

# CURRICULUM GUIDE

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## **Bamboo Artisan**

*(A Modular Approach)*



Council for Technical Education and Vocational Training

**Curriculum Development Division**

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## **Introduction**

The competency based and market oriented curriculum guide for **Bamboo Artisan** is designed to produce employable skilled Handicraft Technician equipped with knowledge, skills and attitudes related to the occupation. In this curriculum, the trainees will practice skills of handicraft making; especially the bamboo based decorative articles in the bamboo handicraft industries. Once the trainees acquire the competencies they will have ample opportunity for employment and self-employment through which they will contribute in the national streamline of poverty reduction in the country.

*The feature of this curriculum is to focus on entrepreneurial skills and Sales & marketing skills in order to create self-employment opportunity. The skills and knowledge included in Applied Mathematics, Basic English, and basic concept of handicraft improve their knowledge and skills and make them competent bamboo artisan needed for the occupation. Another major feature of the curriculum is to incorporate the drop-out youths who have only the class five schooling experience. The curriculum is designed on the basis of modular modality so that it will be successful to meet the needs of individual and community.*

## **Aim**

The main aim of this program is to produce employable bamboo based artisans who could provide effective services at bamboo based handicraft industries as well as could create self employment opportunity in the country.

## **Objectives**

After completion of training the trainees will be able to:

1. Familiarize with concept of bamboo and bamboo based handicraft.
2. Apply English for understanding occupation related terminologies.
3. Perform simple mathematical problems related to occupation.
4. Design and draw sketches and drawings.
5. Develop entrepreneurial and marketing skills related to occupation.
6. Prepare the splints frames, lipping stripes, roofs, and bases as parts related to decorative articles.
7. Prepare carving and embroidery patterns.
8. Design bamboo stem based and root based decorative articles.
9. Make bamboo stem based and root based decorative articles.
10. Paste carving patterns on the prepared decorative articles.
11. Perform finishing works of the products.

## **Course Description**

This curriculum guide is based on the work required to be performed by a bamboo-based handicraft making artisan at handicraft industries in Nepal. This curriculum guide is designed to equip trainees with the skills & knowledge of the field of bamboo based handicraft especially, with knowledge and skills of decorative article production. This course is divided in three modules with the prerequisite of Basic course. The Basic course consists of Basic Concept about bamboo and handicraft, Basic English, and Applied Mathematics. Moreover, the designed curriculum guide consists of two modules as specialized and common modules, is a complete package of Bamboo Artisan. These modules are. (1) Bamboo Stem Based Handicraft; (2) Bamboo Root Based Handicraft and (3) Entrepreneurship Development. The Entrepreneurship Development is offered in this curricular program as a common module. The provision of On-the-Job Training (OJT) is included to provide opportunities to the trainees to experience and expose to "The World of Work" as well as practice the critical competencies.

The duration of particular modules will be as mentioned in the course structure. There will be demonstration by instructors/trainers and the opportunity to practice skills/tasks

necessary for this level of technicians. Trainees will practice & learn skills using typical tools, equipment, machines, and materials necessary for the program

### **Duration**

The total duration of the course extends over 10 months (i.e. 6 x130 or 780 hours in-house training + 4x160 hours or 640 hrs OJT=1420 hours total duration). The total duration of in-house training and OJT are 6 months and 4 months respectively. After the completion of the prescribed course the trainees should undergo OJT for the period as mentioned on the course structure. Trainees will learn and practice the knowledge and skills at the institutional level and apply them during the period of OJT so as to have exposure/ experience of the "world of work." Entrepreneurial and marketing skills will be provided at the end of training under module 2 to make the trainees competent and orient them for self-employment at the end of training before undergoing OJT.

### **Target Group**

The target group for this training program will be youths with special focus to poor, women, conflict victim, internal displaced people (IDP) and disadvantage groups (DAGs) with educational prerequisite of minimum primary level pass.

### **Target location**

The target group for this training program will be from all over Nepal.

### **Group Size**

The group size of this training program will be maximum 30, provided all necessary resources to practice the tasks/ competencies as specified in this curriculum guide.

### **Medium of Instruction**

The medium of instruction for this program will be Nepali/English or both.

### **Pattern of Attendance**

The trainees should have 80% attendance in theory classes and 90% in practical/ performance to be eligible for internal assessments and final examinations.

### **Focus of Curriculum**

This is a competency-based curriculum. This curriculum emphasizes on competency performance. 80% Time is allotted for performance and 20% Time is for related technical knowledge. So, the curriculum focuses on performance of the specified competencies. The provision of OJT is made to practice the critical tasks during the stated period.

### **Entry Criteria**

Individuals who meet the following criteria will be allowed to enter this curricular program:

- Minimum of five class pass or equivalent
- Minimum of 15 years of age
- Citizenship certificate (for the name, parents' name, age, date of birth and address verification purpose only)
- Should pass entrance examination

### **Instructional Media and Materials**

The following instructional media and materials are suggested for the effective instruction and demonstration.

- **Printed Media Materials** (Assignment sheets, Case studies, Handouts, Information sheets, Individual training packets, Procedure sheets, Performance Check lists, Textbooks etc.).
- **Non-projected Media Materials** (Display, Models, Flip chart, Poster, Writing board etc.).
- **Projected Media Materials** (Opaque projections, Overhead transparencies, Slides etc.).

- **Audio-Visual Materials** (Audiotapes, Films, Slide-tape programs, Videodiscs, Videotapes etc.).
- **Computer-Based Instructional Materials** (Computer-based training, Interactive video etc.).

### **Teaching Learning Methodologies**

The methods of teaching for **Bamboo Artisan** program will be a combination of several approaches. Such as Illustrated Lecture, Group Discussion, Demonstration, Simulation, Guided practice, Practical experiences, Fieldwork and Other Independent learning.

- Theory: Lecture, Discussion, Assignment, Group work.
- Practical: Demonstration, Observation, Guided practice and Self-practice.

### **Follow up Provision**

**First follow up:** Six months after the completion of the program

**Second follow up:** Six months after the completion of the first follow up

**Follow up cycle:** In a cycle of one year after the completion of the second follow up for five years

### **Grading System**

The trainees will be graded as follows based on the marks in percentage secured by them in tests/ evaluations.

- Distinction: Passed with 80% or above
- First Division: passed with 75% or above
- Second Division: passed with 65% or above
- Third Division: passed with 60% or above

### **Trainees Evaluation Details**

- Continuous evaluation of the trainees' performance is to be done by the related instructor/ trainer to ensure the proficiency over each competency under each area of sub-module.
- Related technical knowledge learnt by trainees will be evaluated through written or oral tests as per the nature in the institutional phase of training.
- Trainees must secure minimum marks of 40% and 60% in theory and practical evaluations respectively.
- The ratio between internal and final examination of knowledge test will be 20:80 but for the performance test it will just reverse.
- The entrance test will be administered by the concerned training institute
- The OJT will be evaluated according to the OJT details stated in the curriculum

### **Trainers' Qualification (Minimum)**

- TSLC in related field
- Good communicative and instructional skills
- Experience in related field

### **Trainer-Trainees Ratio**

- In theory classes 1(trainer): 20 (trainees)
- In practical classes (in workshop and laboratory) 1(trainer): 10 (trainees)

### **Suggestions for Instruction**

#### **1. Select objectives**

- Write objectives of cognitive domain.
- Write objectives of psychomotor domain.
- Write objectives of affective domain

#### **2. Select Subject matter**

- Study subject matter in detail.

- Select content related to cognitive domain.
  - Select content related to psychomotor domain.
  - Select content related to affective domain.
3. **Select Instructional Methods**
    - Teacher centered methods: like lecture, demonstration, question –answers, inquiry, induction and deduction methods.
    - Student initiated methods like experimental, field trip/excursion, discovery, exploration, problem solving, and survey methods.
    - Interaction methods like discussion, group/team teaching, microteaching and exhibition.
    - Dramatic methods like role play and dramatization
  4. Select Instructional method (s) on the basis of objectives of lesson plans and KAS domains.
  5. Select appropriate educational materials and apply at right time and right place.
  6. Evaluate the trainees applying various tools to correspond the KAS domains.
  7. Make plans for classroom / field work / workshop organization and management.
  8. Coordinate among objectives, subject matter and instructional methods.
  9. Prepare lesson plan for theory and practical classes.
  10. Deliver /conduct instruction / program.
  11. Evaluate instruction/ program.

**Special suggestion for the performance evaluation of the trainees**

1. Perform task analysis.
2. Develop a detail task performance checklist.
3. Perform continuous evaluation of the trainees by applying the performance checklist.

**Suggestion for skill training**

1. Demonstrate task performance in normal speed.
2. Demonstrate slowly with verbal description of each and every Performance steps in the sequence of activity of the task performance using question and answer techniques.
3. Repeat 2 for the clarification on trainees demand if necessary.
4. Perform fast demonstration of the task.

### **Provide trainees the opportunities to practice the task performance demonstration**

1. Provide opportunity to trainees to have guided practice.
2. Create environment for practicing the demonstrated task performance.
3. Guide the trainees in each and every Performance steps of task performance.
4. Provide trainees to repeat and re-repeat as per the need to be proficient on the given task performance.
5. Switch to another task demonstration if and only trainees developed proficiency in the task performance.

### **Other suggestions**

1. Apply principles of skill training.
2. Allocate 20% Time for theory classes and 80% Time for task performance while delivering instructions.
3. Apply principles of learning relevant to the age group of the learners.
4. Apply principles of intrinsic motivation.
5. Facilitate maximum trainees' involvement in learning and task performance activities.
6. Instruct the trainees on the basis of their existing level of knowledge, skills and attitude.

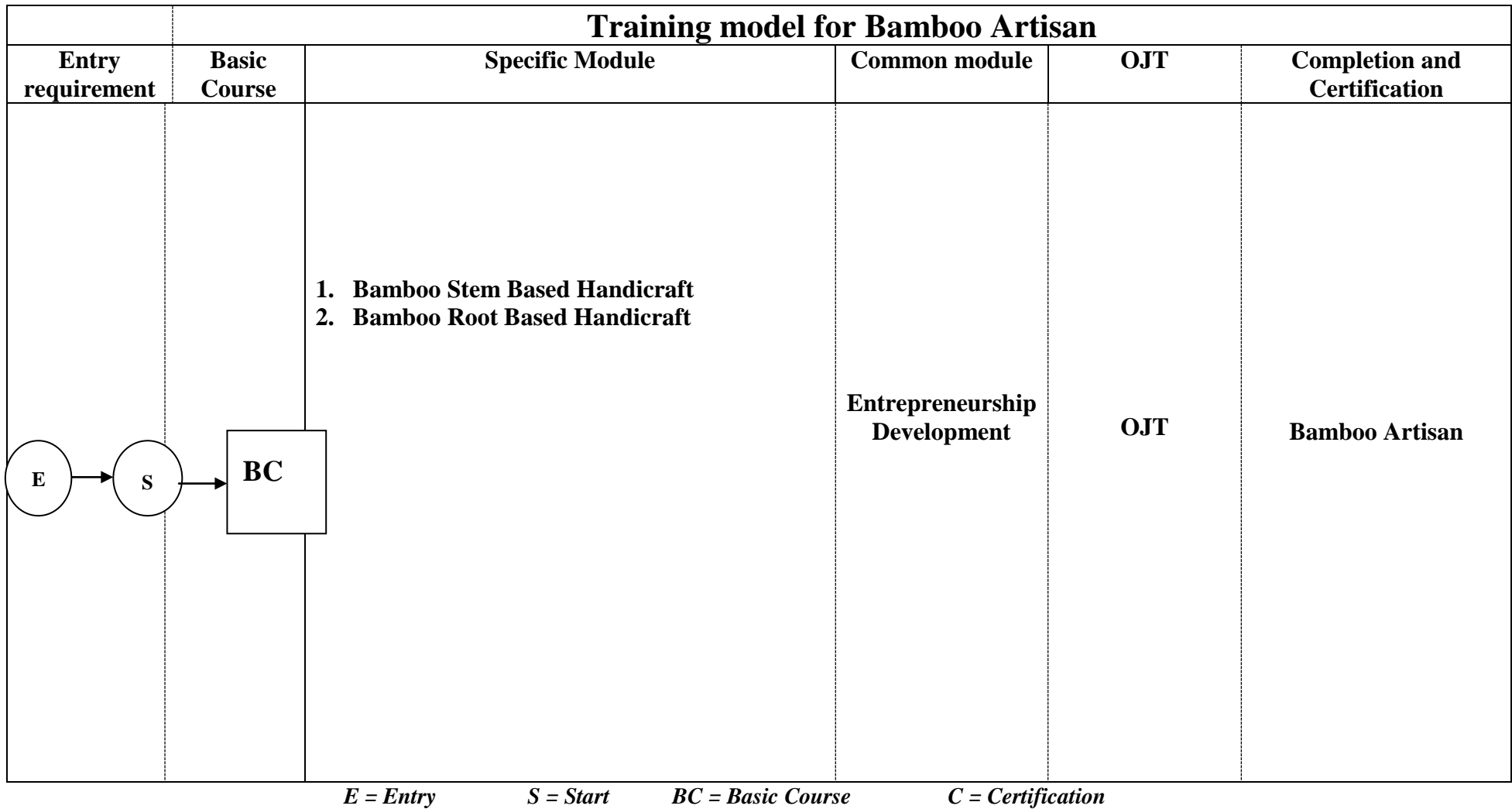
### **Certificate Requirements**

The related training institute will provide the certificate of "**Bamboo Artisan (Bamboo Based Handicraft)**" based on the prescribed in-house training and related OJT completed as per the model of the curriculum. However, individuals who complete module(s) of the institutional training will receive the certificate of completion of the particular module(s).

