - S03617BOT003)
2020-21	DEBASHISH DASH (Roll - S03618BOT007)
2021-22	GOPESHWARI SAHU ((Roll - S03619BOT003) MUSKAN PRIYADARSHINI (Roll - S03619BOT011)
2022-23	AKANKSHA BEHERA (UNIV RANK-6) (Roll - S03620BOT001)

STUDENT ASSESSMENT

MONTHLY TEST

QUIZZES

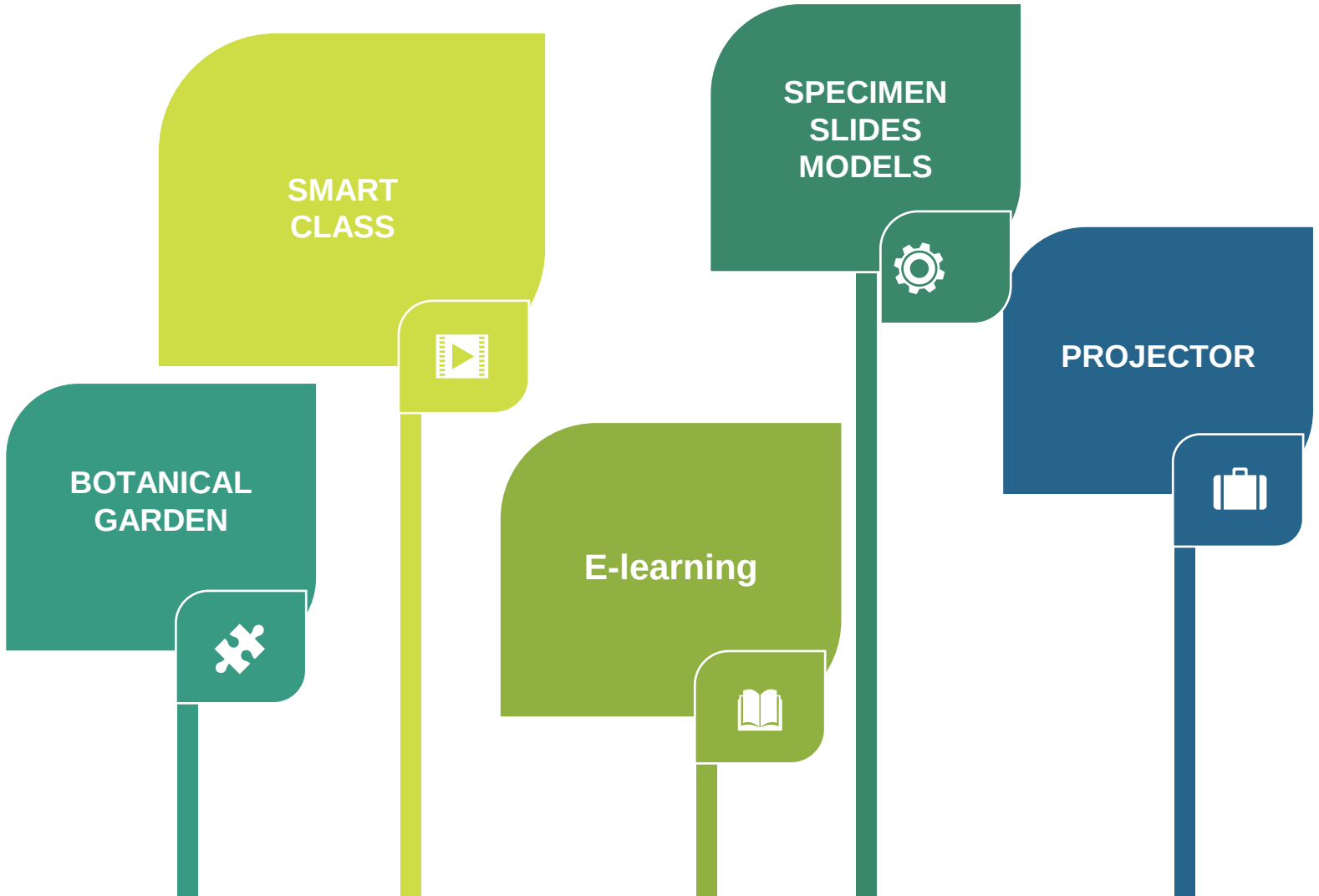
UNIT TEST



CORE VALUES

Why Botany Department is crucial for our institution?

The department offers workshops and training programs to enhance students' practical skills, such as data analysis, scientific writing, and presentation techniques.



