

Department of Botany and Microbiology
Session 2025-26

Bachelor of Science (B.Sc.)

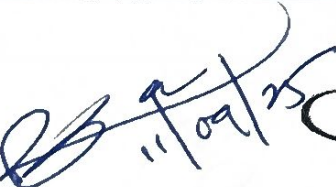






IV Semester (Elective)

(S2-BOTA1T)

Course Outcomes		
CO.No.	Course Outcomes	Cognitive Level
CO1	• This course will provide knowledge on plants and their parts used in various industries.	U
CO2	• Students will get an idea to establish plant based natural product industry.	U
CO3	• This course will make the students self-reliant.	U, A

	Credits	Marks		Total Marks (Min. Passing Marks: 35)
		Internal	External	
Theory	3	40	60	100 (Min. Passing Marks: 35)
Practical	1	40	60	100 (Min. Passing Marks: 35)
Total	4	200		

	Marks	
	Internal	External
Theory	3 Internal Exams of 20 Marks (During the Semester) (Best 2 will be taken)	1 External Exams (At the End of Semester)
Practical	2 Internal Exams (20 Marks) + Attendance of 10 Marks (During the Semester) (Both will be taken + Attendance)	1 External Exams (At the End of Semester)

St. Aloysius' College Jabalpur, M.P. (Autonomous) Reaccredited A++ by NAAC with CGPA 3.58/4.00,
College with Potential for Excellence (CPE) DST-FIST supported and DBT Star College Scheme
Department of Botany and Microbiology
Session 2025-26

Part B- Content of the Course		
Total No. of Lectures- 60 Hours Tutorials- 0 Practical (theory 2 hours per week): L/T/P:		
Unit	Topics	No. of Lectures
I	1 Plants in Timber Industry: 1.1 Timber yielding trees of India and their products (Shisham, Sal, Teak, Deodar, Babool). 1.2 Bamboo and Cane Industry. 1.3 Kattha' Industry.	09
II	Leaf Based Industries- 1.1 Utility products of leaf (Palash, Banana). 1.2 Tea Industry (Production of various types of teas). 1.3 Leaf oil Industry (Mint, Camphor, Neem, Tulsi, Eucalyptus and Lemon grass). 1.4 Leaves used as spices (Kasoori Methi, Pudina, Curry patta, Onion, Tejpatta).	12
III	Flower based Industries — 1.1 Perfume products of Gulab, Jasmine, Henna, 1.2 Color industry (Food and Holi colors). 1.3 Raw material for Fermentation (Mahua).	12
IV	Fruits and Seed-based Industries- 1.1 Jams, Jellies, Juice, Sauce and Pickles. 1.2 Poha and Daal Industry. 1.3 Edible Oil Industry (Groundnut, Soybean) 1.4 Starch, Glucose, and Dextrose Industry.	12
Keywords/Tags: Keywords-Timber, Bamboo, Cane, Jute, Tea Industry, Oil yielding leaves, Perfumes, Leaf spices, Fermentation, Food colours, Edible oils		

fernanadave
11/09/25

Ra
11/09/25

GM

G

De

\$

St. Aloysius' College Jabalpur, M.P. (Autonomous) Reaccredited A++ by NAAC with CGPA 3.58/4.00,
College with Potential for Excellence (CPE) DST-FIST supported and DBT Star College Scheme
Department of Botany and Microbiology
Session 2025-26

Part C-Learning Resources

Text Books, Reference Books, Other resources

Suggested Readings:

1. Gerald E. Wickens, Economic Botany, principles and Practice, Kluver Academic Publishers (2001)
2. Kocchar, S.L. Economic Botany, Cambridge University Press, UK (2016)
3. Simpson, B.B. and Ogorzaly, M.C. Economic Botany, Tata Macgray Hill Publisher (1986)

Suggested online material:

1. <https://krishi.icar.gov.in/jspui/bitstream/123456789/19815/1/Timber.pdf>
2. file:///C:/Users/CSP/Downloads/7B.pdf
3. [https://swsu.ru/sbornik-statev/pdf/II chapter%202.pdf](https://swsu.ru/sbornik-statev/pdf/II%20chapter%202.pdf)

Part -D: Assessment and Evaluation (Theory)

Suggested Continuous Evaluation Methods:

Maximum Marks: 100; CCE: 40, University Exam (UE): 60

Internal Assessment: Continuous Comprehensive Evaluation (CCE): 40	Class Test, Assignment/Presentation	
		15+25 (Total: 40)
External Assessment: University Exam Section: 60 Time: 03.00 Hours	Section (A): Objective Type Questions	
	Section (B): Short Questions	
	Section (C): Long Questions	
	Total	60

Note: Field Visit/ project report for a specific topic can be prepared by the students.

[Handwritten signatures and dates]

11/09/25

11/09/25

Sh

11/09/25

11/09/25

11/09/25