

The Kelkar Education Trust's
V. G. Vaze College of Arts, Science and Commerce
(Autonomous) - Affiliated to University of Mumbai
(Re Accredited By NAAC with Grade A)

Revised Syllabus for FYBSc
Based on NEP-2020 Guidelines

Program: B.Sc.
Course : BOTANY
Semester I

To Be Implemented From
Academic Year 2023-24
F.Y.B.Sc (Botany)
Semester: I

Open Elective (OE)- I
Course code: VGVUOE104
Course Title: Cosmetology decoded by Botanicals-I

Course code: VGVUOE104

(Credits-04)

Teaching Scheme (Hrs/Week)				Continuous Internal Assessment (CIA) 40 marks					End Semester Examination	Total
L	T	P	C	CIA-1	CIA-2	CIA-3	CIA-4	Lab	Written	
3	-	1	4	20	15	05		-	60	100
Max. Time, End Semester Exam (Theory) -2Hrs.										

Course Learning Objectives

1. To impart knowledge of herbal cosmetology and its related aspects.
2. To acquaint the students with common herbs (raw materials) used in the cosmetic industry.
3. To study some important herbal formulations.

Course Learning Outcomes

After the successful completion of the course, Learners will be able to

CO1- Gain basic ideas about the herbal cosmetic industry.

CO2- Learn about the applications of prospective herbs of cosmetic importance.

CO3 - Develop and enhance skills required to take up Herbal Cosmetology as a profession.

Unit 1 – An overview of Herbal Cosmetics

- 1.1 Introduction to Herbal Cosmetology, Types of Herbal cosmetics
- 1.2 Historical background of Herbal cosmetology, Advantages of Herbal Cosmetics,
- 1.3 Current Status and Future Scope of Herbal Cosmetics in India and abroad.
- 1.4 Herbal cosmetology – An Entrepreneurial Skill

Unit 2 – Herbal Plants: Uses as Cosmetics

1.1 Herbs of cosmetic importance (with special emphasis on their source, active principles and cosmetic properties.):

- Almond oil
- Aloe Vera
- Neem
- Turmeric

- Sandalwood
- Eclipta

1.2 Natural colorants : Biological Source, coloring principles, chemical nature and usage of the following herbals :

- Henna
- Indigo
- Saffron
- Beet root
- Bixa

Unit 3 - Study of the following Herbal cosmetic formulations:

- 1.1 Herbal Face oils
- 1.2 Herbal face packs
- 1.3 Herbal hair mask

Practical Cosmetology decoded by Botanicals	
Sr. No.	Description
1. I	Identification of different herbs used in cosmetic formulations.
2.	Preparation of the following herbal formulations: <ul style="list-style-type: none"> ● Herbal Face oil ● Herbal Aloe Vera gel ● Herbal face packs ● Herbal hair mask
3.	Preparation of dyes from the following herbs: <ul style="list-style-type: none"> ● Henna ● Malabar spinach ● Beetroot
4.	Preparation of hair dyes.
5.	Preparation of lip tints.
6.	Industrial/Institutional visit to enhance entrepreneurial skills.

References :

1. Cosmetics- Formulation, Manufacturing and Quality control – P.P. Sharma
2. Herbal Cosmetics Hand Book- H. Panda
3. Herbal Cosmetics by P. K Chattopadhyay
4. The Complete Technology Book on Herbal Perfumes and Cosmetics by H. Panda
5. Pharmacognosy by Trease and Evans
6. Pharmacognosy by Kokate, Purohit and Gokhale
7. Pharmacognosy & Pharmacobiotechnology by Ashutosh Kar
8. Essential of Pharmacognosy by Dr. S. H. Ansari
9. Cosmetics – Formulation, Manufacturing and Quality Control, P.P. Sharma, 4th edition, Vandana Publications Pvt. Ltd., Delhi

10. Wilkinson, Moore, seventh edition, George Godwin. Poucher's Perfumes, Cosmetics, and Soaps.
11. Hilda Butler, 10th Edition, Kluwer Academic Publishers. Handbook of Cosmetic Science and Technology, 3rd Edition.

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Revised Syllabus for FYBSc
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Program: B.Sc.
Course: BOTANY
Semester II

To Be Implemented From
Academic Year 2023-24
F.Y.B.Sc (Botany)
Semester: II

Open Elective- II
Course Title: Indoor Gardening-I

Course code:

(Credits-04)

Teaching Scheme (Hrs/Week)				Continuous Internal Assessment (CIA) 40 marks					End Semester Examination	Total
L	T	P	C	CIA-1	CIA-2	CIA-3	CIA-4	Lab	Written	
3	-	1	4	20	15	05		-	60	100
Max. Time, End Semester Exam (Theory) -2Hrs.										

Course Learning Objectives

1. To understand the concept of different types of gardening practices
2. To apply the basic principles and components of gardening
3. To design various types of indoor gardens
4. To establish and maintain special types of gardens for indoor landscaping

Course Learning Outcomes –

After the successful completion of the course, Learners will able to

CO1- Identify and distinguish between different types of indoor plants

CO2- Describe the cultural methods used for growing various indoor plants

CO3 - Acquainted with common pest management

CO4- Develop entrepreneurial skills of develop various types of indoor gardens

Indoor Gardening

Unit 1 – Introduction

1.1 Introduction to plants used in Indoor Garden

1.2 Botanical Terminologies

1.3 Types of plants and plant parts, Morphological characters

Unit 2 – Indoor Plant Culture

2.1 Soil and its Characteristics and Organic Gardening

2.2 Mineral Nutrition and Garden Implements

2.3 Potting Mixtures, Essential soil elements

2.4 Common plant pests and pest management

Unit 3 - Garden Techniques

3.1 Kokedama and Microgreens

3.2 Terrariums and Dish Garden

3.3 Hanging Baskets and Bonsai

3.4 Indoor foliage plants and maintenance

Practicals :

1. Identification of important garden plants and their parts
2. Preparation of compost and bioenzyme
3. Recycling of waste as planting containers
4. Preparation of Kokedama and Hanging baskets
5. Preparation of Terrarium and Dish Garden
6. Propagation of foliage plants for indoors

References :

1. Bose TK, Maiti RG, Dhua RS and Das P. 1999. Floriculture and Landscaping. Naya Prokash.
2. Nambisan KMP.1992. Design Elements of Landscape Gardening. Oxford & IBH.
3. Randhawa GS and Mukhopadhyay A. 1986. Floriculture in India. Allied Publ.
4. Trivedi, PP.1983. Home Gardening. Statesman Press. New Delhi. India.
5. Sabina GT and Peter KV. 2008. Ornamental Plants for Gardens. New India Publ. Agency.
6. Woodrow MG.1999. Gardening in India. Biotech Books.
7. Arora, JS. 1999. Introduction to ornamental horticulture. Kalyani Publishers, Ludhiana, India.