

AC – 20/05/2025
Item No. – 6.5 (N) (2a) Sem. III

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE Vertical 3

Faculty of Science

Board of Studies in Botany

Second Year Programme

Semester

III

Title of Paper

Credits

I) Botany of Perfumes

2

From the Academic Year

2025-26

Title of Paper: Botany of Perfumes

Sr. No.	Heading	Particulars
1	Description of the course : Including but Not limited to :	This course explores the applied aspects of botany in lifestyle, culture, and industry, focusing on sustainable practices, and perfume extraction. Botanical applications impact industries like perfumery, organic farming, and urban gardening, promoting sustainability and economic growth. Students gain hands-on skills in plant-based industries, learning eco-friendly techniques and market opportunities. This course complements studies in horticulture, environmental science, biochemistry, and business. Growing demand for organic products, natural fragrances, and sustainable farming increases career opportunities. Students can work in perfumery, organic farming, urban agriculture, plant-based product development, and sustainability consulting.
2	Vertical :	Open Elective
3	Type :	Theory
4	Credit:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	Hours Allotted :	30 Hours
6	Marks Allotted:	50 Marks

7	Course Objectives: To enable the learner 1. Gain insight into applied aspects of botany relevant to lifestyle, culture, and industry. 2. Learn hands-on techniques such as perfume extraction. 3. Understand eco-friendly and sustainable approaches in botanical applications. 4. Analyze the cultural, economic, and scientific aspects of plants used in various industries. 5. Identify opportunities in industries like perfumery, organic farming, and urban gardening.				
8	Course Outcomes: The learner will be able to 1. Explain the historical and cultural significance of perfumes. 2. Identify key fragrant plants and their role in perfume-making. 3. Differentiate between various scent types and their components. 4. Create simple natural perfume blends and understand their commercial potential. 5. Evaluate the sustainability and future trends in the perfume industry.				
9	<table border="1" data-bbox="256 1092 1430 1921"> <tr> <td data-bbox="256 1092 906 1171">Module 1: Plants and Natural Fragrances</td><td data-bbox="906 1092 1430 1171">15 Lectures</td></tr> <tr> <td colspan="2" data-bbox="256 1171 1430 1921"> 1. Introduction to the World of Perfumes • History of perfumes – from ancient times to today. • Why do plants have fragrances? (Pollination, survival, and human use) • Cultural and traditional significance of perfumes in India and the world. 2. Fragrant Plants and Their Uses • Flowers used in perfumes: Rose, Jasmine, Lavender. • Trees and woods: Sandalwood, Cedarwood. • Spices with strong scents: Clove, Cardamom, Cinnamon. • Resins and natural gums: Frankincense, Myrrh. 3. How Natural Perfumes are Made </td></tr> </table>	Module 1: Plants and Natural Fragrances	15 Lectures	1. Introduction to the World of Perfumes • History of perfumes – from ancient times to today. • Why do plants have fragrances? (Pollination, survival, and human use) • Cultural and traditional significance of perfumes in India and the world. 2. Fragrant Plants and Their Uses • Flowers used in perfumes: Rose, Jasmine, Lavender. • Trees and woods: Sandalwood, Cedarwood. • Spices with strong scents: Clove, Cardamom, Cinnamon. • Resins and natural gums: Frankincense, Myrrh. 3. How Natural Perfumes are Made	
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	• Simple ways to extract plant scents (boiling, pressing, soaking). • Traditional Indian methods: Attars and essential oils. • Modern perfume-making techniques and their environmental impact.
	Module 2: Perfume Making and Everyday Use (15 Lectures)
	1. Creating Simple Perfume Blends • Basics of mixing different natural scents. • How perfumes are named and classified. • Traditional Indian perfumes (Attars, Ruhs). 2. Indian Perfume Industry and Local Scents • Kannauj – The Perfume Capital of India. • Perfumes from Indian flowers (Kewda, Champa, Mogra). • How small businesses make perfumes using traditional methods. 3. Fragrance and Well-Being • How scents affect mood and emotions. • Aromatherapy and its benefits. • Use of perfumes in religious and cultural traditions.

10	Text Books / Reference Books: 1. Perfume: The Alchemy of Scent – Jean-Claude Ellena 2. The Secret of Scent: Adventures in Perfume and the Science of Smell – Luca Turin 3. Essence and Alchemy: A Natural History of Perfume – Mandy Aftel 4. Perfumes: The A-Z Guide – Luca Turin & Tania Sanchez 5. The Art of Perfumery and the Methods of Obtaining the Odors of Plants – George William Septimus Piesse 6. Fragrance: The Story of Perfume from Cleopatra to Chanel – Edwin T. Morris 7. The Complete Book of Essential Oils and Aromatherapy – Valerie Ann Worwood 8. Scent & Chemistry: The Molecular World of Odors – Philip Kraft 9. Aromatherapy and Essential Oils: The Science of Natural Fragrance – Julia Lawless Additional Online Resources • Kannauj Perfumery Industry Reports (For Indian perfumery traditions)
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	ICAR & CSIR Publications on Essential Oils	
11	Internal Continuous Assessment: 40%	External, Semester End Examination 60% Individual Passing in Internal and External Examination
12	Continuous Evaluation through: 20 marks Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)	Term end exam for 30 marks: Attempt any 3 questions out of 6 questions. (10 marks each)
13	Format of Question Paper: for the final examination Time: 1 hour Marks: 30 Note: - Attempt any 3 questions out of 6 questions. - All questions carry equal marks Q1.10 Marks Q2.10 Marks Q3.10 Marks Q4.10 Marks Q5.10 Marks Q6.10 Marks	

Sd/-
 Sign of the BOS
 Chairman
 Prin. Dr. Vasant Mali
 BOS in Botany

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 Offg. Associate Dean
 Dr. Madhav R. Rajwade
 Faculty of Science &
 Technology

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 Prof. Shivram S. Garje
 Faculty of Science &
 Technology