### **Skill Testing Provision**

The graduates who have the completion certificate of this program may sit in the skill test examination of level two (L-2).

## Model of Training





## Course Structure for Bamboo Artisan

S.N.	Code	Course/Modules/sub modules	Nature	Total hours	Full marks
1	BC	<b>M0: Basic Course</b> <ul style="list-style-type: none"> <li>• Basic Concept of Bamboo and Handicraft</li> <li>• Applied English</li> <li>• Basic Mathematics</li> </ul>	T+P	100	100
2	M1	<b>M1: Bamboo Stem Based Handicraft</b> <ul style="list-style-type: none"> <li>▪ Basic Tools and Basic Works</li> <li>▪ Bamboo Stem Based Decorative Articles Making</li> </ul>	T+P	350	300
3	M2	<b>M2: Bamboo Root Based Handicraft</b> <ul style="list-style-type: none"> <li>▪ Basic Tools and Basic Works</li> <li>▪ Bamboo Root Based Decorative Articles Making</li> </ul>	T+P	270	250
4	M3	<b>M3: Entrepreneurship Development</b> <ul style="list-style-type: none"> <li>• Entrepreneurial Skills</li> <li>• Sales and Marketing Skills</li> </ul>	T+P	60	50
<b>Total</b>				<b>780</b>	<b>700</b>
5	<b>On –the-Job Training ( 4 months)</b>		P	640	400
<b>Grand total</b>				<b>1420</b>	<b>1100</b>

*Note: OJT commences after the completion of above-mentioned modules.*

## Module Code: BC

### Module Title: Basic Course

#### Description

This module is designed to equip trainees with the knowledge and skills on Basic Course as a prerequisite for mastering any specialized module/s course. This course provides foundation knowledge of the occupation as well as knowledge and skills of applied English and basic mathematics for supporting to advance the occupational learning.

#### Aim

This module aims to equip trainees with foundation knowledge and skills as a prerequisite course to master specialized modules.

#### Objectives

After completion of this course module the trainees will be able to:

1. Familiarize with concept of bamboo and bamboo based handicrafts.
2. Apply English for understanding occupation related terminologies.
3. Perform simple mathematical problems related to occupation.

**Prerequisite:** Nil

**Duration:** 100 hours

#### Course: BC

S.N.	Code	Sub-modules	Nature	Total hours	Full marks
1	BC 0.1	Basic Concept of Bamboo and Handicraft	T+P	30	100
2	BC 0.2	Applied English	T	40	
3	BC 0.3	Basic Mathematics	T	30	
<b>Total</b>				<b>100</b>	<b>100</b>

**Module Code: BC**  
***Sub module Code: BC 0.1***  
**Sub module Title: Basic Concept of Bamboo and Handicraft**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on Basic concept of bamboo and handicraft as a prerequisite course for mastering other specific module/s. This course deals with concept, types, commonly available bamboos, bamboos identification and requirements of a good bamboo under the concept of bamboo as well as concept of handicraft related to the occupation.

**Duration:** 30 hours

**Competencies**

1. Familiarize with the basis of bamboo
2. Identify commonly available bamboos
3. Enlist the requirements of a good bamboo
4. Preserve fall bamboos
5. Identify green and seasoned bamboos
6. Familiarize with concept of bamboo based handicrafts/decorative articles
7. Specify the category of handicrafts/decorative articles
8. Describe bamboo based handicrafts

# Task Analysis

**TASK NO. 1 Familiarize with the basis of bamboo.**

**Time: 1 hr**

**Theory: 1 hr**

**Practical: hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions. 2. Define bamboo. 3. Enlist importance of bamboo. 4. Enlist uses of bamboo.	<p><b><u>Condition(Given):</u></b>            Class room, textbooks, manuals and handouts</p> <p><b><u>Task (What):</u></b>            Familiarize with the basis of bamboo.</p> <p><b><u>Standard (How well):</u></b>            Bamboo defined            Importance of bamboo enlisted            Uses of bamboo enlisted</p>	<ul style="list-style-type: none"> <li>➤ Introduction of bamboo</li> <li>➤ Importance of bamboo</li> <li>➤ Uses of bamboo</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 2 Identify commonly available bamboos.**

**Time: 4 hrs**  
**Theory: 2 hrs**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions 2. Enlist types of bamboo. 3. Read bamboo available at particular altitude. 4. Enlist the bamboo available in the market for the purpose of handicraft.	<p><b><u>Condition(Given):</u></b>            Workshop, displayed samples of commonly available bamboos</p> <p><b><u>Task (What):</u></b>            Identify commonly available bamboos.</p> <p><b><u>Standard (How well):</u></b>            Types of bamboo enlisted            Bamboo available at particular altitude read            Commonly available bamboo enlisted</p>	<ul style="list-style-type: none"> <li>➤ Types of bamboo.</li> <li>➤ Bamboo available at particular altitude.</li> <li>➤ Bamboo available in the market for the purpose of handicraft.</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 3 Enlist the requirements of a good bamboo.**

**Time: 4 hrs**

**Theory: 2 hrs**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions</li> <li>2. Define good bamboo</li> <li>3. Enlist the requirements</li> <li>4. Enlist defects in bamboo</li> <li>5. Select young bamboo for preparing splints.</li> <li>6. Select matured bamboo for preparing pins and decorative articles</li> <li>7. Select straight bamboo.</li> <li>8. Remove defective, twisted and wrapped bamboo.</li> <li>9. Select well seasoned bamboo.</li> </ol>	<p><b><u>Condition(Given):</u></b> Class room, textbooks, manuals and handouts</p> <p><b><u>Task (What):</u></b> Enlist the requirements of a good bamboo</p> <p><b><u>Standard (How well):</u></b> Requirements of a good bamboo enlisted. Defects observed in bamboo</p>	<ul style="list-style-type: none"> <li>➤ Definition of a good bamboo</li> <li>➤ Requirements of a good bamboo</li> <li>➤ Defects in bamboo</li> <li>➤ Method of cutting upstanding bamboo</li> <li>➤ Cutting tool handling technique</li> </ul>

**Tools/equipment:** Khukuri, knives etc

**Safety:**

Remove defective and cracked bamboo while selecting

Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 4 Preserve fall bamboos.**

**Time: 8 hrs**

**Theory: 2 hrs**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Define of preservation</li> <li>3. Enlist importance of preservation</li> <li>4. Enlist need of seasoning process</li> <li>5. Enlist technique of seasoning process</li> <li>6. Enlist commonly available anti-termite preservative solution</li> <li>7. Enlist storing technique</li> <li>8. Cut bamboo only in winter season.</li> <li>9. Put fall green bamboo on sunlight</li> <li>10. Keep fall bamboo for seasoning process</li> <li>11. Keep seasoned bamboo for natural drying process under the sun light &amp; at the well ventilated area</li> <li>12. Apply preservative.</li> <li>13. Store fall bamboo only on dry and well ventilated shed in staggered arrangement.</li> </ol>	<p><b><u>Condition(Given):</u></b> Fall bamboo, shed, preservative materials, brush ,cutting tools and glove</p> <p><b><u>Task (What):</u></b> Preserve fall bamboos.</p> <p><b><u>Standard (How well):</u></b> Fall bamboo well seasoned and preserved</p>	<ul style="list-style-type: none"> <li>➤ Definition of preservation</li> <li>➤ Importance of preservation</li> <li>➤ Need of seasoning process</li> <li>➤ Technique of seasoning process</li> <li>➤ Materials used in preservation</li> <li>➤ Storing technique</li> </ul>

**Tools/equipment:**

**Safety:** Remove bamboo from dampness while storing

## Task Analysis

**TASK NO. 5 Identify green and seasoned bamboos.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions</li> <li>2. Read the characteristics of green bamboo.</li> <li>3. Read the characteristics of seasoned bamboo.</li> <li>4. Observe green bamboo.</li> <li>5. Observe seasoned bamboo.</li> </ol>	<p><b><u>Condition(Given):</u></b> Green and seasoned bamboos</p> <p><b><u>Task (What):</u></b> Identify green and seasoned bamboos.</p> <p><b><u>Standard (How well):</u></b> Green and seasoned bamboo observed and identified.</p>	<ul style="list-style-type: none"> <li>➤ Characteristics of green and seasoned bamboo</li> <li>➤ Identification technique</li> </ul>

**Tools/equipment:**

**Safety:**



## Task Analysis

**TASK NO. 6 Familiarize with concept of bamboo based handicrafts/decorative articles.**

**Time: 2 hrs**

**Theory: 2 hrs**

**Practical: hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions</li> <li>2. Define handicraft</li> <li>3. Enlist the importance of handicraft</li> <li>4. Enlist the development concept of handicraft.</li> </ol>	<p><b><u>Condition(Given):</u></b> Class room, textbooks, manuals and handouts</p> <p><b><u>Task (What):</u></b> Familiarize with concept of bamboo based handicrafts/decorative articles</p> <p><b><u>Standard (How well):</u></b> The concept of bamboo based handicrafts well familiarized.</p>	<ul style="list-style-type: none"> <li>➤ Definition of handicraft</li> <li>➤ Importance of handicraft</li> <li>➤ Historical background of handicraft development</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Time: 4 hrs**  
**Theory: 2 hrs**  
**Practical: 2 hrs**

**TASK NO. 7 Specify the category of handicrafts/decorative articles.**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions. 2. Enlist different kinds of bamboo stem based handicraft/decorative articles. 3. Enlist different kinds of bamboo root based handicrafts/decorative articles.	<p><b><u>Condition(Given):</u></b>            Class room, textbooks, manuals and sample handicrafts/decorative articles</p> <p><b><u>Task (What):</u></b>            Specify the category of handicraft</p> <p>.</p> <p><b><u>Standard (How well):</u></b>            Category of handicrafts specified.</p>	<ul style="list-style-type: none"> <li>➤ Category of handicrafts</li> <li>➤ Importance of bamboo based handicrafts</li> <li>➤ Bamboo based decorative articles (stem based &amp; root based)</li> <li>➤ Potential of bamboo based handicraft in Nepal</li> </ul>

**Tools/equipment:**  
**Safety:**

## Task Analysis

**TASK NO. 8 Describe the history of handicraft development.**

**Time: 4 hrs**

**Theory: 2 hrs**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions 2. Enlist history of handicraft 3. Enlist development of handicraft 4. Enlist bamboo based handicraft	<p><b><u>Condition(Given):</u></b>            Class room, textbooks, manuals and handouts</p> <p><b><u>Task (What):</u></b>            Describe the history of handicraft development</p> <p><b><u>Standard (How well):</u></b>            The history of handicraft development described</p>	<ul style="list-style-type: none"> <li>➤ History of handicraft</li> <li>➤ Development of handicraft</li> <li>➤ Bamboo stem based and root based handicrafts</li> </ul>

**Tools/equipment:**

**Safety:**

**Module Code: BC**  
**Sub module Code: BC 0.2**

**Sub module Title: Applied English**

**Description**

This sub module is designed to equip trainees with the skills and knowledge on Applied English as a basic sub module related to the occupation. This module intends to deal Definition and spelling of the occupation related terminologies, Spelling of occupation related tools and equipment, Spelling of commonly demandable decorative articles or items and Interpretation of working drawings and catalogues.

**Duration:** 40 hours

**Competencies**

**1. Define bamboo based handicraft following terminologies:**

Artisan, Handicraft, Bamboo, Young bamboo, Matured bamboo, Cane, Node, Wall décor, Cloum, Seith, Stem, Root, Internodes, Seasoning, Measuring, Marking, Filing, Sawing, Boring, Drilling, Component piece, Extraction, Skinning, Coating, Stripes, Splints, Hairs, Working drawing, Pictorial drawing, Matt piece, Weaving pattern, Loose weaving, Tight weaving, Upright form, Upright splints, Upright stripes, Over two-under two weave, Over three-under three weave, Hexagonal weave, Square pattern, Blocking weave, Check pattern weave, Modified weave, Lap joint, Butt joint, Dove tail joint, Mitre joint, Mortise and tennon joint, Half lap joint, Structural frame work, Decorative articles, structural parts, Embroidery making, Carving etc, Insulation

**2. Spell following bamboo based handicraft tools equipments and materials:**

Measuring tape, Knives, Scissor, Scratching brush, Hand saw, Working board, Plash, Vice, Khukuri, C-clamp, Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try- square, Metal ruler, Scratch awl, Hack saw, File, Drilling machine, Drill bit, Circular machine, Small grinder, Rasp, Blow- lamp, Cotton cloth Chisel -Round chisel , Plane chisel , File – Wooden file, Steel file, Hand saw, Hammer, Scraper, Compressor machine, Spray machine for painting, Reamer, Drill Machine with cutter bit, Electric mini power saw, Leather pad, Glove, Sharpening stone, Compressor machine, Electric mini power saw, Spray machine, Carving chisel, Embroidery making tool sets, hardware, Sand paper, ply paper, Varnish, Thinner, Linseed oil etc

**3. Spell following commonly demandable bamboo based handicrafts/decorative articles/items:**

Flower vase, Flower vase (for table), Churi (Bangle)stand, Dust bin (Basket), Flower vase, Hair comb, Soap case, Square letter box, Temple, Tips box , Cassette rack, Drum (madal), Gate, hair clip , Hand fan, Helicopter , House letter box (five angled), Napkin holder, Pen stand, Phone stand , Photo frame, Pipe (Bansuri), Pooja basket, Ship, square tray, Table lamp, Tooth peg, Tower, Triangular tray, Wall lamp, Wall stand clock, Ornaments (hair clip/ ring/ bracelet), Animal items (giraffe/ cow/ elephant/zebra/ rhino/antelope/camel/reindeer), Animal items (lizard/chameleon/snake/crocodile), Bird items (crow/ peacock/ parrot/ lophophorus), Human heads/ statue etc.