SEMINARS CONDUCTED

SESSION	TOPIC AND PRESENTOR
2018-19	**USE OF BIOTECHNOLOGY IN AGRICULTURE -** TANMAY RANJAN BISHI **TRANSLOCATION IN PHLOEM -** RABI NARAYAN MUDULI **THE GREEN JOURNEY -** DEBASHISH DASH **MEDICINAL PLANTS -** SONI PRADHAN **TYPES OF BIOFUELS, ENERGY CONVERSION ROUTE -** GHANASHYAM JAIPURIA
2019-20	**USE OF BIOTECHNOLOGY IN AGRICULTURE**- BY TANMAYA R. BISHI **TRANSLOCATION IN PHLOEM** - BY RABI NARAYAN MUDULI **THE GREEN JOURNEY** - DEBASIS DASH **MEDICINAL PLANTS** - SONI PRADHAN **ECONOMIC IMPORTANCE OF ALGAE** - MUSKAN PRIYADARSHINI **ENDOSYMBIOSIS** - SHASHI YADAV
2020-21	**BACTERIAL NUTRITION**- ITISHREE PRADHAN **BIOTECHNOLOGY- A WAY BEYOND BIOLOG**Y - DEBASIS DASH **PHYTOHORMONES** - jYOTISHMATI SAMAL **PHYTOCHROME** - ALIVA NAIK **ECOLOGICAL FOOTPRINT**- MOHAN PRADHAN
2021-22	**GENE INTERACTION**- AKANKSHA BEHERA **VARIATION IN CHROMOSOME STRUCTURE AND FUNCTION**- KAPIL KU. BEHERA **NUMERICAL CHROMOSOMAL ABERRATION** - BSUSTISMITA SAHU
2022-23	**DNA AS THE CARRIER OF GENETIC INFORMATI**ON- KAPIL KU. BEHERA **PRINCIPLE AND RULES OF IUCN** - JAGATRAM SETH **GENE REGULATION** - AKANKSHA BEHERA **ROLE OF FUNG**I - AAKASH KISHAN **XEROSERE** - PRITI ADE **STELAR SYSTEM IN PTERIDOPHYTES** - ROHNAK SAHU **SOIL FORMATION AND SOIL PROFILE** - DIBYA DASHAYA **HOST PATHOGEN RELATIONSHIP** - MAHESH PRADHAN **EVOLUTION OF SPOROPHYTE IN BRYOPHYTE** - PUJARANI SATPATHY & JAYANTI MUNDA **VARIOUS MODELS OF REPLICATIO**N - ACHAL PATEL **NITROGEN CYCLE** - SABITRI BHOI

TEACHING METHODOLOGY

PRACTICAL CLASS

SMART CLASS

REMEDIAL CLASS

LECTURES

FIELD TRIPS

SEMINARS

TEACHING METHODOLOGY

SEMINAR LIBRARY

SPECIMEN

TEACHER-STUDENT DISCUSSION

LABORATORY

SLIDES

BOTANICAL GARDEN

Programme Outcomes & Programme Specific Outcomes

LAXMINARAYAN COLLEGE, JHARSUGUDA.

DEPARTMENT OF BOTANY – (POs, PSOs, and COs).

1. PROGRAM OUTCOMES OF BACHELOR OF SCIENCE –(BOTANY HONOURS) :

Introduction :

Botany is a broad discipline encompassing various subjects involved with the plants. B.Sc. (Hons.) in Botany programme is designed to provide students with a sound theoretical background and practical training in all aspects of botany and help them develop an appreciation of the importance of botany in all different contexts.

The syllabus for Botany at undergraduate level using the Choice Based Credit System has been framed in compliance with model syllabus given by UGC. While framing the syllabus as per the UGC guidelines, the topics have been kept as generic as possible per our own infrastructure, expertise and strength.

The main objective of framing this new syllabus is to give the students a holistic understanding of the subject giving substantial weightage to both the core content and techniques used in Botany. Keeping in mind and in tune with the changing nature of the subject, adequate emphasis has been given on new techniques and understanding of the subjects.

The syllabus has also been framed in such a way that basic skills of the subjects are taught to the students, and everyone might not need to go for higher studies and the scope of securing a job after graduation will increase. To ensure implementation of a holistic pedagogical model, a number of choices for Generic electives from allied disciplines like Chemistry, Zoology have been included in this framework in addition, considering the employability aspect of B.Sc. Botany Graduates, due importance has been given towards their core competency in this subject matter, both theoretical and practical. To expand the employability of graduates, certain ability enhancement electives to develop language proficiency and many skill bases elective courses from relevant disciplines like chemistry, zoology, mathematics etc. have been introduced. The syllabus will also enable the students to equip for national level competitive exams that they may attempt in future.

1.1. PROGRAM OUTCOMES (POs) :

- PO 1: Sound domain knowledge – Students can acquire a strong, basic knowledge on origin, evolution and diversification in the basic and applied fields of Botany. They can develop relationship with the environments including their economic values.
- PO 2: Laboratory skill – the syllabus has aim to develop good laboratory skills with latest advanced tools, instruments and modern technologies to address emerging problems with scientific viewpoint.
- PO 3: Overall skill – Students will able to think logically and scientifically into structural outline, gather appropriate knowledge and skill for future career, planning and conducting independent project proposal and make appropriate report on it.

- PO 4: Team work – The syllabus will enhance the development of the spirit of the team work, learn to harbour collaborative approach to explore new facts.
- PO 5: Academic and scientific endeavour – Students will gain cognitive development, innovative approach, technical knowledge, entrepreneurship and management skill to set up a new start-up.
- PO 6: Eco-friendly approach – The course has a futuristic approach to develop eco-friendly management practices to make socio-economic upliftment.
- PO 7: Ethical awareness – Development of ethical awareness among students regarding research & publications is another outcome of the proposes course.
- PO 8: Goal of life – The syllabus will help to inculcate visions in students so that they can play a vital role for the advancement of the discipline in the greater benefits of the society.

