

# INDIRA GANDHI GOVT. COLLEGE PANDARIYA

## Department of Botany

B.Sc. Program Outcomes:-

B.sc Program Specific Outcomes (PSOS):-

By the end of this course, the students will be able to:-

- 1- Understand the basic concepts of lower group plants and morphology of higher groups.
- 2- Understand the evolution, classification, anatomical details of higher group plants.
- 3- Analyze the cell organelles and application of genetics, molecular biology in plant breeding
- 4- Identify the bacteria, viruses and plant pathogen
- 5- Analyze metabolic activities of plants
- 6- Understand the application of genetic engineering for the improvements of plants
- 7- Understand the basic concepts of ecology
- 8- Perform the procedure of laboratory technique in biochemistry, biotechnology and utilization of plants.

B.Sc Course Objectives :-

S. No.	Class	Course (Paper)	Course Outcomes
1	B.Sc- I year	Bacteria, Viruses, Fungi, Lichens and Algae	<ol style="list-style-type: none"><li>1. Understand the basic concept of bacteria, viruses and mycoplasma.</li><li>2. Describe the classification general characteristics of Algae.</li><li>3. Analyze economic importance of bacteria, virus and algae.</li><li>4. Discuss the life-cycle of micro organism and algae</li></ol>
		Bryophytes, pteridophytes, gymnosperms and Palaeobotany	<ol style="list-style-type: none"><li>1. Compare lower group of plants with higher lower group.</li><li>2. Identify the different plant diseases.</li><li>3. Understand the economic importance of fungi, lichens and bryophytes.</li><li>4. Discuss the classification of fungi and bryophyte.</li><li>5. Explain the classification of pteridophyta and gymnosperm.</li><li>6. Describe the economic importance of pteridophyta and gymnosperm.</li></ol>
2	B.Sc- II year	Diversity of Seed Plants and their Systematic	<ol style="list-style-type: none"><li>1. Understand the paleobotany and geological time scale.</li><li>2. Identify the different types of fossils.</li><li>3. Explain the morphology and modification of plants Compare the types of inflorescence and fruits.</li><li>4. Describe the parts of flower Describe</li></ol>

*Chitras*

			<p>general taxonomic rule of plant classification.</p> <ol style="list-style-type: none"> <li>5. Discuss the principles of botanical nomenclature.</li> <li>6. Criticize the classification of angiosperm.</li> </ol>
		Structure, Development and Reproduction in Flowering Plants	<ol style="list-style-type: none"> <li>1. Preparation of herbarium.</li> <li>2. Analyze the floral formula of monocot and dicot families.</li> <li>3. Perform the procedure of cytological techniques.</li> <li>4. Analyze the biostatistics data.</li> <li>5. Understand and identify the plants under natural environment Compare the types of inflorescence and fruits.</li> <li>6. Describe the parts of flower.</li> </ol>
3	B.Sc- III year	Plant Physiology, Biochemistry and Biotechnology	<ol style="list-style-type: none"> <li>1. Describe the plant growth and its growth regulators.</li> <li>2. Describe the seed-dormancy and methods to break-dormancy.</li> <li>3. Describe the plant-defense and role of secondary metabolites.</li> <li>4. Discuss plant tissue culture technique and its application.</li> <li>5. Discuss the advantages and disadvantages of genetic-engineering.</li> </ol>
		Ecology and Utilization of plants	<ol style="list-style-type: none"> <li>1. Compare the various ecological successions.</li> <li>2. Explain different types of environmental pollution and its management.</li> <li>3. Understand about the renewable and non-renewable natural sources.</li> <li>4. Analyze the principle, types, and application of instruments.</li> <li>5. Explain morphology utilization and chemical-constituents of different plants.</li> </ol>

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