**4. Interpret working drawing/pictorial drawings and catalogues.**

**Module Code: BC**  
***Sub module Code: BC 0.3***

**Sub module Title: Basic Mathematics**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on Basic Mathematics as a prerequisite course for mastering other specific module/s. This course deals with mathematical skills such as unit conversion, fraction, measurement, simple geometric concept, volume and quantity calculation, cost calculation as well as other calculations related to the occupation.

**Duration:** 30 hours

**Competencies**

1. Review additions, dividends, multiplications and subtractions related problems
2. Review fraction related problems
3. Convert unit of measurement from one system to another system
4. Measure length, breadth and height of the object /geometrical figure
5. Calculate perimeter of the geometrical figures (triangle, square, rectangle, circle, polygon)
6. Calculate area (rectangle, circle, trapezoid, triangle etc)
7. Measure mass/density/weight/capacity/Volume of solid and liquid
8. Calculate the quantity of materials required
9. Measure the quantity of work performed
10. Calculate the total cost of work performed and determine loss and profit
11. Calculate simple interest
12. Apply simple unitary rule.

**Text book:**

Mathematic - Grade six – Printed by Janak Education Materials Centre Ltd., Sanothimi, Bhaktapur

## Module Code: M1

### Module Title: Bamboo Stem Based Handicraft

#### Description

This module consists of two sub modules. These are Basic tools and basic works and Bamboo stem based decorative articles (handicrafts) making.

The first sub modules is designed to equip trainees with the knowledge and skills on Basic tools and equipment handling technique and Basic works related to bamboo based decorative articles making.

Similarly, the second sub module intends to provide the knowledge and skills on different bamboo stem based decorative articles making.

#### Aim

This module aims to equip trainees with the knowledge and skills on bamboo based decorative articles (handicrafts) making.

#### Objectives

After completion of this core module the trainees will be able to:

1. Handle tools and equipment related to occupation
2. Perform measuring, marking, slicing, drilling and skinning works
3. Perform bending and work of work piece
4. Prepare various types of pins and splints needed for handicraft decorative articles
5. Prepare various types of boarders and frames
6. Develop and design sketch and drawing
7. Weave decorative articles
8. Prepare carving patterns
9. Make various bamboo based decorative articles/ items
10. Apply paints and varnishes to the decorative articles

**Prerequisite:** Basic course completed.

**Duration:** 350 hours

#### Module Structure (M1)

S.N.	Code	Sub-modules	Nature	Total hours	Full marks
1.1	SM1.1	Basic Tools and Basic Works	T+P	70	300
1.2	SM1.2	Bamboo Stem Based Decorative Articles Making	T+P	280	
<b>Total</b>				<b>350</b>	<b>300</b>

On-the-job training for the module will be 320 hours if the module is taken separately and exited from the training.

**Module Code: M1**  
***Sub module Code: M1.1***

**Sub module Title: Basic Tools and Basic Works**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on basic tools handling techniques and basic as well as preparatory works related to bamboo stem based decorative articles making such as safety rules, measuring, marking, trimming, sawing, drilling, and preparations of pins, boarders, splints, joints and frames related to the occupation.

**Duration:** 70 hours

**Competencies**

1. Orient with safety rules
2. Identify/handle tools and equipment
3. Measure/ mark work piece
4. Saw/trim/slice /file work piece.
5. Split stripe
6. Drill/bore hole
7. Skin work piece
8. Apply blowtorch
9. Dry stripes
10. Straighten/bend/fold work piece
11. Prepare pin
12. Prepare thick splint/thin splint/wide splint/bend splint (choya)
13. Prepare photo frame/basket frame/temple frame/tray frame
14. Prepare lamp/letter box/photo frame lipping stripes (boarders)
15. Make butt joint/lap joint/ mitre joint
16. Apply glue for joining pieces
17. Make plain/slant/round/pagoda roof
18. Make clock base/flower base/lamp base/temple base
19. Fix hardware

## Task Analysis

**TASK NO. 1 Orient with safety rules.**

**Time: 1 hr**  
**Theory: 1 hr**  
**Practical: hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Define safety. 2. Enlist importance of safety precaution. 3. Enlist workshop hazards. 4. Enlist personal safety rules and regulations. 5. Enlist workshop safety rules and regulations.	<p><b><u>Condition (Given):</u></b>            Class room,            handouts and safety poster</p> <p><b><u>Task (What):</u></b>            Orient with safety rules.</p> <p><b><u>Standard (How well):</u></b>            Various safety rules and regulation oriented.</p>	<ul style="list-style-type: none"> <li>➤ Define safety</li> <li>➤ Importance of safety precaution</li> <li>➤ Workshop hazards</li> <li>➤ Safety rules and regulations</li> </ul>

**Tools/equipment:**  
**Safety:**



## Task Analysis

**TASK NO. 2 Identify/handle tools and equipment.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Identify the tools used in bamboo based handicraft</li> <li>3. Identify the equipments used in bamboo based handicraft.</li> <li>4. Enlist function of tools and</li> <li>5. Equipment.</li> <li>6. Handle measuring and marking tools.</li> <li>7. Handle cutting, sawing and filling tools.</li> <li>8. Handle drilling/boring tools.</li> <li>9. Handle blow torch.</li> <li>10. Handle carving/embroidery making tools</li> <li>11. Handle clamping tools.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop and displayed tools</p> <p><b><u>Task (What):</u></b> Identify/handle tools and equipment.</p> <p><b><u>Standard (How well):</u></b> Various tools and equipments well identified and handled.</p>	<ul style="list-style-type: none"> <li>➤ Identifications of tools and equipments.</li> <li>➤ Function of different tools and equipment</li> <li>➤ Tools handling technique</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipment:** Various displaying tools and equipment

**Safety:** Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 3 Measure/mark work piece**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Define measurement</li> <li>3. Enlist importance of measuring</li> <li>4. techniques</li> <li>5. Enlist importance of marking</li> <li>6. Obtain work piece</li> <li>7. Collect measuring tools</li> <li>8. Collect marking tools</li> <li>9. Apply measuring tools to measure work piece in required size</li> <li>10. Apply marking tools to mark work piece in required size &amp; shape.</li> <li>11. Clean and remove dust and particles object.</li> <li>12. Restore all tools.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Measure and mark work piece</p> <p><b><u>Standard (How well):</u></b> Work piece measured and marked applying measuring and marking tools.</p>	<ul style="list-style-type: none"> <li>➤ Definition of measurement</li> <li>➤ Measuring techniques</li> <li>➤ Importance of marking work piece</li> <li>➤ Marking technique</li> </ul>

**Tools/equipment:** Measuring tape, scale, try-square, pencil, marker, dot pen.

**Safety:**

## Task Analysis

**TASK NO. 4** Saw/trim/slice /file work piece.

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtained work piece</li> <li>4. Observe marked work piece</li> <li>5. Saw work piece in required size &amp; shape.</li> <li>6. Trim work piece in required size</li> <li>7. Slice work piece required size.</li> <li>8. File work piece as per standard.</li> <li>9. File work piece as required.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Saw/trim/slice/ file work piece.</p> <p><b><u>Standard (How well):</u></b> Work piece sawed, trimmed, sliced and filed as per specification.</p>	<ul style="list-style-type: none"> <li>➤ Importance of sawing, trimming, slicing and filing in handicraft area.</li> <li>➤ Sawing techniques</li> <li>➤ Trimming and slicing techniques</li> <li>➤ Filing techniques</li> </ul>

**Tools/equipment:** Khukhuri, knives, chisel, file etc

**Safety:** Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 5 Split stripe**

**Time: 2 hrs**  
**Theory: 1 hr**  
**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipments</li> <li>3. Obtain work piece</li> <li>4. Collect required tools and equipments</li> <li>5. Receive measurement of required</li> <li>6. Split strip</li> <li>7. Split cut piece in required stripes.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b>                      Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b>                      Split stripe</p> <p><b><u>Standard (How well):</u></b>                      Stripe split as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Measuring of required split strip</li> <li>➤ Splitting techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Knives, khukuri etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 6 Drill/bore hole**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtain work piece.</li> <li>4. Observe work piece.</li> <li>5. Fix work piece</li> <li>6. Mark the point to be drilled.</li> <li>7. Drill hole.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Drill/bore hole</p> <p><b><u>Standard (How well):</u></b> Various sizes of holes bored and drilled as per requirements.</p>	<ul style="list-style-type: none"> <li>➤ Uses of drill machine</li> <li>➤ Drilling and boring</li> <li>➤ Procedure</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Drill machine, bit etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 7 Skin work piece**

**Time: 2 hrs**

**Theory: 1 hr**

**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist importance of skinning</li> <li>3. Obtain work piece</li> <li>4. Collect required tools</li> <li>5. Determine the point to be skinned.</li> <li>6. Skin the work piece.</li> <li>7. Clean and remove dust and particles object.</li> <li>8. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Skin work piece</p> <p><b><u>Standard (How well):</u></b> Work piece skinned as per requirements and established standard.</p>	<ul style="list-style-type: none"> <li>➤ Importance of skinning</li> <li>➤ Requiring tools</li> <li>➤ Skinning techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** knives, khukuri, chisel etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 8 Apply blow-torch**

**Time: 2 hrs**  
**Theory: 1 hr**  
**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect blowtorch</li> <li>3. Enlist importance of blow-torch</li> <li>4. Obtain work piece</li> <li>5. Collect materials</li> <li>6. Collect blow-lamp</li> <li>7. Apply blow-torch on work piece.</li> </ol>	<p><b><u>Condition (Given):</u></b>  Workshop, blow-torch and materials</p> <p><b><u>Task (What):</u></b>  Apply blow - torch</p> <p><b><u>Standard (How well):</u></b>  Blow – torch well applied.</p>	<ul style="list-style-type: none"> <li>➤ Importance of blow torch</li> <li>➤ Applying techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** blow –torch, lighter, cloth etc  
**Safety:** Handle blow-torch safely

## Task Analysis

**TASK NO. 9 Dry stripes.**

**Time: 2 hrs**

**Theory: 0.5 hr**

**Practical: 1.5 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions. 2. Enlist the importance of drying 4. Receive the drying techniques 5. Obtain work piece 6. Keep drying process under sunlight.	<p><b><u>Condition (Given):</u></b>            Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b>            Dry stripes.</p> <p><b><u>Standard (How well):</u></b>            Stripes dried as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Importance of drying</li> <li>➤ Drying techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:**

**Safety:**



## Task Analysis

**TASK NO. 10** Straighten/bend/fold component piece.

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Enlist the importance of straightening/ bending/ folding component piece.</li> <li>4. Collect component piece</li> <li>5. Apply blow –torch on required portion of the component piece.</li> <li>6. Clamp work piece on vice.</li> <li>7. Straighten work piece as required.</li> <li>8. Bend work piece as required size.</li> <li>9. Fold work piece as require size.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Straighten/bend/fold component piece</p> <p><b><u>Standard (How well):</u></b> Component piece straightened/bended and folded.</p>	<ul style="list-style-type: none"> <li>➤ Importance of straightening, bending and folding of component piece</li> <li>➤ Straightening techniques</li> <li>➤ Bending techniques</li> <li>➤ Folding techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** c-clamp, blow torch and vice.

