



॥ विद्या विनयेन शोभते ॥

Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

**ARTS, COMMERCE AND SCIENCE COLLEGE, NEW PANVEL
(AUTONOMOUS)**

Re-accredited 'A+' Grade by NAAC (3rd Cycle - CGPA 3.61)

'College with Potential for Excellence' Status Awarded by UGC

'Best College Award' by University of Mumbai

DEPARTMENT OF BOTANY

Course Outcomes Class: F.Y.B. Sc.

Semester I

Course (Paper) Name	Skill Enhancement Course: Plant Preservation Techniques-I
Paper No	USEC1PPT
CO1	Explain the basic principles of Herbarium and dry preservation
CO2	Describe the significance and designing of Botanical gardens, different steps involved in dry preservation of plant materials
CO3	Differentiate between the different methods of dry preservation, and herbaria
CO4	Classify the herbaria on the basis of taxonomy and morphological features
CO5	To collect suitable plant material for preservation and herbaria
CO6	To prepare herbarium sheets

Course (Paper) Name	Open Elective Course: Plants in Health Care and Cosmetics
Paper No	UOE1PHC1
CO1	Describe types of phytoconstituents, medicinal uses of plants from Grandma's pouch.
CO2	Explain concept and current scope of Nutraceuticals, Herbals and Dietary Supplements
CO3	Identify various plants in Grandma's pouch, and plants used as nutraceuticals
CO4	Differentiate between the different types of phytochemicals, nutraceuticals and dietary supplements



॥ विद्या विनयेन शोभते ॥

Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

ARTS, COMMERCE AND SCIENCE COLLEGE, NEW PANVEL

(AUTONOMOUS)

Re-accredited 'A+' Grade by NAAC (3rd Cycle - CGPA 3.61)

'College with Potential for Excellence' Status Awarded by UGC

'Best College Award' by University of Mumbai

Course (Paper) Name	Open Elective Course: Plants in Human Nutrition-I
Paper No	UOE1PHN1
CO1	Describe the significance of proteins, carbohydrates, fats, vitamins, minerals and fibre in human diet.
CO2	Explain the functions of proteins, carbohydrates, fats, vitamins, minerals and fibre in human diet and the plant sources from which they are obtained.
CO3	Differentiate between essential and non-essential amino acids, and types of proximate principles
CO4	Compare the different deficiency symptoms of various nutrients.

Semester II

Course (Paper) Name	Botany I (Plant Diversity and Structure)
Paper No	USC2BO1M
CO1	Describe structure and functions of plant cell organelles
CO2	Explain Ecological significance and Economic importance of Algae, Fungi, Bryophytes
CO3	Identify various types of plant types, plant cell organelles and plant tissues
CO4	Differentiate between the different plant groups namely Algae and Bryophyta, as well as Fungi, simple and complex tissues.
CO5	Identify <i>Nostoc</i> , <i>Spirogyra</i> , <i>Sargassum</i> , <i>Gelidium</i> , Diatoms, <i>Rhizopus</i> , <i>Aspergillus</i> , <i>Agaricus</i> , <i>Riccia</i> , <i>Anthoceros</i> , <i>Funaria</i> and different cell organelles
CO6	Prepare slides to show cell inclusions and simple and complex tissues
CO7	Explain ecological significance and economic importance of algae, fungi and bryophytes
CO8	Differentiate between algae, fungi and bryophytes, cell organelles, simple and complex tissues



॥ विद्या विनयेन शोभते ॥

Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

**ARTS, COMMERCE AND SCIENCE COLLEGE, NEW PANVEL
(AUTONOMOUS)**

Re-accredited 'A+' Grade by NAAC (3rd Cycle - CGPA 3.61)

'College with Potential for Excellence' Status Awarded by UGC

'Best College Award' by University of Mumbai

Course (Paper) Name	Skill Enhancement Course: Plant Preservation Techniques-II
Paper No	USEC1PPT
CO1	Explain the basic principles of wet and dry preservation and making permanent slides
CO2	Describe the different steps involved in wet preservation of plant materials and preparation of permanent slides
CO3	Differentiate between different types of preservatives
CO4	Classify the museum specimen and permanent slides on the basis of taxonomy and morphological or anatomical features
CO5	To collect suitable plant material for preservation
CO6	To prepare museum specimen, and permanent slides

Course (Paper) Name	Open Elective Course: Plants in Health Care and Cosmetics-II
Paper No	UOE1PHC1
CO1	Describe common plants used in preparation of cosmetics for face, body and hair. (Chandan, Manjistha, Turmeric, Saffron, Aloe, Reetha, Shikakai, Hibiscus, Brahmi, Bhringraj), structure of human skin.
CO2	Explain tridosh concept of Ayurveda, prakriti nidaan
CO3	Identify various plants used in the preparation of herbal cosmetics and for aromatherapy
CO4	Differentiate between the different types of prakriti as per Ayurved, herbal cosmetics.

Course (Paper) Name	Open Elective Course: Plants in Human Nutrition-II
Paper No	UOE1PHN1
CO1	To describe the significance of balanced diet, non-conventional food, healthy lifestyle to avoid lifestyle diseases.
CO2	To explain the concept of malnutrition, fast and junk foods, empty calories, loss of nutritive value through food processing and anti-nutritional factors
CO3	To differentiate between anti and non-nutritional factors, deficiency symptoms of various nutrients
CO4	To compare the different non-conventional and conventional food sources, malnutrition in urban and rural context.