1.2. PROGRAM SPECIFIC OUTCOMES (PSOs) :

- PSO 1: rational analysis – Development of fundamental concepts, rational thinking & analytical skill.
- PSO 2: Skill development – Development of skill in some area like Mushroom culture technology, Nursery & Gardening, Biofertilizer, vermicomposting etc. Students will gain knowledge through different hands-on training program on agro-economic activities.
- PSO 3: Soft skill proficiency – Development of communication skill, attitudes, leadership quality, ethical values and social awareness.
- PSO 4: Ethical awareness – Development of concept on ethical principles of education and research, responsibility on environment and knowledge of norms of the biodiversity conservations.
- PSO 5: Environmental consciousness – Increase in eco-friendly consciousness, waste management practices to overcome environmental pollution and degradation of environment.
- PSO 6: Scientific attitude – Inculcation of research mind and approach to develop eco-friendly products and knowledge of basic sciences, life sciences, and fundamental process of plants to study analyse any related fact.
- PSO 7: Resource management –Development of knowledge & skill on natural renewable resource management.
- PSO 8: Awareness against diseases – Development of awareness against infectious and fatal diseases.
- PSO 9: Ecological awareness – Understanding the valuable impact of the plant diversity in social and environmental aspects and demonstrate the knowledge and need of sustainable development.
- PSO 10: Ethno-medical practices – Development of knowledge on ethno- medicinal plants, their commercial usage and worldwide applications.
- PSO 11: Social interactions – Development of community link up through regular survey on Health & Nutritional parameters, Ethno- veterinary interests of local villagers.
- PSO 12: Compatible agriculture – Development of concept about significance of crop improvement through genetic engineering in the present context of growing populations.

Course Outcomes

1.3. COURSE OUTCOMES (COs) :

SEMESTER – I.

- **DSC 1 – MICROBIOLOGY AND PHYCOLOGY.**
  - CO1: Developing the concept of Microbes and Algae: classification and types.
  - CO2: Understanding Viruses – their characteristics and structures.
  - CO3: Understanding the facts regarding diseases and awareness.
  - CO4:Examining the general characteristics of Bacteria and their cell reproduction/Recombination.
  - CO5: Characteristics of algae and their reproduction.
  - CO6: Increasing the concept of utilization of Viruses Bacteria and Algae in Human Welfare.
  - CO7: Conduct practical experiments using skills appropriate to the study of the Microbes and Algae.

- **DSC 2 – BIOMOLECULES AND CELL BIOLOGY.**
  - CO1: Understanding the basic concept of Cell Biology.
  - CO2: This course gives a vast knowledge about cell and its different Biomolecules and structures and functions of Biomolecules.
  - CO3: Important information about Bioenergetics, Enzyme which are really important for the living world.
  - CO4: Concept about Cell organelles, Cell cycle, Cell division and multiplications.
  - CO5: Gather knowledge about the Biochemical analysis of different biomolecules, Chromosomes study, different physical process involved in cell.

- **GE 1 – BIODIVERSITY (MICROBES, ALGAE, FUNGI & ARCHEGONIATE).**
  - CO1: Study characterization and economic importance of various groups of algae.
  - CO2: Develop understanding on the concept of microbes their nutrition, growth, metabolism, reproduction and recombination process.
  - CO3: Prepare microbial samples for microscopic observation and temporary and permanent slides for different algal samples.
  - CO4: Understanding the economic importance of microbes in human welfare.
  - CO5: Understand the concept of extinct and extant primitive archaegoniates (bryophytes, pteriodophytes & gymnosperms).
  - CO6: Understand about the morphology, anatomy, of different vegetative parts and reproductive organs with life cycle of different genus.
  - CO7: Gather knowledge about the evolution among the plants and evolution of land plants.

SEMESTER – II.

- **DSC 3 – MYCOLOGY AND PHYTOPATHOLOGY.**
  - CO1: Developing the knowledge on Fungi and basic concept on common Plant diseases.
  - CO2: Practice of skill development in laboratory and field work related to Mycology and Plant pathology.
  - CO3: Understanding the knowledge of allied groups of Fungi and Lichens and the approach of their utilizations in applied fields.

- **DSC 4 – ARCHEGONIATE.**
  - CO1: Understanding of Archegoniate-Bryophytes, Pteridophytes, and Gymnosperms.
  - CO2: Understanding on Morphology, Anatomy and Reproduction of Bryophytes, Pteridophytes, and Gymnosperms.
  - CO3: Understanding of Plant evolution and their transitions to land habitat.
  - CO4: Demonstration of proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes, Gymnosperms.
  - CO5: Understanding of plant evolution through time.

- **GE 2 – PLANT PHYSIOLOGY & METABOLISM.**
  - CO1: Understand water relations of plants with respect to physiological processes.
  - CO2: Explain chemical properties and deficiency symptoms in plants.
  - CO3: Classify aerobic and anaerobic respiration.
  - CO4: Explain the significance of photosynthesis and respirations.
  - CO5: Assess dormancy and germination of seeds.
  - CO6: To acquire adequate knowledge about translocation in plants, carbon dioxide concentrating mechanism, growth regulators and flowering of plants.

