2.6.1

Program Outcomes (Pos)
Program Specific Outcomes (PSOs)
& Course Outcomes
For

BOTANY

(2020- 2021)

Quality Science Education Since 1993

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

Program Outcumes(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-101 **PC-BOT-101**	*Develop understanding on the concept of microbial nutrition. *Classify viruses based on their characteristics and structures. *Develop critical understanding of plant diseases and their remediation. *Examine the general characteristics of bacteria and their cell reproduction/recombination. *Increase the awareness and appreciation of human friendly viruses. bacteria, algae and their economic importance. *Conduct experiments using skills appropriate to subdivisions.
CC-BOT-201 **PC-BOT-201**	*Develop understanding on chemical bonding among molecules. *Identify the concept that explains chemical composition and structure of cell wall and membrane. *Classify the enzymes and explain mechanism of action and structure. *Compare the structure and function of cells and explain the development of cells. *Describe relationship between the structure & function of bimolecular.
ES-BOT-101 **Horticulture**	*Understand the different classification of horticultural crops, nursery management and use of technology in horticulture. *Develop their competency on pre and post-harvest technology in crops. *Analyze the methods of weed control and harvest treatment and economic implications of cultivation of tropical and sub-tropical of crops. *Importance floriculture and contribution spices & condiments economy.

ES-BOT-201 Natural Resource Management	*Understand the concept of different natural resources & their utilization. *Analyze sustainable utilization land, water, forest & energy resources. *Evaluate the management strategies of different natural resources. *Different national & international efforts in resource management& conservation
CC-BOT-211 PC-BOT-211	Study of plant morphology of Inflorescence and parts of flowers. Highlights structural development of Gymnosperm plants from zygote to the nature stage. Introduction, formation and types of fossils, study through demonstrate to plant organ fossils. The structure, function of cell wall and the basic framework of cell wall and plasma membrane permeability, and studied of cell division process.
CC-BOT-212 PC-BOT-212	Structure and properties of water. Types and properties of solutions and plant water relations through low of osmosis. Study of structure, characters and methods of plant community. Study of ecological adaptations. Heredity and variation at molecular and cellular levels.
ES-BOT-211 DNA-a molecule of life	Introduction, brief history and structure of DNA. With physical properties and applications of DNA.
ES-BOT-213 Biodiversity	Introduction of various ecosystem diversity and value of biodiversity. Biogeographically classification of India and conservation of biodiversity. India as a mega diversity nation, threats to biodiversity.
CC-BOT-221 PC-BOT-221	Study of morphology of special inflorescence and fruits. General characters of angiosperms and life cycle of sunflower and maize Classification system of angiosperms by Bentham and Hooker, and also study of families. Know about Meristems, mechanical and conducting tissue system and secondary growth of plants.
CC-BOT-222 PC-BOT-222	Angiosperm Embryology for structure and development of Microsporangium and Mega sporangium highlights the fertilization and embryo development. Basic knowledge of biochemistry for an understanding of the chemical structure and properties of carbohydrates, Lipids and Proteins. Know about the movements of water and Nutrients in the plant, know the significance of Transpiration.
EG- Value oriented education	To create awareness regarding the personal moral value, social values and Indian culture among the students. Also create love and faith for value, ethics and our reach culture.
EG- Human Rights	Study of Human rights in India. Civil and political rights, international documents. Meaning and evolution Rights, Nature, Concept, Development and Importance.

For NAAC (ZMC)

Convener

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