

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

# Faculty of Science

## **Bachelor of Science (B.Sc.)**

**SUBJECT: BOTANY**

#### **IV Semester (Major/ Minor)**

## Paper- Industrial Botany

(S2-BOTA1T)

## Course Outcomes

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
CO4	Gained knowledge about start-up opportunities in the field of botany.	
CO5	Learnt about opportunities of social services	

## **Credit and Marking Scheme**

	Credits	Marks		Total Marks
		Internal	External	
Theory	4	40	60	100 (Min. Passing Marks: 35)
Practical	2	40	60	100 (Min. Passing Marks: 35)
<b>Total</b>	<b>6</b>			<b>200</b>

## Evaluation Scheme

	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)

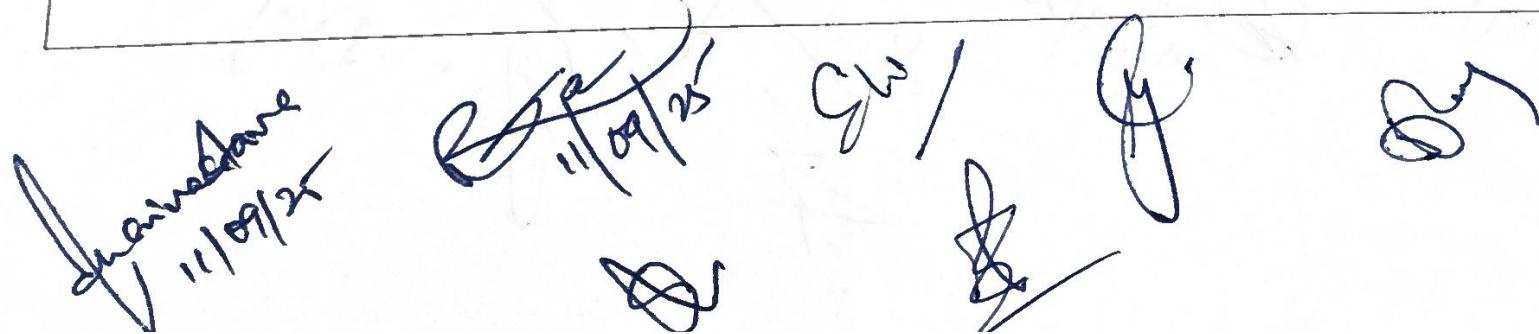
✓ *Janet Adams* 11/09/25 ✓ *Bob* 11/09/25 ✓ *GR* ✓ *Q* ✓ *Q* ✓ *Day*

**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	<b>1 Plants in Timber Industry:</b> 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.	12
II	<b>Leaf Based Industries-</b> 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	<b>Flower based Industries —</b> 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	<b>Fruits and Seed-based Industries-</b> 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
V	<b>Other parts of plants based Industries</b> 1.1 Sugar and Jaggery Industries. 1.2 Jute and Agarbatti stick making industry. 1.3 Project proposal preparation for establishment of an industry. 1.4 Grants and funding provider organizations of India.	12

**Keywords/Tags:** Keywords-Timber, Bamboo, Cane, Jute, Tea Industry, Oil yielding leaves, Perfumes, Leaf spices, Fermentation, Food colours, Edible oils, Food preservation techniques, Sugar industries.


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## 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 Macgraw Hill Publisher (1986)

#### **Suggested online material:**

- [1.https://krishi.icar.gov.in/jspui/bitstream/123456789/19815/1/Timber.pdf](https://krishi.icar.gov.in/jspui/bitstream/123456789/19815/1/Timber.pdf)
- [2.file:///C:/Users/CSP/Downloads/7B.pdf](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 chapter%202.pdf)

## **Part –D: Assessment and Evaluation (Theory)**

### **Suggested Continuous Evaluation Methods:**

**Maximum Marks: 100; CCE: 40. University Exam (IIE): 60**

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

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

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