SEMESTER – III.

- **DSC 5 – ANATOMY OF ANGIOSPERMS.**
  - CO1: Study the internal structure of plants for identification of the plant.
  - CO2: Know about the different plants organs like Root, Stem and Leaves and their importance.
  - CO3: Develop an understanding of concepts and fundamentals of plant anatomy, examine the internal anatomy of plant systems and organs.
  - CO4: Develop the critical understanding on the evolution of concept of organization of shoot and root apex.
  - CO5: Analyse the composition of different parts of plants and their relationships.
  - CO6: Evaluate the adaptive and protective systems of plants.
  - CO7: Generating in students an interest in plant structure and wood for having a wise approach in timber use, one of the most economically useful resources.

Course Outcomes

➢ **DSC 6 – ECONOMIC BOTANY.**

- CO1: Learn the relationship between plant and people. This paper intersects many fields such as agronomy, chemistry, economic ethno-botany, geography, forestry, horticulture.
- CO2: Understand core concepts Economic Botany and relate with Environment, Populations, Communities, and Ecosystems.
- CO3: Develop critical understanding on the evolution of concept organizations of apex new crops, varieties, importance of germplasm diversity.
- CO4: Develop a basic knowledge of taxonomic diversity and importance families of useful plants.
- CO5: Increase in awareness and appreciation of plants and plant products encountered in everyday life.
- CO6: Appreciate the diversity of plants and the plant products in human use.
- CO7: To know about medicinal properties and uses of plants by folklore and Ayurveda system. Ability of conserve rare and threatened plant species both in-vivo and in-vitro conditions.

➢ **DSC 7 – GENETICS.**

- CO1: Developing of detail knowledge about Mendelian and non-Mendelian genetics with several practical approaches. Here conceptual understanding of laws of inheritance, genetic basic of loci and alleles and their linkage.
- CO2: Development of concept about the nucleic acids & how nucleic acids transport genetics information among offspring.
- CO3: Understanding scientific cause behind several abnormal chromosomal syndromes.
- CO4: Understanding basic causes of gene mutation its detection & DNA- repair mechanism.
- CO5: Examine the structure, function and replication of DNA.
- CO6: Analyse the effect of mutations on gene functions and dosage.
- CO7: Developing critical understanding of chemical basis of genes and their interactions at populations and evolutionary levels.

SEMESTER – IV.

➢ **DSC 8 – MOLECULAR BIOLOGY.**

- CO1: Studies of the structures and chemical properties of DNA and RNA through various through historic experiments, and to develop practical concept.
- CO2: Differentiate the main types of prokaryotes through their grouping abilities and their characteristic.
- CO3: Evaluate the experiments establishing central dogma and genetic code.
- CO4: Gain an understanding of various steps in transcription, protein synthesis and protein modification.

➢ **DSC 9 – PLANT ECOLOGY AND PHYTOGEOGRAPHY.**

- CO1: Understand core concepts of biotic and abiotic environments.
- CO2: Development of concept on global ecological issues.

- CO3: Acquiring knowledge about ecosystems and biodiversity.
- CO4: Knowledge about soils – physical, chemical and biological components.
- CO5: Analysis of the phytogeography or phyto-geographical division of India.
- CO6: Evaluation of energy sources of ecological system.
- CO7: Acquiring the concept of adaptations of plants in relation to light, temperature, water, wind, and fire.
- CO8: Development of skills for ecological practices.
- CO9: Knowledge about the distribution of plants and there arrangement – both natural and manmade are studied for having a total view to relate the distribution pattern of plants to establish more sustainable plant community systems in the world.

➢ **DSC 10 – PLANT SYSTEMATICS.**

- CO1: Knowledge about appropriate method of Identification of plants to contribute classifications to trace the evolution and interpretation among the plants.
- CO2: Understanding the principles of general taxonomy and nomenclatural rules.
- CO3: Explanation of concept of species.
- CO4: Development of the concept to classify plants.
- CO5: Recognition of the importance 0of Herbarium, virtual herbarium and Botanic garden.
- CO6: Interpretation the rules of ICN in botanical nomenclature.
- CO7: Assessment of terms and concepts related to phylogenetic systematics.

SEMESTER – V.

➢ **DSC 11 – REPRODUCTIVE BIOLOGY OF ANGIOSPERMS.**

- CO1: The students will be able to understand different reproductive parts of angiosperms and their functions. They also study about different kind of pollen grain, their structure and functions and also their effects on animals.
- CO2: Palynology involved in plant identifications.
- CO3: Important to learn about various plants parts, embryonic development, breeding activity and conservation techniques.
- CO4: Recall the history of reproductive biology of angiosperms & recognise the importance of genetic and molecular aspects of flower development.
- CO5: Evaluate and understand structure and functions of different reproductive structures.
- CO6: Gain knowledge about Self-incompatibility in Pollination and Fertilization.