**Safety:** Handle tools safely

## Task Analysis

**TASK NO. 11 Prepare pin**

**Time: 2 hrs**

**Theory: 1 hr**

**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Enlist importance of pin.</li> <li>4. Enlist types of pin.</li> <li>5. Enlist making techniques.</li> <li>6. Collect stripe.</li> <li>7. Measure and mark on stripes.</li> <li>8. Prepare pins.</li> <li>9. Clean and remove dust and particles object.</li> <li>10. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Prepare pin</p> <p><b><u>Standard (How well):</u></b> Pin prepared as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Importance of pin</li> <li>➤ Types of pin</li> <li>➤ Making techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Hand saw, knives, scale, khukuri, chisel etc

**Safety:** Handle tools safely

## Task Analysis

**TASK NO. 12 Prepare thick splint/thin splint/wide splint (choya)**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect the required tools</li> <li>3. Collect the required work piece</li> <li>4. Enlist types of splint (choya)</li> <li>5. Peel thick splint as required</li> <li>6. Peel thin splint as required.</li> <li>7. Peel wide splint as required.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Prepare thick splint/thin splint/wide splint (choya)</p> <p><b><u>Standard (How well):</u></b> Thick splint, thin splint and wide splint prepared as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Types of splint (choya)</li> <li>➤ Gauging of thick, thin and wide splint</li> <li>➤ Preparation techniques</li> <li>➤ Safety precaution.</li> </ul>

**Tools/equipment:** Hand saw, knives, measuring tape, khukuri, chisels etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 13 Prepare photo frame/basket frame/temple frame/tray frame**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist types of frame.</li> <li>3. Enlist making techniques</li> <li>4. Obtain work piece.</li> <li>5. Collect tools.</li> <li>6. Measure and mark component piece.</li> <li>7. Prepare various component pieces for frames.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Prepare photo frame/basket frame/temple Frame/tray frame</p> <p><b><u>Standard (How well):</u></b> Photo frame, basket frame, temple frame and tray frame Prepared in required size and numbers</p>	<ul style="list-style-type: none"> <li>➤ Types of frame</li> <li>➤ Importance of frame</li> <li>➤ Uses of frame</li> <li>➤ Frame making techniques</li> </ul>

**Tools/equipment:** Hand saw, plash, vice, knives, measuring tape, hammer, chisel, file, glue etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 14 Prepare lamp/letter box/photo frame lipping stripes ( boarders)**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect work piece.</li> <li>3. Collect tools.</li> <li>4. Measure and mark work piece.</li> <li>5. Apply tool for lipping.</li> <li>6. Prepare lipping strip for lamp</li> <li>7. Prepare lipping stripes for letter box</li> <li>8. Prepare lipping stripes for photo frame.</li> <li>9. Obtain lipping.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Prepare lamp/letter box/photo frame lipping stripes (boarders)</p> <p><b><u>Standard (How well):</u></b> Lipping stripes for lamp, letter box, photo frame (boarders) prepared</p>	<ul style="list-style-type: none"> <li>➤ Importance of lipping</li> <li>➤ Types of lipping</li> <li>➤ Size of lipping stripes</li> <li>➤ Preparing techniques</li> <li>➤ Lipping techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Hand saw, plash, vice, knives, measuring tape, hammer, chisel, file, glue etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 15 Make butt joint/lap joint /mitre joint**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect required tools and equipments</li> <li>3. Collect work piece</li> <li>4. Mark the point to make butt joint.</li> <li>5. Mark the point to make lap joint</li> <li>6. Mark the point to make mitre joint.</li> <li>7. Prepare butt joint</li> <li>8. Prepare lap joint</li> <li>9. Prepare mitre joint</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Make butt joint/lap joint/ mitre joint</p> <p><b><u>Standard (How well):</u></b> Butt joint, lap joint and mitre joint made as per standard and measurement.</p>	<ul style="list-style-type: none"> <li>➤ Importance of joints</li> <li>➤ Types of joints</li> <li>➤ Making techniques</li> <li>➤ Joint making technique</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Hand saw, plash, vice, knives, measuring tape, hammer, chisel, glue etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 16 Apply glue for joining pieces**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools for glue application.</li> <li>3. Obtain the gluing materials.</li> <li>4. Collect component parts.</li> <li>5. Prepare surface where the glue is applied.</li> <li>6. Apply glue as required.</li> <li>7. Join component parts</li> <li>8. Clamp glued component parts.</li> <li>9. Clean and remove dust and particles object.</li> <li>10. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Apply glue for joining pieces</p> <p><b><u>Standard (How well):</u></b> Glue applied for joining component parts.</p>	<ul style="list-style-type: none"> <li>➤ Introduction to gluing materials</li> <li>➤ Importance of glue</li> <li>➤ Types of glue</li> <li>➤ Glue applying techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Glue, cloth etc

**Safety:** Handle tools safely

## Task Analysis

**TASK NO. 17 Make plain/slant/round/pagoda roof**

**Time: 12 hrs**

**Theory: 2 hrs**

**Practical: 10 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect materials</li> <li>3. Collect tools and equipments</li> <li>4. Draw free hand sketch of plain roof, slant roof, round roof and pagoda type roof</li> <li>5. Measure and work piece into required size.</li> <li>6. Cut work piece into required size</li> <li>7. Prepare surfaces and edges of cut piece.</li> <li>8. Prepare members of roof structure.</li> <li>9. Join members of roof structure.</li> <li>10. Prepare plain roof.</li> <li>11. Prepare slant roof.</li> <li>12. Prepare round roof.</li> <li>13. Prepare pagoda roof.</li> <li>14. Make roof in required size, shape and style.</li> <li>15. Clean and remove dust and particles object.</li> <li>16. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Make plain/slant/round/Pagoda roof.</p> <p><b><u>Standard (How well):</u></b> Plain, slant, round and pagoda roofs made in different size, shape and style as per obtained sketch.</p>	<ul style="list-style-type: none"> <li>➤ Introduction to different</li> <li>➤ types of roof</li> <li>➤ Importance of different types of roof</li> <li>➤ Size, shape and style of roof</li> <li>➤ Design and sketch of roofs.</li> <li>➤ Making techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Hand saw, plash, vice, knives, measuring tape, hammer, chisel pliers, glue etc

**Safety:** Handle tools safely



## Task Analysis

**TASK NO. 18 Make clock base/flower base/lamp base/temple base**

**Time: 8 hrs**

**Theory: 2 hrs**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect materials</li> <li>3. Collect tools and equipments</li> <li>4. Measure and work piece into required size.</li> <li>5. Cut work piece into required size</li> <li>6. Prepare surfaces and edges of cut piece.</li> <li>7. Prepare members of base structure.</li> <li>8. Join members of base structure.</li> <li>9. Prepare clock base.</li> <li>10. Prepare flower base.</li> <li>11. Prepare lamp base.</li> <li>12. Prepare temple base.</li> <li>13. Make roof in required size, shape and style.</li> <li>14. Clean and remove dust and particles object.</li> <li>15. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Make clock base/flower base/lamp base/temple base.</p> <p><b><u>Standard (How well):</u></b> Clock base, flower base, amp base and temple base made in different size, shape and style as per obtained sketch.</p>	<ul style="list-style-type: none"> <li>➤ Introduction of base(stand)</li> <li>➤ Importance of base</li> <li>➤ Types of base</li> <li>➤ Size, shape and style of base</li> <li>➤ Design and sketch of base</li> <li>➤ Making techniques of base</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Hand saw, plash, vice, knives, measuring tape, hammer, chisel, glue etc

**Safety:** Handle tools safely

## Task Analysis

**TASK NO. 19 Fix hard wares**

**Time: 2 hrs**

**Theory: 1 hr**

**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Obtain tools and equipment.</li> <li>3. Collect required hard wares.</li> <li>4. Obtain work piece.</li> <li>5. Obtain sketch.</li> <li>6. Prepare and mark points where the hard wares to be fixed.</li> <li>7. Apply nails.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipments and materials</p> <p><b><u>Task (What):</u></b> Fix hard wares</p> <p><b><u>Standard (How well):</u></b> Hard wares fixed as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Introduction of hardware</li> <li>➤ Importance of hardware</li> <li>➤ Types of hardware</li> <li>➤ Fixing techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Plash, hammer, pliers, screwdriver, screw, hard wares etc

**Safety:** Handle cutting tools safely

**Module Code: M1**  
**Sub module Code: M1.1**

**Sub module Title: Bamboo Stem Based Decorative  
Articles Making**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on bamboo stem based decorative articles making requires to be performed by this level of artisan. This sub module intends to deals with Designing & sketching of various decorative articles, Preparing carving patterns and component piece, Joining works and Making of different decorative articles as well as their finishing.

**Duration:** 280 hours

**Competencies**

1. Design bamboo stem based decorative articles
2. Draw working drawing/sketch
3. Design pattern of weaving
4. Weave matte piece of required size and shape
5. Prepare carving/embroidery patterns
6. Prepare component piece
7. Join structural frame work/component piece
8. Join matte on frame work
9. Make triangular /square tray
10. Make photo frame
11. Make five angled/ square letter box
12. Make flower vase (for table & wall)
13. Make pen stand
14. Make churi stand
15. Make tips box
16. Make dust bin (Basket)
17. Make hair clip
18. Make hair comb
19. Make soap case
20. Make hand fan
21. Make pipe (bansuri)
22. Make drum madal
23. Make napkin holder
24. Make tooth pick holder
25. Make gate
26. Make pooja basket
27. Make wall lamp/table lamp stand
28. Make phone holder
29. Make cassette rack
30. Make wall stand clock
31. Make house
32. Make temple
33. Prepare surface for polishing.
34. Apply polish / varnish
35. Paste carving patterns on decorative articles

## **Additional competencies**

1. Make tower
2. Make ship
3. Make helicopter

## Task Analysis

**TASK NO. 1 Design bamboo stem based decorative articles.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect necessary instruments and materials.</li> <li>3. Assume the decorative article to be designed.</li> <li>4. Conceptualize the whole parts of the decorative articles.</li> <li>5. Ensure the freehand sketch of the decorative articles to be drawn.</li> <li>6. Obtain catalogue/model of the object.</li> <li>7. Design the concept based on obtained catalogue or model of the object</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles necessary materials and catalogue</p> <p><b><u>Task (What) :</u></b> Design bamboo stem based decorative articles.</p> <p><b><u>Standard (How well) :</u></b> Bamboo stem based decorative articles well designed consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of design</li> <li>➤ Design criteria</li> <li>➤ Model of different decorative articles</li> <li>➤ Sketching of different decorative articles</li> <li>➤ Design techniques</li> </ul>

**Tools/equipment:** Various templates, model of decorative articles and catalogue

## Task Analysis

**TASK NO. 2 Draw sketch/working drawing of decorative articles.**

**Time: 3 hrs**  
**Theory: 1 hr**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools, instruments and materials</li> <li>3. Obtain white paper.</li> <li>4. Obtain models of decorative articles</li> <li>5. Draw the freehand sketch of different decorative articles.</li> <li>6. Refine the freehand sketches and convert to working drawing</li> <li>7. Insert measurement.</li> <li>8. Remove dust and particles from drawing.</li> </ol>	<p><b><u>Condition (Given) :</u></b>            Classroom, drawing model of decorative articles and necessary materials</p> <p><b><u>Task (What) :</u></b>            Draw sketch/working drawing of decorative articles</p> <p><b><u>Standard (How well) :</u></b>            Sketch and working drawing of decorative articles drawn consulting related catalogues</p>	<ul style="list-style-type: none"> <li>➤ Concept of working drawing and sketch in handicraft design</li> <li>➤ Views of sketch</li> <li>➤ Dimension and scale</li> <li>➤ Technique of sketching</li> </ul>

**Tools/equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & cleaning brush

## Task Analysis

**TASK NO. 3 Design pattern of weaving.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Define weaving pattern.</li> <li>3. Identify design techniques of pattern</li> <li>4. Design over one- under one weave.</li> <li>5. Design over two- under two weave.</li> <li>6. Design over three- under three weave.</li> <li>7. Design hexagonal weave.</li> <li>8. Enlist types of pattern.</li> <li>9. Design square pattern</li> <li>10. Design blocking weave.</li> <li>11. Design check pattern weave.</li> <li>12. Design pattern of weaving.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, drawing and necessary materials</p> <p><b><u>Task (What) :</u></b> Design pattern of weaving.</p> <p><b><u>Standard (How well) :</u></b> Various types of weaving patterns designed consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of weaving pattern</li> <li>➤ Types of weaving pattern</li> <li>➤ Method of weaving pattern</li> <li>➤ Designing techniques of weaving pattern</li> <li>➤ Weaving techniques</li> </ul>

**Tools/Equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, Sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & cleaning brush

## Task Analysis

**TASK NO. 4 Weave matte piece in required size & shape.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools and equipment</li> <li>3. Weave over one- under one weave.</li> <li>4. Weave over two- under two mattes.</li> <li>5. Weave over three- under three mattes.</li> <li>6. Weave hexagonal matte.</li> <li>7. Weave square pattern matte</li> <li>8. Weave blocking matte.</li> <li>9. Weave check pattern matte.</li> <li>10. Weave check pattern matte.</li> <li>11. Clean and remove dusts and particles.</li> <li>12. Clean and remove dust and particles object.</li> <li>13. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Weave matte piece in required size and shape</p> <p><b><u>Standard (How well) :</u></b> Matte woven in required size and shape.</p>	<ul style="list-style-type: none"> <li>➤ Concept of matte weaving</li> <li>➤ Types of matte</li> <li>➤ Types of splint</li> <li>➤ Weaving techniques assigning various types of matte</li> <li>➤ Safety precaution</li> </ul>

**Tools/Equipments:** Choya, scissors, Knives, glue, cloth etc

**Safety:** Handle tools safely



## Task Analysis

**TASK NO. 5 Prepare carving/embroidery patterns.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Enlist carving patterns.</li> <li>3. Collect required tools and template.</li> <li>4. Collect work pieces.</li> <li>5. Perform light burning over the surface of work piece for black coloring.</li> <li>6. Prepare square carving pattern.</li> <li>7. Prepare star pattern</li> <li>8. Prepare flower pattern.</li> <li>9. Prepare gajur pattern.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Prepare carving/embroidery patterns.</p> <p><b><u>Standard (How well) :</u></b> Various carving and patterns of well prepared as per drawing.</p>	<ul style="list-style-type: none"> <li>➤ Concept of carving and embroidery patterns</li> <li>➤ Types of carving and embroidery patterns.</li> <li>➤ Uses of carving and embroidery pattern</li> <li>➤ Technique of preparing carving and embroidery pattern</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:** Knife, Chisels, Scissor, Glue (adhesive), Oil stone & Cleaning cloth

