



Program	Bachelor of Pharmacy (BPharm)	Semester - 3
Type of Course	-	
Prerequisite		
Course Objective	-	
Effective From A.Y.	2023-24	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				External Marks (T)	Internal Marks (T)	External Marks (P)	Internal Marks (P)	
3	-	0	3	50	25	-	-	75

SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content		T - Teaching Hours W - Weightage	
Sr.	Topics	T	W
1	UNIT 1 1. Introduction to Ayurveda, Siddha, Unani, Homeopathy & Sowa-Rigpa Systems and Traditional Formulations. 2. Some Important Medicinal & Aromatic Plants mentioned in ancient texts 3. Ayurvedic formulations processing (Asava, Arishta, Bhasma, Vati)	9	20
2	UNIT 2 4. Good Cultivation and Collection Practices guidelines- WHO, NMPB-AYUSH, Voluntary Certification Scheme for Medicinal Plant Produce, Conservation of rare and endangered traditional plants 5. Subsidies from Indian Government, Buyback Agreement and Contract farming with AYUSH and other Companies 6. Cultivation/ Agrotechniques of Few Medicinal Plants	10	22
3	UNIT 3 7. Medicinal Plant Extracts 8. Aromatic Plant Essential oils 9. Value added products: AYUSH Products, food, nutraceuticals, cosmetics and agrochemicals, Entrepreneurship and start up opportunities in Plants (Licensing and manufacturing)	8	18
4	UNIT 4 10. Illustration Case study with some examples value added products (Giloy, Neem, Aloe) 11. AYUSH, CDSCO, FSSAI WHO and ICH Guidelines	8	18
5	UNIT 5 12. With illustrations case study Quality Control of Traditional Formulations 13. With illustrations comparative evaluation of Pharmacopoeial standards (Licorice & Ashwagandha) 14. Field Demonstration of few Medicinal and aromatic plant cultivation sites 15. Virtual Visit to Ayurvedic rasshala or Companies manufacturing traditional medicines	10	22
Total		45	100

Suggested Distribution Of Theory Marks Using Bloom's Taxonomy					
Level	Remembrance	Understanding	Application	Analyze	Evaluate
Weightage	40	25	15	10	10

NOTE : This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.



Course Outcomes

At the end of this course, students will be able to:

C01	To understand basic principle of ayurvedic and herbal medicines.
C02	To provide basic knowledge on its regulations, quality control methods and market study.
C03	To study market examples of medicinal and aromatic plants.

Reference Books

1.	Indian Medicinal Plants By Kiritikar KR and Basu BD International Book Distributors, Booksellers and Publishers
2.	Handbook of Aromatic Plants By S. K. Bhattacharjee Pointer Publishers
3.	The Ayurveda Encyclopedia natural secrets to healing, prevention and Longevity. By Swami sada , Tirtha Shri satguru publication, Delhi, India. 1st, Pub. Year 1998
4.	Indigenous Drugs of India By Chopra Academic Publishers
5.	Indian Herbal Pharmacopoeia Regional Research Laboratory and Indian Drug Manufacturer's Association
6.	Ayurvedic Drugs and Their Plant sources By V V Sivarajan and I Balachandran Oxford and IBH Publishing Co. Pvt. Ltd.
7.	The Treatise on Indian Medical Plants By Asima Chatterjee and Satyesh C Pakrashi. National Institute of Science Communication
8.	Laboratory Handbook for the Fractionation of Natural Extracts By Peter J Houghton and Amala Raman Springer Publication.
9.	Pharmacognosy (TextBook) By C.K.KOKATE, S.B. GOKHALE, A. P PUROHIT Nirali prakashan 53rd