➢ **DSC 12 – PLANT PHYSIOLOGY.**

- CO1: Understand the Water relation of plants with respect to various physiological processes.
- CO2: Explain chemical properties and deficiency symptoms in plants.
- CO3: Explain the significance of nitrogen fixation.

Course Outcomes

- CO4: Students adequate the knowledge of translocations in plants.
- CO6: Acquire adequate knowledge about plant growth regulators, phytochrome and flowering of plants.

➢ **DSE 1 – ANALYTICAL TECHNIQUES IN PLANT SCIENCES.**

- CO1: Develop conceptual understanding of cell wall degradation enzymes and cell fractionation.
- CO2: Classify different types of chromatography techniques.
- CO3: Explain the principles of light microscopy, compound microscopy, fluorescence microscopy etc.
- CO4: Apply suitable strategies in data collections and disseminating research findings.

➢ **DSE 2 – NATURAL RESOURCES MANAGEMENT.**

- CO1: Understanding the idea of resources and examples of natural resources.
- CO2: Development of the concept regarding the sustainability of using natural resources.
- CO3: Develop idea on national and international efforts in resource management to make them sustainable.

SEMESTER – VI.

➢ **DSC 13 - PLANT METABOLISM.**

- CO1: Understanding the metabolism of plants and enzymes with respect to various physiological processes.
- CO2: Explanation of chemical properties carbon compounds produced in plants.
- CO3: Explanation of the significance of carbon metabolism in plants.
- CO4: Acquiring the adequate knowledge of metabolism in plants.
- CO5: Explain the ATP-synthesis.
- CO6: To acquiring adequate knowledge about nitrogen metabolism in plants.
- CO7: Explanation of the metabolism of signal transduction.

➢ **DSC 14 – PLANT BIOTECHNOLOGY.**

- CO1: Understand the core concepts and fundamentals of plant biotechnology and genetic engineering.
- CO2: Develop their competency on different types of plant tissue culture.
- CO3: Analyse the enzymes and vectors for genetic manipulations.
- CO4: Examine gene cloning and evaluate different methods of gene transfer.
- CO5: Critically analyse the major concerns and applications of transgenic technology.
- CO6: To learn about gene cloning, recombinant DNA technology and bioinformatics includes recent biotechnological advancement related to genomics.
- CO7: Acquire the knowledge about gene transfer and applications biotechnology.

- CO8: Acquire the knowledge about tissue culture techniques, restriction digestion, isolation and electrophoresis of plasmid DNA.

➢ **DSE 3 – HORTICULTURAL PRACTICES & POST HARVEST TECHNOLOGY.**

- CO1: Understanding the horticultural practices as a livelihood occupations.
- CO2: Establishment of the knowledge of using plants as economical and aesthetic values.
- CO3: Knowledge of keeping the plant materials in storage and to visualize the post-harvest problems.
- CO4: To know the tricks of the trade of the horticultural products.

➢ **DSE 4 – REASEARCH METHODOLOGY.**

- CO1: Understand the concept of research and different types of research in the context of biology.
- CO2: Develop laboratory experiment related skills.
- CO3: Develop competence on data collection and process of scientific documentation.
- CO4: Analyse the ethical aspects of research.
- CO5: Evaluate the different methods of scientific writing and reporting.

DEPT. TIME TABLE

LAXMI NARAYAN COLLEGE, JHARSUGUDA.
(DEPARTMENT OF BOTANY)

