

।। विद्या विनयेन शोभते ।। Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

ARTS, COMMERCE AND SCIENCE COLLEGE, NEW PANYEL (&UOMOUGULA)

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 |

| 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) |
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| Paper No | USC2BO1M |
| CO1 | Identify Nostoc, Spirogyra, Sargassum, Gelidium, Diatoms, Rhizopus, Aspergillus, Agaricus, Riccia, Anthoceros, Funaria and different cell organelles |
| CO2 | Prepare slides to show cell inclusions and simple and complex tissues |
| CO3 | Explain ecological significance and economic importance of algae, fungi and bryophytes |
| CO4 | Differentiate between algae, fungi and bryophytes, cell organelles, simple and complex tissues |

| 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 antinutritional 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. |