

**Program Outcomes (Pos)
Program Specific Outcomes (PSOs)
& Course Outcomes
For
BOTANY
(2021- 2022)**



**DEPARTMENT OF BOTANY
THE H. N. S. B. LTD. SCIENCE COLLEGE
N.H. - 48, MOTIPURA,
HIMATNAGAR (S. K.)
GUJARAT (383001)**

Program Outcomes(Pos)

PO-1	Critical Thinking: To mould a responsible citizen who is aware of most basic domain-independent knowledge, including critical thinking and communication.
PO-2	Social interaction: Elicit views of the others mediate disagreement and help reach conclusions in group settings.
PO-3	Environment and sustainability: Understand the issues of environmental contexts and Sustainable development.
PO-4	Ethics: Students will demonstrate and understanding of major concepts in all disciplines of Botany.

Program Specific Outcomes (PSOs)

PSO-1	Understand the nature and basic concepts of cell Biology, Biochemistry, Taxonomy, Anatomy, Ecology, cryptogams, Genetics Ethno botany and plant Physiology.
PSO-2	Analyze the relationships among animals, plants and Microbes
PSO-3	Perform Procedures as per Laboratory standered in the areas of Biochemistry, Taxonomy, Anatomy, Ecology, cryptogams, Genetics Ethno botany and plant Physiology.

Course Outcomes (COs)

Course	Outcome
CC-BOT-321 PC-BOT-321	Chemical Nature of genetic materials: Molecular structure of DNA & RNA, Genetic code and Translation. Defense mechanisms in plants, Dissemination of plant pathogens & Study of Lichens & Angiosperm Families, Distinguishing characters and classification as per Bentham and hookers system.
CC-BOT-322 PC-BOT-322	Biochemistry- Study of Lipids, Vitamins and Enzymes. Plant Physiology-Translocation of food in plant, light reaction, photo-phosphorylation, path of Carbon in photosynthesis. Respiration, Photoperiodism, seed dormancy, physiological role of phytohormones.
CC-BOT-323 PC-BOT-323	General study of Economic importance of oil seeds, fibers, medicinal plants, Dyes & wood. Plant tissue culture & Biotechnology- Nutrition medium, types of culture, Recombination DNA technology. Genetics- Sex Determination and sex linkage, Maternal effects and cytoplasmic heredity.Energy flow in the ecosystems, ProductionEcology.
CC-BOT-324 PC-BOT-324	Plant anatomy: Root-Stem transition, Anatomy in relation to Taxonomy, Methods & Anomalous Secondary growth. Plant Breeding: Introduction, history, evolution, Patterns and scope and objectives of Crop plants. Types of Artificial Vegetative Reproduction, Selection in Self-Pollinated Crops.Breeding Methods and Hybrid Vigour.

ES-BOT-302
Fresh Water Ecology

Study of Fresh water, Limnology, lakes, Benthos, Bogs, Marshes and Swamps. Properties and types of Fresh water, structure of lake. Aquatic food web and food pyramids, energy flow, Threats to aquatic Ecosystem, Global issues and legislation for conservation and management.