W.E.F – 01/08/2024

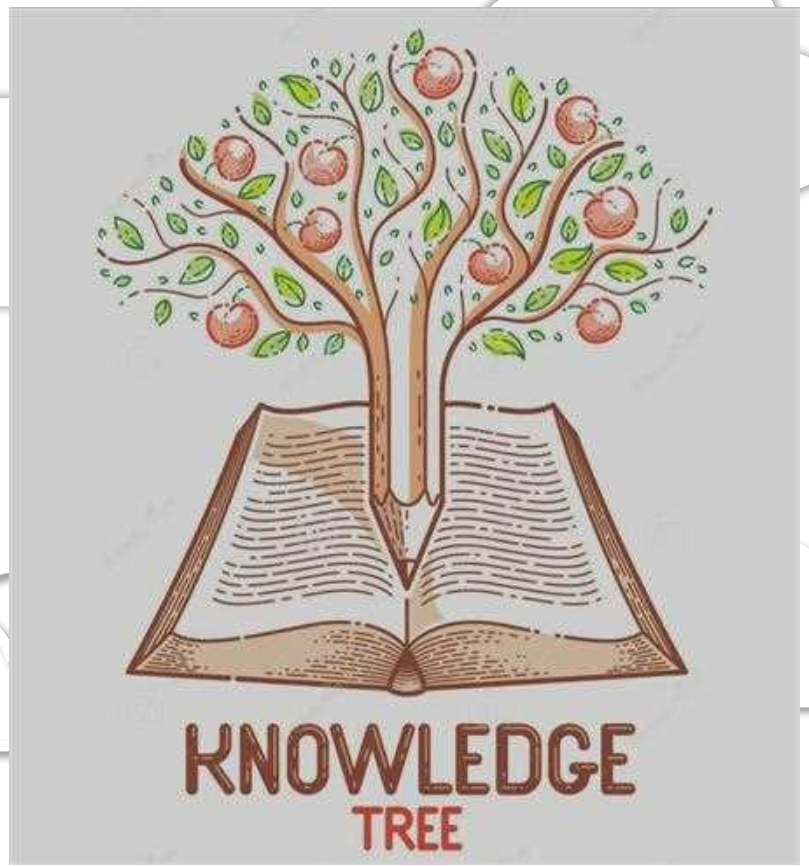
Day	9:00 AM	9:45 AM	10:30 AM	11:15 AM	12:00 PM	12:45 PM	1:30 PM	2:15 PM	3:30 PM
MON	+3 1ST YR DSC PRACTICAL, PH			+ 3 3RD YR DSC PRACTICAL, PH			AECC – 102	Extra class for slow learner – 2ND YR - 24, BP	
	3RD YR – 18, RSM	3RD YR – 18, RSM	3RD YR – 18, BP	2ND YR – 18, BP		1ST YR – 24 , BP			
			2ND YR – 24, RSM		1ST YR G.E – 24, RSM				
	+2 1ST YR SC. (GR-5)					+2, 2ND YR SC.(GR- 4)			
TUE	+3 1ST YR DSC PRACTICAL, PH			+ 3 3RD YR DSC PRACTICAL, PH				Extra class for slow learner – 1ST YR - 24, RSM	
	3RD YR – 18, BP	3RD YR – 18, BP	3RD YR – 18, RSM	2ND YR – 18, RSM		2ND YR – 24, BP	2ND YR EV – 102		
				1ST YR – 24 BP	1ST YR G.E – 24, RSM		+2 I YR -29, RSM		
	+2 1ST YR SC. (GR-6)					+2, 2ND YR SC.(GR- 5)			
WED	+3 2ND YR DSC PRACTICAL			+ 3 3RD YR DSC PRACTICAL, PH			+3 1ST YR G.E PRACTICAL, PH		
	3RD YR – 18, RSM	3RD YR – 18,RSM	3RD YR – 18, BP	2ND YR – 18, BP			3RD YR EV – 102	Extra class for slow learner – 3RD YR -24, RSM	
	+2 II YR – 29, BP			1ST YR – 24, RSM	1ST YR G.E – 24, BP				
	+2 1ST YR SC. (GR-4)					+2, 2ND YR SC.(GR- 6)			
THU	+3 2ND YR DSC PRACTICAL, PH			+ 3 3RD YR DSC PRACTICAL, PH					
	3RD YR – 18,BP	3RD YR – 18,BP	3RD YR – 18, RSM	2ND YR – 24,RSM		1ST YR -24,RSM	AECC -102		
		+2 II YR - 29 ,RSM			1ST YR G.E – 24, BP	SECC – 102			
FRI	+3 2ND YR DSC PRACTICAL, PH								
	3RD YR – 18, RSM	3RD YR – 18, BP	2ND YR – 24, RSM	2ND YR – 24,BP	1ST YR – 24, RSM	1ST YR-24,BP	1ST YR EV – 102		
					2ND YR – 18, BP	SECC – 102			
SAT									
	3RD YR – 18, BP	3RD YR – 18,RSM	2ND YR – 24, BP	2ND YR – 24, RSM	2ND YR – 18, RSM	1ST YR-24,RSM	AECC – 102	Seminar	
				1ST YR – 24, BP	+2 I YR -29,BP	SECC – 102			
	+2 1ST YR SC. (GR-3)					+2, 2ND YR SC.(GR- 3)			

- RSM – Rojismita Majhi (Lecturer in Botany)
- BP – Binod Parida (Lecturer in Botany)
- PH – Prasanta Hembram(Lab Demonstrator in Botany)

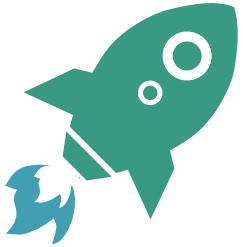
DEPARTMENT LIBRARY

TEXT BOOKS

320



INTERNET FACILITY



OPEN ACCESS JOURNALS

Annals of Botany-
https://academic.oup.com/jxb/

Journal of Experimental Botany
https://www.google.com/url?sa=E&source=gmail&q=https://academic.oup.com/aob/

REFERENCE BOOKS

50

BOTANICAL GARDEN

A botanical garden is often arranged according to their taxonomic relationships or geographic origins. They serve as educational, research, and conservation centers. Botanical gardens also play a crucial role in plant conservation efforts, protecting endangered species and promoting sustainable practices.

The Botanical Garden of L. N. Jharsuguda is of 4800 sq. feet. and the following plants are available in it.