**Safety:** Handle of sharp edged tools safely

## Task Analysis

**TASK NO. 6 Prepare component piece.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Determine the components to be developed.</li> <li>3. Collect tools and equipment.</li> <li>4. Obtain design template.</li> <li>5. Obtain work pieces.</li> <li>6. Measure and mark pieces.</li> <li>7. Trim work pieces.</li> <li>8. Skin work pieces.</li> <li>9. Prepare splint.</li> <li>10. Prepare frames</li> <li>11. Prepare lippings.</li> <li>12. Weave matte.</li> <li>13. Prepare carving pattern.</li> <li>14. Prepare roof.</li> <li>15. Clean and remove dust and particles object.</li> <li>16. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make component piece.</p> <p><b><u>Standard (How well) :</u></b> Component piece made as per sketch.</p>	<ul style="list-style-type: none"> <li>➤ Introduction of component piece.</li> <li>➤ Types of materials</li> <li>➤ Technique of making component pieces</li> </ul>

**Tools/equipments:** Knife, Chisels, Oil stone & cleaning cloth

**Safety:** Handle of sharp edged tools safely

## Task Analysis

**TASK NO. 7 Join structural frame work/component piece.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Enlist structural joinery</li> <li>3. Enlist structural frame work.</li> <li>4. Determine the structural framework to be joined.</li> <li>5. Collect tools and equipment.</li> <li>6. Obtain structural frame work.</li> <li>7. Join splint.</li> <li>8. Join frames</li> <li>9. Join borders.</li> <li>10. Weave matte.</li> <li>11. Prepare carving pattern.</li> <li>12. Prepare roof</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Join structural frame work/component piece.</p> <p><b><u>Standard (How well) :</u></b> Structural frame work joined as per sketch.</p>	<ul style="list-style-type: none"> <li>➤ Concept of structural joinery</li> <li>➤ Types of structural frame work.</li> <li>➤ Structural frame Working techniques</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:** Knife, Chisels, Scissor, Glue (adhesive), Oil stone, & Cleaning cloth

**Safety:** Handle of sharp edged tools safely

## Task Analysis

**TASK NO. 8 Join matte on frame work.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Enlist joinery on matte frame work</li> <li>3. Collect materials and tools</li> <li>4. Set matte in required size and shape</li> <li>5. Join matte on frame.</li> <li>6. Clean and remove dust and particles object.</li> <li>7. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Join matte of frame work.</p> <p><b><u>Standard (How well) :</u></b> Matte piece on frame work joined as per sketch.</p>	<ul style="list-style-type: none"> <li>➤ Concept of joinery on matte</li> <li>➤ Frame work</li> <li>➤ Setting techniques</li> <li>➤ Matte joining technique.</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:** Knife, Chisels, Scissor, Glue (adhesive), Oil stone, & Cleaning cloth

**Safety:** Handle sharp edged tools safely

## Task Analysis

**TASK NO. 9 Make triangular tray/ square tray.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Prepare matt board for base.</li> <li>15. Join matt board on the base.</li> <li>16. Join base &amp; border according to the instruction.</li> <li>17. Prepare lippings (border stripes).</li> <li>18. Fix lippings (border stripes).</li> <li>19. Assemble components pieces of triangular/square tray.</li> <li>20. Clean and remove dust and particles object.</li> <li>21. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make triangular tray.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Structural works joined correctly. Matte board base joined. Lippings pasted.</p>	<ul style="list-style-type: none"> <li>➤ Concept of triangular tray and square tray as a decorative item</li> <li>➤ Sketch of triangular tray and square tray</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO.10 Make photo frame.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain design template.</li> <li>4. Arrange work-place.</li> <li>5. Select required main &amp; auxiliary materials.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo in required cut piece.</li> <li>8. Process Skinning of the entire cut piece.</li> <li>9. Split cut piece in required stripes.</li> <li>10. Dry stripes.</li> <li>11. Prepare choya (splints) in required width &amp; gauge.</li> <li>12. Prepare component pieces as per template.</li> <li>13. Make joints as required by the work.</li> <li>14. Join structural frame-works.</li> <li>15. Prepare lippings (border stripes). Paste lipping (border stripes).</li> <li>16. Assemble components pieces of photo frame.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make photo frame.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Structural works joined. Lippings pasted.</p>	<ul style="list-style-type: none"> <li>➤ Concept of photo frame as a decorative item</li> <li>➤ Sketch of photo-frame</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 11 Make five angled/ square letter box**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Prepare lippings (border stripes).</li> <li>15. Fix lippings (border stripes).</li> <li>16. Assemble components pieces of letter box.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make five angled/ square letter box.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Structural works joined correctly. Lippings pasted correctly.</p>	<ul style="list-style-type: none"> <li>➤ Concept of letter box as a decorative articles</li> <li>➤ Shape of letter box</li> <li>➤ Sketch of letter box</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO.12 Make flower vase (for table and wall).**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of flower vase.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make flower vase (for table/wall).</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept flower vase as a decorative item</li> <li>➤ Sketch of flower vase</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely



## Task Analysis

**TASK NO.13 Make pen stand.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of pen stand.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make pen stand.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Woven matte Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of pen stand as a decorative item</li> <li>➤ Sketch of pen stand</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 14 Make churi (bangle) stand.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Prepare component pieces as per template.</li> <li>11. Make joints as required by the work.</li> <li>12. Join structural frame-work of base &amp; border frame</li> <li>13. Join base &amp; border according to the instruction.</li> <li>14. Prepare lippings (border stripes).</li> <li>15. Fix lippings (border stripes).</li> <li>16. Assemble components pieces of churi stand.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make churi (bangle) stand.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Structural works joined. Lippings pasted.</p>	<ul style="list-style-type: none"> <li>➤ Concept churi stand as a decorative item</li> <li>➤ Sketch of churi stand</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 15 Make tips box.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Prepare component pieces as per template.</li> <li>11. Make joints as required by the work.</li> <li>12. Join structural frame-work of base &amp; border frame</li> <li>13. Join base &amp; border according to the instruction.</li> <li>14. Prepare lippings (border stripes).</li> <li>15. Fix lippings (border stripes).</li> <li>16. Assemble components pieces of tip box.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make tips box.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done correctly. Component pieces prepared. Required joints made. Structural works joined. Lippings pasted.</p>	<ul style="list-style-type: none"> <li>➤ Concept of tips box as a decorative item</li> <li>➤ Sketch of tips box</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, White glue, Cotton cloth, Scratching brush, Handsaw, Hacksaw, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Clips, Oil stone, Try-square, Metal ruler, Small nails, Leather pad, Glove, Ply-wood etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 16 Make dust bin (basket).**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Weave basket.</li> <li>12. Assemble components pieces of dust bin.</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make dust bin.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Various types of choya prepared. Woven basket. Surface finished with correct</p>	<ul style="list-style-type: none"> <li>➤ Concept of dust bin as a decorative item</li> <li>➤ Sketch of dust bin</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 17 Make hair clip.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make hair curve clip.</li> <li>11. Drill holes on the clip.</li> <li>12. Make stick (pin).</li> <li>13. Assemble components pieces of hair clip.</li> <li>14. Clean and remove dust and particles object.</li> <li>15. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make hair clip.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Curve clip made. Holes drilled. Stick made.</p>	<ul style="list-style-type: none"> <li>➤ Concept of hair clip as a decorative item</li> <li>➤ Sketch of hair clip</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bit, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Pliers, Chisel Khukuri, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 18 Make hair comb.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive verbal instruction and design template.</li> <li>2. Prepare work-place.</li> <li>3. Collect required tools.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make stripes in required width and gauge.</li> <li>11. Mark as required size, shape &amp; style.</li> <li>12. Cut work-piece</li> <li>13. Saw teeth lines.</li> <li>14. Assemble components pieces of hair comb.</li> <li>15. Clean and remove dust and particles object.</li> <li>16. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make hair comb.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Stripe made. Work piece marked. Work piece cut.</p>	<ul style="list-style-type: none"> <li>➤ Concept of hair comb as a decorative item</li> <li>➤ Sketch of hair comb</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 19 Make soap case.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive verbal instruction and design template.</li> <li>2. Prepare work-place.</li> <li>3. Collect required tools.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Prepare choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base.</li> <li>14. Make walls.</li> <li>15. Make cover.</li> <li>16. Assemble components pieces of soap case.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make soap case.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Choya made. Required joints made. Structural works joined correctly. Walls made. Cover made.</p>	<ul style="list-style-type: none"> <li>➤ Concept of soap case as a decorative item</li> <li>➤ Sketch of soap case</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Drilling machine, Bits, Blow-lamp, White glue, Cotton cloth, Scratching brush, Hacksaw Working board, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Plash, Vice, Khukuri, Small Grinder, Clips, Oil stone, Try-square, Metal ruler, Leather pad, Glove etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 20 Make hand fan.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process skinning of the entire cut piece.</li> <li>8. Split cut piece in required work piece.</li> <li>9. Dry work piece.</li> <li>10. Cut fingers.</li> <li>11. Extend fingers in required span.</li> <li>12. Paste texture paper on both sides in required shape.</li> <li>13. Make hole as required by the work.</li> <li>14. Assemble components pieces of hand fan.</li> <li>15. Clean and remove dust and particles object.</li> <li>16. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make hand fan.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done correctly. Work piece split. Required fingers cut. Fingers extended. Texture paper pasted. Hole made.</p>	<ul style="list-style-type: none"> <li>➤ Concept of hand fan as a decorative item</li> <li>➤ Sketch of hand fan</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Working table, Chisel, Vice, Khukuri, Try-square, Metal ruler, File, Leather pad, Glove, Texture paper, Glue etc

**Safety:**

Handle sharp edged instruments & power tools safely



## Task Analysis

**TASK NO. 21 Make pipe (bansuri).**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Collect appropriate materials.</li> <li>5. Trim bamboo in required length.</li> <li>6. Process Skinning of the work piece.</li> <li>7. Dry work piece.</li> <li>8. Make holes as required by the work.</li> <li>9. Make wooden whistling tongue.</li> <li>10. Fix tongue on the mouth of the work piece.</li> <li>11. Apply blow lamp to create pattern on the surface.</li> <li>12. Clean and remove dust and particles object.</li> <li>13. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make pipe (Bansuri).</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Appropriate materials collected. Bamboo length trimmed. Holes made. Wooden whistling tongue made. Tongue fixed as instructions.</p>	<ul style="list-style-type: none"> <li>➤ Concept bansuri as a decorative item</li> <li>➤ Sketch of bansuri</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, White glue, Blow lamp, Wood, Cotton cloth, Scratching brush, Handsaw, Hacksaw, Working board, Try-square, Metal ruler, Leather pad, Glove, Glue, & Chisel

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO.22 Make drum madal.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Collect appropriate materials.</li> <li>5. Trim bamboo in required cut piece.</li> <li>6. Process Skinning of the entire cut piece.</li> <li>7. Dry work piece.</li> <li>8. Bevel both edge in required degree.</li> <li>9. Cut leather piece in required size &amp; shape.</li> <li>10. Male holes on the sides of skin piece.</li> <li>11. Prepare leather tune (leather rope) as required.</li> <li>12. Set leather piece on both sides of the work piece.</li> <li>13. Tight up skin piece with tune correctly.</li> <li>14. Prepare Black khari.</li> <li>15. Set black khari on the both edge sides of madal.</li> <li>16. Assemble components pieces of madal.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make drum madal.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done correctly. Appropriate materials collected. Bamboo length trimmed. Both edge beveled. Both leather piece set with tune. Black khari set.</p>	<ul style="list-style-type: none"> <li>➤ Concept of madal as a decorative item</li> <li>➤ Sketch of madal</li> <li>➤ Primary processing method.</li> <li>➤ Beveling technique</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, White glue, Handsaw, Working board, Cotton cloth, Scratching brush, Handsaw, Glove, Glue, Black Working table, Chisel, Vice, Khukuri, Try-square, Metal ruler, File, Leather, & charcoal powder

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 23 Make napkin holder.**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Collect appropriate materials.</li> <li>5. Trim bamboo in required cut piece.</li> <li>6. Process Skinning of the entire cut piece.</li> <li>7. Dry work piece.</li> <li>8. Cut in required size, shape &amp; style.</li> <li>9. Bevel all inner &amp; outer edges.</li> <li>10. Assemble components pieces of napkin holder.</li> <li>11. Clean and remove dust and particles object.</li> <li>12. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make napkin holder.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Appropriate materials collected. Bamboo length trimmed. Different size, shape &amp; style holder cut. Edge beveled.</p>	<ul style="list-style-type: none"> <li>➤ Concept of napkin holder as a decorative item</li> <li>➤ Sketch of napkin holder</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution.</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, White glue, File, Working board, Cotton cloth, Scratching brush, Handsaw, hacksaw, Khukuri, Metal ruler, File, Leather pad, Glove, etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 24 Make tooth pick holder**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Collect appropriate materials.</li> <li>5. Trim bamboo in required cut piece.</li> <li>6. Process Skinning of the entire cut piece.</li> <li>7. Dry work piece.</li> <li>8. Prepare choya (splints) as required.</li> <li>9. Make sticks (sinka) in required shape &amp; style.</li> <li>10. Cut sticks in standard tooth peg size.</li> <li>11. Bevel one end.</li> <li>12. Pack in standard bulk.</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition(Given):</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make tooth pick holder.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done correctly. Appropriate materials collected. Bamboo length trimmed. Sticks made. Sticks cut in standard size. On end beveled. Standard bulk packed.</p>	<ul style="list-style-type: none"> <li>➤ Concept of tooth pick holder as a decorative article</li> <li>➤ Sketch of tooth pet</li> <li>➤ Primary processing method</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Metal ruler, Leather pad, Khukuri, Sandpaper, Cotton cloth, Handsaw, Hacksaw, Working board, Working table, Chisel, etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 25 Make gate.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Join various components parts.</li> <li>15. Paste various carving patterns.</li> <li>16. Assemble components pieces of gate.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make gate</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of gate as a decorative item</li> <li>➤ Sketch of gate</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, White glue, Cotton cloth, Scratching brush, Handsaw, Hack saw, Working board, Working table, Chisel, Vice, Khukuri, Try-square, Metal ruler, File, Leather pad, Glove, etc

