



DEPARTMENT OF HORTICULTURE
FACULTY OF AGRICULTURAL SCIENCES
University of the Punjab, Lahore

Programme	B.Sc. (Hons.) Agriculture	Course Code	HORT-411	Credit Hours	3(2-1)
Course Title	MEDICINAL AND AROMATIC PLANTS				
Course Introduction					
<p>This course is designed to provide a comprehensive understanding of Medicinal and aromatic plants. Medicinal and aromatic plants hold significant importance due to their extensive applications in healthcare, wellness, and industry. These plants are a rich source of bioactive compounds that have been used for centuries in traditional medicine systems to treat various ailments and promote overall health. In modern times, they continue to be crucial in the development of pharmaceuticals, nutraceuticals, and herbal remedies, providing natural alternatives to synthetic drugs with fewer side effects.</p>					
Learning Outcomes					
<p>On the completion of the course, the students will be able:</p> <ol style="list-style-type: none">1. Identify and classify medicinal and aromatic plants: Students will be able to recognize and categorize various plants used for medicinal and aromatic purposes.2. Learning about the bioactive compounds, their extraction, and pharmacological effects of medicinal plants.3. Students will understand the techniques for growing, harvesting, drying, and processing medicinal and aromatic plants.4. Students will learn methods for evaluating the quality, purity, and safety of medicinal plant products.5. Students will understand the traditional and modern applications of medicinal plants, including their use in pharmaceuticals, cosmetics, and food.					
Course Content			Assignments/Readings		
Week 1	Unit-I				
	1.1 Introduction to Medicinal plants 1.2 Importance of Medicinal plant				
Week 2	Unit-II				
	2.1 Introduction to Aromatic plants				
	2.2 Importance				
Week 3	Unit-III				
	3.1 Origin of medicinal and aromatic plants				
	3.3 Habitat of medicinal and aromatic plants				

Week 4	Unit-IV 4.1 Classification of medicinal plants	
Week 5	Unit-V 5.1 Botany and its scope	
Week 6	Unit-VI 6.1 Climatic requirements	
Week 7	Unit-VII 7.1 Cultivation and production	
Week 8	8.1 Chemical properties	
	8.2 pharmacological properties	
Week 9	Unit-IX 9.1 Products and medicinal uses	
Week 10	10.1 Methods of plant collection	
	10.2 Extraction techniques	
Week 11	Unit-XI 11.1 Certification systems 11.2 standards 11.4 procedures	
Week 12	Unit-XII 12.1 Processing	
Week 13	Unit-XIII 13.1 nursery Growing	
Week 14	Unit-XIV 14.1 Marketing of Medicinal and Aromatic plants	
Week 15	Unit-XV 15.1 Export potential	
Week 16	Unit-XVI 16.1 Sustainable Environment	

PRACTICAL

Week 1	Identification of Medicinal plants	
Week 2	Identification of Aromatic plants	
Week 3	Collection of medicinal plants	
Week 4	Description of aromatic plants	
Week 5	Acclimatization	
Week 6	Multiplication of economically important plants	
Week 7	Parts used	
Week 8	Important ingredients	
Week 9	Processing and extraction methods	
Week 10	Media, Mixtures	
Week 11	Visit to various herbal institutions	
Week 12	Visit to Pansari markets	
Week 13	Visit to herbal gardens.	
Week 14	Visit to marketing values	
Week 15	Visit to medical stores	
Week 16	Advantages from medicinal plants	

Textbooks and Reading Material

1. Bhattacharjee, S.K. 1999. Handbook of Medicinal Plants. Pointer Publishing Co. India.
2. Joshi, S.G. 2000. Medicinal Plants. Oxford and IBH, India.
3. Farooqui, M.L.H. 2000. Medicinal Plants of Prophet Muhammad (PBUH). Sidrah Publishers, Lukhnaw.
4. Grieve, M. 1992. A Modern Herbal. Tiger Book International, U.K.
5. Serdar, O. and M. Milan. 2007. Medicinal and Aromatic Crops. Haworth Food & Agric. Products.

Teaching Learning Strategies

1. Lectures
2. Discussions
3. Presentations
4. Quiz
5. Assignments

Assignments: Types and Number with Calendar

1. Analyze a case where a medicinal plant was used in a clinical trial. What were the outcomes, and how did the findings impact its use in traditional versus modern medicine?
- 2.

Assessment

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Sr. No.	Elements	Weightage	Details
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1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.
2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

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