1. *Acalypha wilkesiana* F:Euphorbiaceae
2. *Aegle marmelos* L.: Rutaceae
3. *Aloe vera* L. Burm. f.: Liliaceae
4. *Amaryllis belladonna* L.: Amaryllidaceae
5. *Amomum aromaticum* Roxb.: Zingiberaceae
6. *Andrographis paniculata* (Burm.) Nees F: Acanthaceae
7. *Araucaria columnaris*
8. *Araucaria heterophylla*
9. *Argemone mexicana* L.: Papaveraceae
10. *Aristolochia* sp.: Aristolochiaceae
11. *Aralia* sp.: Araliaceae
12. *Asparagus racemosus* Willd.: Liliaceae
13. *Azadirachta indica* A. Juss.: Meliaceae
14. *Boerhaavia diffusa* L.: Nyctaginaceae
15. *Caesalpinia inermis* L.: Fabaceae (Leguminosae)

16. *Caladium bicolor* F: Araceae
17. *Calathea makoyana* F: Maranthaceae
18. *Calotropis procera* L., R.Br. F: Asclepiadaceae
19. *Canna indica* L.F: Cannaceae
20. *Carica papaya* Caricaceae
21. *Casuarina equisetifolia* L.F: Casuarinaceae
22. *Chlorophytum comosum* F: Asparagaceae
23. *Clerodendrum infortunatum* F: Lamiaceae
24. *Codiaeum variegatum* F: Euphorbiaceae
25. *Coleus blumei* F: Lamiaceae
26. *Cordyline fruticosa* F: Agavaceae
27. *Cordyline terminalis* F: Asparagaceae
28. *Crinum asiaticum* L.F Amaryllidaceae
29. *Crossandra undulaefolia* L. (Nees) F.: Acanthaceae
30. *Crossandra infundibuliformis* F.: Acanthaceae
31. *Cupressus* sp. F: Cupressaceae
32. *Cycas circinalis* F: Cycadaceae
33. *Cycas rumphii* F: Cycadaceae
34. *Cynodon dactylon* L. F: Poaceae

35. *Dahlia tuberosa* F: Asteraceae
36. *Dianthus caryophyllus* L.F: Caryophyllaceae
37. *Discocalyx cybianthoides* F: Primulaceae
38. *Dracaena marginata* F: Liliaceae
39. *Duranta plumieri* L.F: Verbenaceae
40. *Eclipta prostrata* L.F: Asteraceae
41. *Euphorbia heterophylla* L.F: Euphorbiaceae
42. *Euphorbia neriifolia* L.F: Euphorbiaceae
43. *Euphorbia tirucalli* L.F: Euphorbiaceae
44. *Gardenia florida* L.F: Rubiaceae
45. *Gerbera jamesonii* F: Asteraceae
46. *Goeppertia makoyana* F: Maranthaceae
47. *Hibiscus rosa-sinensis* L.F: Malvaceae
48. *Howea forsteriana* F: Arecaceae
49. *Hypoestes phyllostachya* F: Acanthaceae
50. *Ixora coccinea* L.F: Rubiaceae
51. *Jasminum auriculatum* Vahl. F: Oleaceae
52. *Jasminum sambac* L. F: Oleaceae
53. *Justicia gendarussa* Burm F: Acanthaceae
54. *Lantana camara* L.F: Verbenaceae

55. *Mentha piperita* L.: Lamiaceae
56. *Mentha viridis* L.: Lamiaceae
57. *Microsorum pustulatum*: Polypodiaceae
58. *Mimusops elengi* L.: Sapotaceae
59. *Mirabilis jalapa* L.: Nyctaginaceae
60. *Mussaenda philippica*: Rubiaceae
61. *Murraya exotica* L.: Rutaceae
62. *Murraya koenigii* L.: Rutaceae
63. *Nephrolepis exaltata*: Nephrolepidaceae
64. *Nephrolepis duffii*: Nephrolepidaceae
65. *Ocimum sanctum* L.: Lamiaceae
66. *Opuntia littoralis*: Cactaceae
67. *Oxalis corniculata* L.: Oxalidaceae
68. *Oxalis corniculata* L.: Oxalidaceae
69. *Pandanus baptistii*: Pandanaceae
70. *Pedilanthus tithymaloides* L.: Euphorbiaceae
71. *Peperomia clusiifolia*: Piperaceae
72. *Petunia hybrida*: Solanaceae
73. *Pinus roxburghii*: Pinaceae
74. *Piper betle* L.: Piperaceae
75. *Pithecellobium dulce* Roxb.: Mimosaceae
76. *Polyscias guilfoylei*: Araliaceae

77. *Polyscias scutellaria* F: Araliaceae
78. *Psidium guajava* L.: Myrtaceae
79. *Pteris ensiformis* F: Polypodiaceae
80. *Pupalia atropurpurea* L.: Amaranthaceae
81. *Rauwolfia serpentina* L.: Apocynaceae
82. *Rosa indica* L.: Rosaceae
83. *Sansevieria cylindrica* F: Asparagaceae
84. *Sansevieria kraussiana* F: Asparagaceae
85. *Scadoxus multiflorus* F: Amaryllidaceae
86. *Schefflera arboricola* F: Araliaceae
87. *Selaginella sp.* F: Selaginellaceae
88. *Tabernaemontana coronaria* R.Br. F: Apocynaceae
89. *Tecoma stans* F: Bignoniaceae
90. *Thuja orientalis* L.: Pinaceae
91. *Tradescantia bicolor* L.: Commelinaceae
92. *Turnera ulmifolia* L.: Turneraceae
93. *Vinca rosea* L.: Apocynaceae
94. *Viola tricolor hortensis* (Panby) F: Violaceae
95. *Withania somnifera* L.: Solanaceae