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 26 Make pooja baskets.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Weave basket.</li> <li>12. Assemble components pieces of pooja basket.</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make pooja basket.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of pooja basket as a decorative item</li> <li>➤ Sketch of pooja basket</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, scratching brush, Handsaw, working board, Khukuri, Metal ruler, Leather pad & Glove

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 27 Make wall lamp/table lamp stand.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of table lamp/wall lamp.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make wall lamp/table lamp stand.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of wall and table lamp stand as a item</li> <li>➤ Sketch of wall lamp and table lamp</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 28 Make phone holder.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of phone stand.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make phone stand.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of phone holder as a decorative item</li> <li>➤ Sketch of phone holder</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails etc

**Safety:**

Handle sharp edged instruments & power tools safely



## Task Analysis

**TASK NO. 29 Make cassette rack.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of cassette rack.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make cassette rack.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of cassette rack as a item</li> <li>➤ Sketch of cassette rack</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 30 Make wall stand clock.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of stand clock.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make wall stand clock.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of wall stand clock as a decorative item</li> <li>➤ Sketch of wall stand</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 31 Make house.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of house.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition(Given):</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What):</u></b> Make house</p> <p><b><u>Standard (How well):</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of house as a decorative item</li> <li>➤ Sketch of house</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 32 Make temple.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of temple.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition(Given):</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What):</u></b> Make temple</p> <p><b><u>Standard (How well):</u></b> Primary processing work done. Component pieces prepared. Required joints made. Matte woven. Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of temple as a decorative item</li> <li>➤ Sketch of temple</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 33 Prepare surface for polishing.**

**Time: 10 hrs**

**Theory: 1 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Define surface preparation</li> <li>3. Collect tools &amp; materials.</li> <li>4. Obtain work piece.</li> <li>5. Check outer &amp; inner surface.</li> <li>6. Clean surface.</li> <li>7. Prepare putty</li> <li>8. Apply putty to fill the hole and gaps</li> <li>9. Apply sand paper.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools, equipment and materials .</p> <p><b><u>Task (What) :</u></b> Prepare surface.</p> <p><b><u>Standard (How well) :</u></b> All the dust and particles removed. Surface prepared for polishing.</p>	<ul style="list-style-type: none"> <li>➤ Requirements of surface</li> <li>➤ Preparing putty</li> <li>➤ Applying putty techniques</li> <li>➤ Materials for surface preparation</li> <li>➤ Types of sand paper</li> <li>➤ Preparation technique</li> </ul>

**Tools/equipments:**

Knife, Chisels, Scissor, Glue, Spirit, Shellac, Brush, Sandpaper, Cotton cloth, Bamboo dust, & cleaning cloth

**Safety:**

Handle product safely

## Task Analysis

**TASK NO. 34 Apply polish/varnish.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Define polish/varnish.</li> <li>3. Collect materials.</li> <li>4. Obtain work piece.</li> <li>5. Check outer &amp; inner surface.</li> <li>6. Clean surface.</li> <li>7. Apply polish / varnish</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools, equipment and materials</p> <p><b><u>Task (What) :</u></b> Apply polish / varnish.</p> <p><b><u>Standard (How well) :</u></b> Polish and varnish applied as per standard.</p>	<ul style="list-style-type: none"> <li>➤ Importance of polishing and varnishing</li> <li>➤ Polishing and varnishing materials</li> <li>➤ Requirement of surface</li> <li>➤ Applying technique</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Sandpaper, Small chisel, Spirit, Shellac, Brush, Cotton cloth, & cleaning cloth

**Safety:**

Handle product safely

## Task Analysis

**TASK NO. 35 Paste carving patterns on decorative articles.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Identify decorative articles.</li> <li>3. Determine carving pattern to be pasted.</li> <li>4. Collect the carving pattern.</li> <li>5. Arrange the carving pattern in proportion and balance.</li> <li>6. Paste the carving pattern.</li> <li>7. Clean and remove dust and particles object.</li> <li>8. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Paste carving patterns on decorative articles</p> <p><b><u>Standard (How well) :</u></b> Carving patterns pasted on decorative articles as per sketch and drawing.</p>	<ul style="list-style-type: none"> <li>➤ Concept of carving pattern paste</li> <li>➤ Value of carving patterns</li> <li>➤ Placing method of the carving pattern</li> <li>➤ Technique of pasting the carving pattern</li> <li>➤ Safety precaution</li> </ul>

**Tools/Equipments:**

Small chisel, Brush, Cotton cloth, Cleaning cloth, white glue, Try-square, scale, pencil etc

**Safety:**

Handle product safely

# **Additional Competencies**



# Task Analysis

**TASK NO. 1 Make tower.**

**Time: 13 hrs**  
**Theory: 1 hr**  
**Practical: 12 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of tower.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition(Given):</u></b>  Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What):</u></b>  Make tower.</p> <p><b><u>Standard (How well):</u></b>  Primary processing work done.  Component pieces prepared.  Required joints made.  Matte woven  Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of tower as a decorative of item</li> <li>➤ Sketch of tower</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 2 Make ship.**

**Time: 13 hrs**

**Theory: 1 hr**

**Practical: 12 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction and design template.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process Skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Join various components parts.</li> <li>15. Paste various carving patterns.</li> <li>16. Assemble components pieces of ship.</li> <li>17. Clean and remove dust and particles object.</li> <li>18. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b> Make ship.</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Appropriate materials collected. Bamboo length trimmed. Component parts made. Structural frame joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of ship as a decorative item</li> <li>➤ Sketch of ship</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissors, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Task Analysis

**TASK NO. 3 Make helicopter.**

**Time: 13 hrs**  
**Theory: 1 hr**  
**Practical: 12 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Arrange work-place.</li> <li>4. Select required main &amp; auxiliary materials.</li> <li>5. Collect required main &amp; auxiliary materials.</li> <li>6. Trim bamboo in required cut piece.</li> <li>7. Process skinning of the entire cut piece.</li> <li>8. Split cut piece in required stripes.</li> <li>9. Dry stripes.</li> <li>10. Make choya (splints) in required width &amp; gauge.</li> <li>11. Prepare component pieces as per template.</li> <li>12. Make joints as required by the work.</li> <li>13. Join structural frame-work of base &amp; border frame</li> <li>14. Weave matte.</li> <li>15. Assemble components pieces of helicopter.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>  Workshop, necessary tools, equipment, materials, drawing and template</p> <p><b><u>Task (What) :</u></b>  Make helicopter.</p> <p><b><u>Standard (How well) :</u></b>  Primary processing of work done.  Component pieces prepared.  Required joints made.  Matte oven  Structural works joined.</p>	<ul style="list-style-type: none"> <li>➤ Concept of helicopter as a decorative item</li> <li>➤ Sketch of helicopter</li> <li>➤ Primary processing method.</li> <li>➤ Component parts</li> <li>➤ Structural frame work</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, White glue, Cotton cloth, Scratching brush, Handsaw, Working board, Plash, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler, & Small nails

**Safety:**

Handle sharp edged instruments & power tools safely

## Module Code: M2

### Module Title: Bamboo Root Based Handicraft

#### Description

This module consists of two sub modules. These are Basic tools and basic works, and Bamboo root based decorative articles (handicrafts) making.

The first sub modules is designed to equip trainees with the knowledge and skills on Basic tools and equipment handling technique, and Basic works related to bamboo root based decorative article making.

Similarly, the second sub module intends to provide the knowledge and skills on different bamboo root based decorative articles making.

#### Aim

This module aims to equip trainees with the knowledge and skills on bamboo root based decorative articles (handicrafts) making

#### Objectives

After completion of this core module the trainees will be able to:

1. Handle tools and equipment
2. Perform measuring, marking, slicing, drilling and skinning works
3. Develop and design sketch and drawing
4. Prepare carving patterns and make embroideries
5. Make various bamboo root based decorative articles/ decorative items
6. Apply paints and varnishes to the decorative articles

**Prerequisite:** Basic course completed.

**Duration:** 270 hours

#### Module Structure (M2)

S.N.	Code	Sub-modules	Nature	Total hours	Full marks
1.1	SM2.1	Basic Tools and Basic Works	T+P	30	250
1.2	SM2.2	Bamboo Root Based Decorative Articles Making	T+P	240	
<b>Total</b>				<b>270</b>	<b>250</b>

On-the-job training for the module will be 320 hours if the module is taken separately and exited from the training.

**Module Code: M2**  
***Sub module Code: M2.1***

**Sub module Title: Basic Tools and Basic Works**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on basic tools handling techniques and basic as well as preparatory works related to bamboo root based decorative articles making such as Safety rules, Identification of different shapes & sizes of bamboo roots, Extraction of bamboo roots from sources, measuring, marking, trimming, sawing, slicing, drilling, and making of various joints related to occupation.

**Duration:** 30 hours

**Competencies**

1. Orient with safety rules
2. Identify/handle tools and equipment
3. Assess different sizes/shapes of bamboo roots
4. Extract bamboo roots from source
5. Measure/ mark work piece
6. Saw/trim/slice /file work piece
7. Drill/bore hole
8. Make lap joint
9. Carve various patterns of decorative designs/ embroidery

## Task Analysis

**TASK NO. 1 Orient with safety rules (review).**

**Time: 1 hr**

**Theory: 1 hr**

**Practical: hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Define safety.</li> <li>2. Enlist importance of safety precaution.</li> <li>3. Enlist workshop hazards.</li> <li>4. Enlist personal safety rules and regulations.</li> <li>5. Enlist workshop safety rules and regulations.</li> </ol>	<p><b><u>Condition (Given):</u></b> Class room, handouts and safety poster</p> <p><b><u>Task (What):</u></b> Orient with safety rules.</p> <p><b><u>Standard (How well):</u></b> Various safety rules and regulation oriented.</p>	<ul style="list-style-type: none"> <li>➤ Define safety</li> <li>➤ Importance of safety precaution</li> <li>➤ Workshop hazards</li> <li>➤ Safety rules and regulations</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 2 Identify/handle tools and equipment.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Identify the tools used in bamboo based handicraft</li> <li>3. Identify the equipments used in bamboo based handicraft.</li> <li>4. Enlist function of tools and Equipment.</li> <li>5. Handle measuring and marking tools.</li> <li>6. Handle cutting, sawing and filling tools.</li> <li>7. Handle electric mini power saw.</li> <li>8. Handle compressor machine.</li> <li>9. Handle drilling/boring tools.</li> <li>10. Handle drilling machine.</li> <li>11. Handle blow torch.</li> <li>12. Handle carving/embroidery making tools</li> <li>13. Handle clamping tools.</li> <li>14. Handle spray machine for painting</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop and displayed tools and equipment</p> <p><b><u>Task (What):</u></b> Identify/handle tools and equipment.</p> <p><b><u>Standard (How well):</u></b> Various tools and equipments well identified and handled.</p>	<ul style="list-style-type: none"> <li>➤ Identifications of tools and equipments.</li> <li>➤ Function of different tools and equipment</li> <li>➤ Tools handling technique</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipment:** Various displayed tools and equipment

**Safety:** Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 3 Assess different sizes/shapes of bamboo roots.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Observe bamboo roots sample displayed workshop.</li> <li>3. Identify different sizes of bamboo roots such as main and auxiliary roots.</li> <li>4. Identify different shapes of bamboo roots.</li> <li>5. Observe the texture of main roots and auxiliary roots.</li> <li>6. Observe the texture of different sizes and shapes of bamboo root.</li> <li>7. Enlist the shape of typical bamboo root.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, different sizes and shapes of displayed bamboo roots</p> <p><b><u>Task (What):</u></b> Assess different sizes/shapes of bamboo roots.</p> <p><b><u>Standard (How well):</u></b> Different sizes and shapes of bamboo roots well assessed.</p>	<ul style="list-style-type: none"> <li>➤ Main and auxiliary roots</li> <li>➤ Identification of different sizes of bamboo root</li> <li>➤ Identification different shape of bamboo roots</li> <li>➤ Texture of bamboo roots</li> </ul>

**Tools/equipment:** Various displayed bamboo roots

**Safety:** Handle bamboo roots safely



## Task Analysis

**TASK NO. 4** Extract bamboo roots from source.

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Visit site where the bamboo roots being extracted.</li> <li>4. Mark the ground for trench digging if necessary.</li> <li>5. Start trench digging and keep continue unless the root obtain</li> <li>6. Identify main and auxiliary roots.</li> <li>7. Extract main and auxiliary root from source without damaging natural structure and texture.</li> <li>8. Store extracted bamboo roots.</li> </ol>	<p><b><u>Condition (Given):</u></b> Site and necessary extracting tools</p> <p><b><u>Task (What):</u></b> Extract bamboo roots from source.</p> <p><b><u>Standard (How well):</u></b> Bamboo roots extracted from source. Main and auxiliary bamboo roots well identified. Natural structure and texture of bamboo root kept remaining.</p>	<ul style="list-style-type: none"> <li>➤ Source for extraction</li> <li>➤ Extracting technique</li> <li>➤ Storing technique</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipment:** Shovel, cross cut saw, jangle measuring tape etc.

