



# बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsā Mūṇḁā Drāyabala Yūnīvārsīṭī

राजपिपला, जि० नर्मदा Rajpipla, Dist. Narmda

Established by Tribal Development Department, Govt. of Gujarat

## School of Science

### B.Sc. (Chemistry) Programme

Subject Code & Name:- BS04SECHE3 Bamboo Art

### Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme			
Credits				Component Weightage (%)			
				CCE		SEE	
L	T	P	Total	TH	PWE	TH	PWE
0	0	2	2	-	50	-	50

Programme Name	B.Sc.
Semester	IV
Course Code	BS04SECHE3
Course Title	Bamboo Art
Course Content Type ( Pr.)	Practical
Course Credit	2
Sessions+ Lab. Per Week	4
Total Teaching/Lab. Hours	30 Hours
* 2 Laboratory = 1 Session	

### Learning Objectives

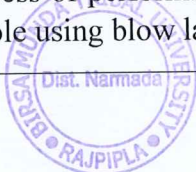
1. Students can identify bamboo items and safety tools.
2. They will be able to recognize and operate various hand tools used in Bamboo Technology.
3. The students can learn to operate various Bamboo processing machineries and carry out their maintenance.
4. They will be able to bend strips, slivers and Bamboo pole using blow lamp.
5. The students will be able to troubleshoot and perform maintenance procedure of different machines used in Bamboo works.
6. They can also carry out different process of seasoning of Bamboos and Various propagation methods.

### Prerequisites (if any)

### Learning Outcomes

On the Completion of this course, students will be able to:

1. Demonstrate safe working practice on various hand tools.
2. Demonstrate and evaluate the process of performing on different types of joints, bending of Bamboo strips, Slivers, Bamboo pole using blow lamp.







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3. Adopt suitable method of practice on cross cutting machine, removing nodes of bamboo using various splitting machine.
4. Students can perform working on round stick making machine and polishing machine
5. Demonstrate the maintenance procedure of different machines used in Bamboo works.
6. Able to choose appropriate Bamboo species for different industrial Handicraft products.
7. Ensure quality of products as per market demand, develop business relation and communication skills by visiting various shops, markets, showrooms etc.

#### Detailed Contents

UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	<b>Basics of Bamboo Art</b> Utilization of Bamboo, Treatment and preservation of Bamboo, Application of Tools, Selection of Bamboo as per job, Perform hand drawing of products, Practice on drawing of various gift items, stationary items and many more, Perform on joints, Perform Bending of Bamboo, Perform Bamboo Cross Cutting Machine, Perform Splitting machine and node removing machine,	15
II	<b>Applications of Bamboo Art</b> Perform working on round stick making machine and polishing machine, Perform operation in Bamboo 2/4 side planner and electrical stand drill machine, Maintenance of machines used in Bamboo processing, the use of Bamboo and other necessary tools in production of different types of furniture. Prepare Bamboo Gift items and Bamboo Ornaments, Making of Bamboo bags, Making of Bamboo Models, Making of Bamboo mats and Blinds manually, Knowledge on transportation and Delivery	15

#### Text Book(s)

#### Reference Books

1. Bamboo Works, Craftsmen Training Scheme (CTS) ,NSQF LEVEL- 3, Government of India Ministry of Skill Development & Entrepreneurship Directorate General of Training, Revised July 2022
2. Bamboo Works, Craftsmen Training Scheme (CTS) ,NSQF LEVEL- 6, Government of India Ministry of Skill Development & Entrepreneurship Directorate General of Training, Revised July 2019







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3. Designing and Building with Bamboo Jules J.A. Janssen Technical University of Eindhoven, The Netherlands, 2020
4. Bamboo Product Manual, Madhya Pradesh State Bamboo Mission, Published by MP State Bamboo Mission, 2015

### Web Resources

1. <https://www.cstaricalcutta.gov.in/images/CITS-Bamboo%20Works-NSQF-6.pdf>
2. <https://nbm.da.gov.in/Documents/Training/NID-MPSBM-Design-Training-Manual-June.2015.pdf>
3. <https://bamboou.com/designing-a-creative-hub-from-bamboo-in-australia/>

### Required Software(s) (if any)

### Practical(s) (if any)

Experiments to support the associated theory course

**L::** Lecture, **T::** Tutorial, **P::** Practical

**CCE::** Continuous and Comprehensive Evaluation

(CCE Theory includes Mid Semester Examination, Assignment, MCQ quizzes, Seminar, Reflective notes, class participation, case analysis and presentation, slip tests (announced/surprised), attendance etc. or any combination of these)

**PWE::** Practical Work Examination

(PWE includes Laboratory practical work, project work, viva simulation exercise work etc.)

**SEE::** Semester End Evaluation