REPUTED ALUMNI

- ★ **Dr. S.N. Panda, Director Research, Chitkara University, Punjab**
- ★ **Dr. Bijayalaxmi Bohidar, Reader in Botany, Womens College, Jharsuguda**
- ★ **Miss Summy Ray, Lecturer in Botany, Womens College, Jharsuguda**
- ★ **Smt. Sujata Sahu, Environmental Advisor, OPGC Bandhbahal.**
- ★ **Smt. Ahalya Naik, Teacher, Talpatia High School.**

BOTANY FAMILY

WELCOME MEET FRESHERS

TEACHER'S DAY

FIELD TRIP

TO KRISHI VIGYAN KENDRA
Jharsuguda

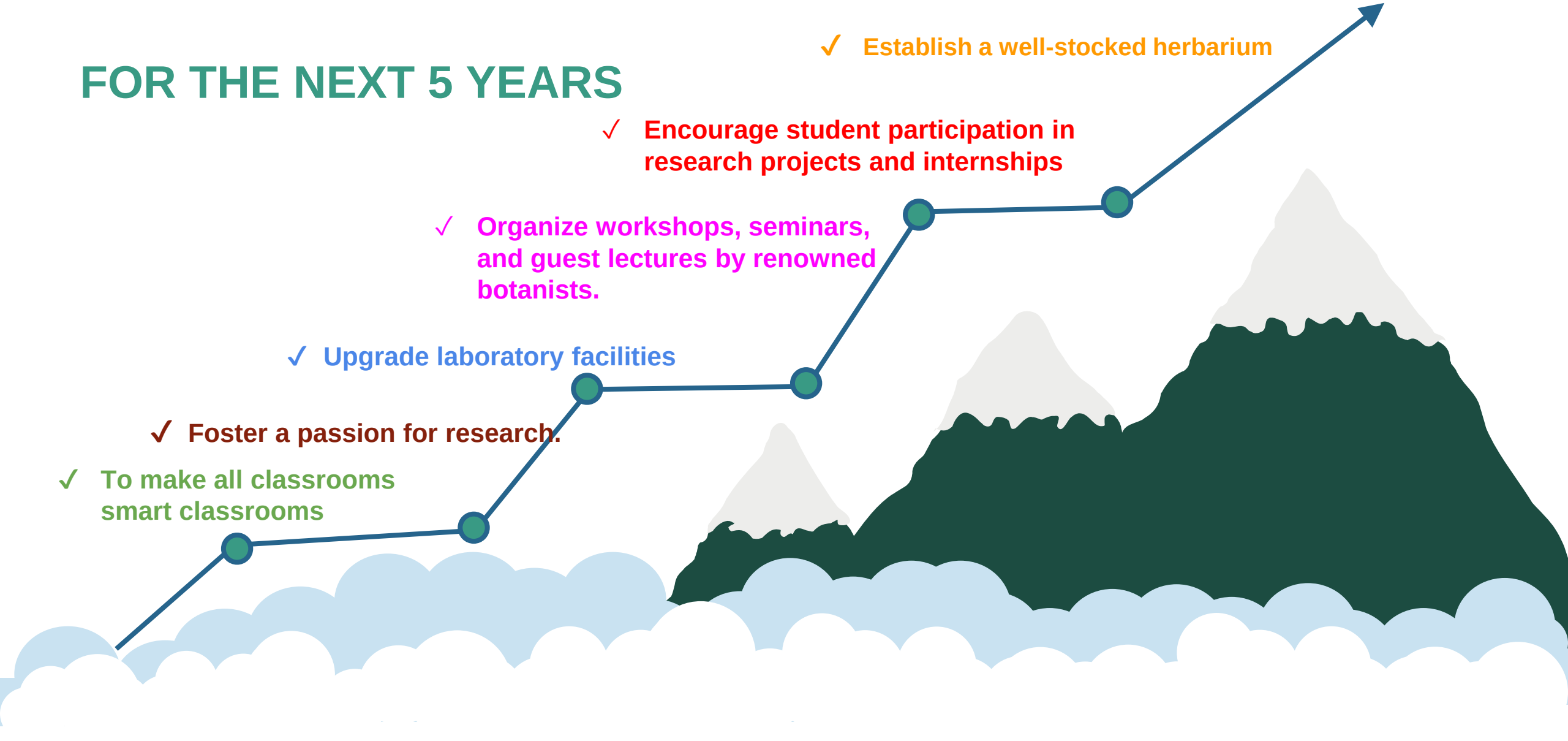
RICE EXHIBITION

BOTANY LABORATORY

PLAN OF THE DEPARTMENT

FOR THE NEXT 5 YEARS

- ✓ To make all classrooms smart classrooms
- ✓ Foster a passion for research.
- ✓ Upgrade laboratory facilities
- ✓ Organize workshops, seminars, and guest lectures by renowned botanists.
- ✓ Encourage student participation in research projects and internships
- ✓ Establish a well-stocked herbarium




THANK YOU