**Safety:** Handle extracting tools in safe manner

Do not damage natural structure and texture of bamboo roots.

## Task Analysis

**TASK NO. 5 Measure/mark work piece (review).**

**Time: 2 hrs**

**Theory: 1 hr**

**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Define measurement</li> <li>3. Enlist importance of measuring</li> <li>4. techniques</li> <li>5. Enlist importance of marking</li> <li>6. Obtain work piece</li> <li>7. Collect measuring tools</li> <li>8. Collect marking tools</li> <li>9. Apply measuring tools to measure work piece in required size</li> <li>10. Apply marking tools to mark work piece in required size &amp; shape.</li> <li>11. Clean and remove dust and particles object.</li> <li>12. Restore all tools.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, instruments and materials</p> <p><b><u>Task (What):</u></b> Measure and mark work piece</p> <p><b><u>Standard (How well):</u></b> Work piece measured and marked applying measuring and marking tools.</p>	<ul style="list-style-type: none"> <li>➤ Definition of measurement</li> <li>➤ Measuring techniques</li> <li>➤ Importance of marking work piece</li> <li>➤ Marking technique</li> </ul>

**Tools/equipment:** Measuring tape, scale, try-square, pencil, marker, dot pen.

**Safety:**

## Task Analysis

**TASK NO. 6** Saw/trim/slice /file work piece (review).

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtained work piece</li> <li>4. Observe marked work piece</li> <li>5. Saw work piece in required size &amp; shape.</li> <li>6. Trim work piece in required size</li> <li>7. Slice work piece required size.</li> <li>8. File work piece as per standard.</li> <li>9. File work piece as required.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipment and materials</p> <p><b><u>Task (What):</u></b> Saw/trim/slice/ file work piece.</p> <p><b><u>Standard (How well):</u></b> Work piece sawed, trimmed, sliced and filed as per specification.</p>	<ul style="list-style-type: none"> <li>➤ Importance of sawing, trimming, slicing and filing in handicraft area.</li> <li>➤ Sawing techniques</li> <li>➤ Trimming and slicing techniques</li> <li>➤ Filing techniques</li> </ul>

**Tools/equipment:** Khukhuri, knives, chisel, file etc

**Safety:** Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 7 Drill/bore hole (review).**

**Time: 2 hrs**

**Theory: 1 hr**

**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtain work piece.</li> <li>4. Observe work piece.</li> <li>5. Fix work piece</li> <li>6. Mark the point to be drilled.</li> <li>7. Drill hole.</li> <li>8. Clean and remove dust and particles object.</li> <li>9. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b> Workshop, necessary tools, equipment and materials</p> <p><b><u>Task (What):</u></b> Drill/bore hole</p> <p><b><u>Standard (How well):</u></b> Various sizes of holes bored and drilled as per requirements.</p>	<ul style="list-style-type: none"> <li>➤ Use of drill machine</li> <li>➤ Drilling and boring</li> <li>➤ Procedure</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Drill machine, bit etc

**Safety:** Handle cutting tools safely

## Task Analysis

**TASK NO. 8 Make lap joint (review).**

**Time: 2 hrs**  
**Theory: 1 hrs**  
**Practical: 1 hr**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtain drawing</li> <li>4. Obtain work pieces.</li> <li>5. Observe work pieces.</li> <li>6. Measure and mark the point to be lapped on both pieces.</li> <li>7. Prepare lap portion on both work pieces.</li> <li>8. Check the measurement of lap portion and bring it into requirement if necessary.</li> <li>9. Join the lap portion of both work pieces.</li> <li>10. Fasten the nails as per required.</li> <li>11. Check the lap joint and remove unnecessary portion if required.</li> <li>12. Clean and remove dust and particles object.</li> <li>13. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b>            Workshop, Workshop, necessary tools, equipment, materials and drawing</p> <p><b><u>Task (What):</u></b>            Make lap joint.</p> <p><b><u>Standard (How well):</u></b>            Lap joint made as per drawing.            Lap joint well kept tight and finish</p>	<ul style="list-style-type: none"> <li>➤ Concept of joint</li> <li>➤ Types of joints</li> <li>➤ Function of joint</li> <li>➤ Lap joint making technique</li> <li>➤ Safety precaution.</li> </ul>

**Tools/equipment:** Bottom square, measuring tape, chisels set, file, mallet, claw hammer etc.

**Safety:** Handle cutting tools in safe manner

## Task Analysis

**TASK NO. 9 Carve various patterns of decorative designs/ embroidery.**      **Time: 10 hrs**  
**Theory: 1 hr**  
**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Collect tools and equipment.</li> <li>3. Obtain work piece</li> <li>4. Observe work pieces.</li> <li>5. Obtain drawing/catalog of decorative designs/ embroideries.</li> <li>6. Obtain model of object to be carved.</li> <li>7. Mark/trace the decorative design/embroidery on the work piece.</li> <li>8. Carve commonly used/carving pattern/ embroideries such as fish embroidery/brick embroidery/flower embroidery/triangle embroidery/circle embroidery etc.</li> <li>9. Apply finishing materials such as ply paper and sand paper.</li> <li>10. Clean and remove dust and particles object.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given):</u></b>  Workshop, tools equipments, materials and drawing, catalog and model of object</p> <p><b><u>Task (What):</u></b>  Carve various patterns of decorative designs/ embroidery.</p> <p><b><u>Standard (How well):</u></b>  Various types of commonly used embroidery carved as per catalogues and model of objects.</p>	<ul style="list-style-type: none"> <li>➤ Concept of decorative design</li> <li>➤ Concept of embroideries carving</li> <li>➤ Commonly used carving pattern</li> <li>➤ Embroidery catalogues</li> <li>➤ Embroidery carving technique</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Carving tools set

**Safety:** Handle carving tools in safe manner

**Module Code: M2**  
***Sub module Code: M2.1***

**Sub module Title: Bamboo Root Based Decorative  
Articles Making**

**Description**

This sub module is designed to equip trainees with the knowledge and skills on bamboo root based decorative articles making require to be performed by this level of artisan. This sub module intends to deal with Designing & sketching of various bamboo root based decorative articles such as office items, birds and animals, Making of various bamboo root based decorative articles such as office items, birds, animals and ornaments as well as their finishing.

**Duration:** 240 hours

**Competencies**

1. Design bamboo root based decorative articles.
2. Draw sketch/working drawing of office items.
3. Draw sketch/working drawing of animals.
4. Draw sketch/working drawing of birds.
5. Draw sketch/working drawing of statues.
6. Make office items (tea mat/ pen holder/telephone holder)
7. Make ornament items (hair clip/ ring/ bracelet).
8. Make animal items (giraffe/ cow/ elephant/zebra/ rhino/antelope/camel/reindeer)
9. Make animal items (lizard/chameleon/snake/crocodile)
10. Make bird items (crow/ peacock/ parrot/ lophophorus)
11. Make human heads/ statue
12. Prepare surface for polishing.
13. Prepare spirit shellac solution
14. Apply spirit shellac solution(primer)
15. Apply touch wood polish / varnish (final)

## Task Analysis

**TASK NO. 1 Design bamboo root based decorative articles.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect necessary instruments and materials.</li> <li>3. Obtain white paper.</li> <li>4. Assume the decorative article to be designed.</li> <li>5. Conceptualize the whole parts of the decorative articles.</li> <li>6. Ensure the freehand sketch of the decorative articles to be drawn.</li> <li>7. Design the concept.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles necessary materials and catalogue</p> <p><b><u>Task (What) :</u></b> Design bamboo root based decorative articles.</p> <p><b><u>Standard (How well) :</u></b> Bamboo root based decorative articles designed consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of design</li> <li>➤ Design criteria</li> <li>➤ Model of different decorative articles</li> <li>➤ Sketching of different decorative articles</li> <li>➤ Design techniques</li> </ul>

**Tools/equipment:** Various templates, model of decorative articles and catalogue

**Safety:**



## Task Analysis

**TASK NO. 2 Draw sketch/working drawing of office items.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools, instruments and materials</li> <li>3. Obtain white paper.</li> <li>4. Obtain models of office items.</li> <li>5. Draw the freehand sketch of various office items such as tea mat, pen holder, telephone holder etc.</li> <li>6. Refine the freehand sketches and convert to working drawing</li> <li>7. Insert measurement.</li> <li>8. Remove dust and particles from drawing.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles and necessary materials</p> <p><b><u>Task (What) :</u></b> Draw sketch/working drawing of office items.</p> <p><b><u>Standard (How well) :</u></b> Sketch and working drawing of various office items, drawn consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of working drawing and sketch office items</li> <li>➤ Model of office items</li> <li>➤ Views of sketch</li> <li>➤ Dimension and scale</li> <li>➤ Technique of sketching</li> </ul>

**Tools/equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & Cleaning brush

**Safety:**

Handle sharp edged instruments safely

## Task Analysis

**TASK NO. 3 Draw sketch/working drawing of animals.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools, instruments and materials</li> <li>3. Obtain white paper.</li> <li>4. Obtain models of various animals.</li> <li>5. Draw the freehand sketch of various animals such as snake, lizard, chameleon, giraffe, cow, elephant, zebra, rhino, antelope, camel and reindeer</li> <li>6. Refine the freehand sketches and convert to working drawing</li> <li>7. Insert measurement.</li> <li>8. Remove dust and particles from drawing.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles and necessary materials</p> <p><b><u>Task (What) :</u></b> Draw sketch/working drawing of animals.</p> <p><b><u>Standard (How well) :</u></b> Sketch and working drawing of various animals drawn consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of working drawing and sketch of animals</li> <li>➤ Model of animals</li> <li>➤ Views of sketch</li> <li>➤ Dimension and scale</li> <li>➤ Technique of sketching</li> </ul>

**Tools/equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & Cleaning brush

**Safety:**

Handle sharp edged instruments safely

## Task Analysis

**TASK NO. 4 Draw sketch/working drawing of birds.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools, instruments and materials</li> <li>3. Obtain white paper.</li> <li>4. Obtain models of various birds.</li> <li>5. Draw the freehand sketch of various animals such as crow, peacock, parrot, lophophorous etc.</li> <li>6. Refine the freehand sketches and convert to working drawing</li> <li>7. Insert measurement.</li> <li>8. Remove dust and particles from drawing.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles and necessary materials</p> <p><b><u>Task (What) :</u></b> Draw sketch/working drawing of birds.</p> <p><b><u>Standard (How well) :</u></b> Sketch and working drawing of various birds drawn consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of working drawing and sketch birds</li> <li>➤ Model of birds</li> <li>➤ Views of sketch</li> <li>➤ Dimension and scale</li> <li>➤ Technique of sketching</li> </ul>

**Tools/equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & Cleaning brush

**Safety:**

Handle sharp edged instruments safely

## Task Analysis

**TASK NO. 5 Draw sketch/working drawing of statues.**

**Time: 5 hrs**

**Theory: 1 hr**

**Practical: 4 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools, instruments and materials</li> <li>3. Obtain white paper.</li> <li>4. Obtain models of statues.</li> <li>5. Draw the freehand sketch of parts of human heads, human half body and human full body.</li> <li>6. Refine the freehand sketches and convert to working drawing</li> <li>7. Insert measurement.</li> <li>8. Remove dust and particles from drawing.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Classroom, model of decorative articles and necessary materials</p> <p><b><u>Task (What) :</u></b> Draw sketch/working drawing of statues.</p> <p><b><u>Standard (How well) :</u></b> Sketch and working drawing of various birds drawn consulting related catalogues.</p>	<ul style="list-style-type: none"> <li>➤ Concept of working drawing and sketch birds</li> <li>➤ Model of statues</li> <li>➤ Views of sketch</li> <li>➤ Dimension and scale</li> <li>➤ Technique of sketching</li> </ul>

**Tools/equipments:**

Paper, Pencil, Eraser, Dot pen, Marker, Paper cutter, sitting mat, Glue, Scotch tape, Pencil sharpener, Colour pencil, Ruler, Compass, Divider, Cutter, Cotton cloth & Cleaning brush

**Safety:**

Handle sharp edged instruments safely

## Task Analysis

**TASK NO. 6 Make office items (tea mat/ pen holder/telephone holder).**

**Time: 13 hrs**  
**Theory: 1 hr**  
**Practical: 12 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as tea mat, pen holder and telephone holder.</li> <li>8. Proceed to convert work piece into mat shape and keep continue until completion.</li> <li>9. Process to convert work piece into pen holder shape.</li> <li>10. Process to convert work piece into telephone holder shape.</li> <li>11. Carve decorative design/embroidery over the mat/ pen holder/telephone holder as per design and drawing.</li> <li>12. Check the measurement of the products.</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>  Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of office items</p> <p><b><u>Task (What) :</u></b>  Make office items (tea mat/ pen holder/telephone holder).</p> <p><b><u>Standard (How well) :</u></b>  Primary processing work done.  Office items such as tea mat, pen holder and telephone holder made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of office items as decorative articles</li> <li>➤ Drawing and catalog of tea mat, pen holder and telephone holder items</li> <li>➤ Primary processing method</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board and Vice. Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely

## Task Analysis

**TASK NO. 7 Make ornament items (hair clip/ ring/ bracelet).**      **Time: 13 hrs**  
**Theory: 1 hr**  
**Practical: 12 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as hair clip, ring, and bracelet.</li> <li>8. Proceed to prepared work piece into hair clip shape.</li> <li>9. Proceed to convert work piece into ring shape and keep continue until completion.</li> <li>10. Proceed to convert work piece into bracelet shape.</li> <li>11. Carve decorative design/embroidery over prepared the hair clip/ ring/ bracelet as per design and drawing.</li> <li>12. Check the measurement of the products.</li> <li>13. Clean and remove dust and particles object.</li> <li>14. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>  Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of ornaments</p> <p><b><u>Task (What) :</u></b>  Make ornament items (hair clip/ ring/ bracelet).</p> <p><b><u>Standard (How well) :</u></b>  Primary processing work done.  Ornament items such as hair clip, ring, and bracelet made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of ornament items as decorative articles</li> <li>➤ Drawing and catalog of hair clip, ring, and bracelet items</li> <li>➤ Primary processing method</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board, Vice. Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely

## Task Analysis

**TASK NO. 8 Make animal items (giraffe/ cow/ elephant/zebra/ rhino/antelope/camel/reindeer).**

**Time: 46 hrs**  
**Theory: 2 hr**  
**Practical: 44 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as giraffe, cow, elephant, zebra, rhino, antelope, camel and reindeer.</li> <li>8. Proceed to prepared work pieces into giraffe/ cow/ elephant/zebra/ rhino/antelope/camel/reindeer shape and keep continue until completion.</li> <li>9. Make/insert parts of giraffe over prepared such shape of work piece.</li> <li>10. Make/insert parts of cow over prepared such shape of work piece.</li> <li>11. Make/insert parts of elephant over prepared such shape of work piece.</li> <li>12. Make/insert parts of zebra over prepared such shape of work piece.</li> <li>13. Make/insert parts of antelope over prepared such shape of work piece.</li> <li>14. Make/insert parts of camel over prepared such shape of work piece.</li> <li>15. Make/insert parts of reindeer over prepared such shape of work piece.</li> <li>16. Carve decorative design/embroidery over the prepared giraffe/ cow/ elephant/zebra/ rhino/antelope/camel/reindeer as per design and drawing.</li> <li>17. Check the measurement of the products.</li> <li>18. Clean and remove dust and particles object.</li> <li>19. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>  Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of animal items</p> <p><b><u>Task (What) :</u></b>  Make animal items (giraffe/ cow/ elephant/ zebra/ rhino/antelope/ camel/reindeer)</p> <p><b><u>Standard (How well) :</u></b>  Primary processing work done.  Animal items such as giraffe, cow, elephant, zebra, rhino, antelope, camel and reindeer made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of animal items as decorative articles</li> <li>➤ Drawing and catalog of giraffe, cow, elephant, zebra, rhino, antelope, camel and reindeer items</li> <li>➤ Primary processing method</li> <li>➤ Component parts</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely

## Task Analysis

**Time: 38 hrs**  
**Theory: 2 hr**  
**Practical: 36 hrs**

**TASK NO. 9 Make animal items (lizard/chameleon/snake/goro/crocodile).**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as lizard, chameleon, snake, goro, and crocodile.</li> <li>8. Proceed to prepared work pieces into lizard/ chameleon/ snake/goro/ crocodile shape and keep continue until completion.</li> <li>9. Make/insert parts of lizard over prepared such shape of work piece.</li> <li>10. Make/insert parts of chameleon over prepared such shape of work piece.</li> <li>11. Make/insert parts of snake over prepared such shape of work piece.</li> <li>12. Make/insert parts of goro over prepared such shape of work piece.</li> <li>13. Make/insert parts of crocodile over prepared such shape of work piece.</li> <li>14. Carve decorative design/embroidery over the prepared lizard/ chameleon/ snake/goro/ crocodile as per design and drawing.</li> <li>15. Check the measurement of the products.</li> <li>16. Clean and remove dust and particles object.</li> <li>17. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of animal items</p> <p><b><u>Task (What)</u></b> Make animal items (lizard/chameleon /snake/goro/crocodile)</p> <p><b><u>Standard (How well) :</u></b> Primary processing work done. Animal items such as lizard, chameleon, snake, goro, and crocodile made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of animal items as decorative articles</li> <li>➤ Drawing and catalog of lizard, chameleon, snake, goro, and crocodile.</li> <li>➤ Primary processing method</li> <li>➤ Component parts</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board, Vice. Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely



## Task Analysis

**TASK NO. 10** Make bird items (crow/ peacock/ parrot/ lophophorus).

**Time: 38 hrs**  
**Theory: 2 hr**  
**Practical: 36 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as crow, peacock parrot and lophophorus.</li> <li>8. Proceed to prepared work pieces into items crow/ peacock/ parrot/ lophophorus shape and keep continue until completion.</li> <li>9. Make/insert parts of crow over prepared such shape of work piece.</li> <li>10. Make/insert parts of peacock over prepared such shape of work piece.</li> <li>11. Make/insert parts of parrot over prepared such shape of work piece.</li> <li>12. Make/insert parts of lophophorus over prepared such shape of work piece.</li> <li>13. Carve decorative design/embroidery over the prepared crow/ peacock/ parrot/ lophophorus as per design and drawing.</li> <li>14. Check the measurement of the products.</li> <li>15. Clean and remove dust and particles object.</li> <li>16. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>  Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of bird items</p> <p><b><u>Task (What) :</u></b>  Make bird items (crow/ peacock/ parrot/ lophophorus.</p> <p><b><u>Standard (How well) :</u></b>  Primary processing work done.  Bird items such as crow, peacock parrot and lophophorus made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of office items as decorative articles</li> <li>➤ Drawing and catalog of crow, peacock parrot and lophophorus.</li> <li>➤ Primary processing method</li> <li>➤ Component parts</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely

## Task Analysis

**TASK NO. 11 Make statues (human head/human half body/human full body).**

**Time: 38 hrs**  
**Theory: 2 hr**  
**Practical: 36 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect required tools.</li> <li>3. Obtain working drawing.</li> <li>4. Arrange work-place.</li> <li>5. Select required work piece.</li> <li>6. Collect required main &amp; auxiliary materials.</li> <li>7. Trim bamboo root in required cut piece of items to be made such as human head, human half body and human full body</li> <li>8. Proceed to prepared work pieces into the parts of human head/ human half body/ human full body shape and keep continue until completion.</li> <li>9. Make/insert parts of head over prepared such shape of work piece.</li> <li>10. Make/insert parts of human half body over prepared such shape of work piece.</li> <li>11. Make/insert parts of human full body over prepared such shape of work piece.</li> <li>12. Carve decorative design/embroidery over the prepared human head/human half body/human full body as per design and drawing.</li> <li>13. Check the measurement of the products.</li> <li>14. Clean and remove dust and particles object.</li> <li>15. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b>                      Workshop, necessary tools, equipment, instruments, work piece, materials and catalogues or drawing or model of statues</p> <p><b><u>Task (What) :</u></b>                      Make statues (human head/human half body/human full body).</p> <p><b><u>Standard (How well) :</u></b>                      Primary processing work done.                      Statues items such as human head, human half body and human half body made as per drawing and design.</p>	<ul style="list-style-type: none"> <li>➤ Concept of statues items as decorative articles</li> <li>➤ Drawing and catalog of human head, human half body and human half body</li> <li>➤ Primary processing method</li> <li>➤ Component parts</li> <li>➤ Procedure</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Measuring tape, Knives, Scissor, Cotton cloth, Scratching brush, Handsaw, Working board, Vice, Khukuri, C-clamp. Leather pad, Glove, Working table, Screwdriver, Hammer, Mallet, Pliers, Chisel, Clips, Oil stone, Try-square, Metal ruler etc

**Safety:**

Handle sharp edged instruments tools safely

## Task Analysis

**TASK NO. 12 Prepare surface for polishing.**

**Time: 11 hrs**

**Theory: 2 hr**

**Practical: 9 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools &amp; materials.</li> <li>3. Obtain product.</li> <li>4. Check outer surface and measurement of the product.</li> <li>5. Clean surface of the product.</li> <li>6. Prepare putty.</li> <li>7. Apply putty to fill the hole and gaps.</li> <li>8. Apply sand paper to make surface smooth and even.</li> <li>9. Clean and remove dust and particles object.</li> <li>10. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools and materials</p> <p><b><u>Task (What) :</u></b> Prepare surface for polishing.</p> <p><b><u>Standard (How well) :</u></b> All the dust and particles removed. Surface well prepared for polishing.</p>	<ul style="list-style-type: none"> <li>➤ Concept of surface preparation</li> <li>➤ Requirements of surface</li> <li>➤ Materials for surface preparation</li> <li>➤ Types of ply paper and sand paper</li> <li>➤ Function of ply paper, sand paper and putty</li> <li>➤ Putty preparation technique</li> <li>➤ Surface preparation technique</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:**

Knife, Chisels, Scissor, Glue, Spirit, Shellac, Brush, Sandpaper, Cotton cloth, Bamboo dust, & cleaning cloth

**Safety:**

Handle product safely

## Task Analysis

**TASK NO. 13 Prepare spirit shellac solution.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools &amp; necessary amount of materials.</li> <li>3. Determine the amount to be prepared.</li> <li>4. Measure/weigh the ingredients to the required amount (i. e. 1 litre spirit, 250 gram shellac, 10 gram red powder and 10 gram blue brown powder)</li> <li>5. Batch the ingredients of above amount of ratio.</li> <li>6. Mix the ingredients and</li> <li>7. Stir mixer until it becomes consistency slurry.</li> <li>8. Test the consistency of solution.</li> <li>9. Ensure the solution ready for use.</li> <li>10. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, necessary tools and materials</p> <p><b><u>Task (What) :</u></b> Prepare spirit shellac solution.</p> <p><b><u>Standard (How well) :</u></b> All the steps followed in sequence. Consistency and colour of solution well produced.</p>	<ul style="list-style-type: none"> <li>➤ Concept of spirit shellac solution</li> <li>➤ Important of spirit shellac solution</li> <li>➤ Ingredients required for spirit shellac solution</li> <li>➤ Preparation technique</li> <li>➤ Preparation technique</li> <li>➤ Safety precautions</li> </ul>

**Tools/equipments:** Weighing machine, liquid measuring instrument, small bucket, stirrer etc.

**Safety:**

Weigh and measure ingredients correctly.

## Task Analysis

**TASK NO. 14 Apply spirit shellac (Primer).**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools instruments.</li> <li>3. Obtain prepared spirit shellac solution.</li> <li>4. Obtain the products.</li> <li>5. Clean and remove dust and from products.</li> <li>6. Check the prepared surface of the products.</li> <li>7. Start to apply spirit shellac from the top part of the products and complete the whole surface.</li> <li>8. Let the products in sun light after painting for at least two days.</li> <li>9. Apply next coat as per requirement and precede step no. 8.</li> <li>10. Ensure the of the surface of the products ready for final paint/polishing/varnishing.</li> <li>11. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools, materials and spirit shellac</p> <p><b><u>Task (What) :</u></b> Apply spirit shellac solution.</p> <p><b><u>Standard (How well) :</u></b> All the steps followed in sequence. Spirit shellac solution well applied. The texture and colour of paint in the product produced red brown colour.</p>	<ul style="list-style-type: none"> <li>➤ Requirement of surface of product</li> <li>➤ Application procedure</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Sandpaper, Small chisel, Spirit Shellac, Brush, Cotton cloth, & Cleaning cloth

**Safety:**

Handle product safely

## Task Analysis

**TASK NO. 15 Apply touch wood polish / varnish (final paint).**

**Time: 7 hrs**

**Theory: 1 hr**

**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Collect tools instruments.</li> <li>3. Obtain touch wood polish/varnish</li> <li>4. Obtain the products.</li> <li>5. Clean the surface of products.</li> <li>6. Start to apply touch wood polish/varnish from the top part of the products and complete the whole surface.</li> <li>7. Let the products in sun light after painting for at least two days.</li> <li>8. Apply next coat as per requirements and proceeds step no 7.</li> <li>9. Clean and remove dust and particles object.</li> <li>10. Restore all tools &amp; remaining materials.</li> </ol>	<p><b><u>Condition (Given) :</u></b> Workshop, products, necessary tools, materials and touch wood polish or varnish</p> <p><b><u>Task (What) :</u></b> Apply touch wood polish / varnish (final).</p> <p><b><u>Standard (How well) :</u></b>  All the steps followed in sequence. Touch wood polish or varnish well applied. The texture and colour of touch wood paint in the product produced red brown colour.</p>	<ul style="list-style-type: none"> <li>➤ Requirement of surface of product</li> <li>➤ Application procedure</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipments:**

Sandpaper, Small chisel, Touch wood polish or varnish, Brush, Cotton cloth, & cleaning cloth

**Safety:**

Handle product safely

## Module Code: M3

# Module Title: Entrepreneurship Development

### Description

This module is designed to equip trainees with the knowledge and skills on Entrepreneurship Development as a compulsory module require to be performed by this level. This module provides skills and knowledge on entrepreneurial skills and Sales and marketing as sub- modules.

### Aim

This module aims to equip trainees with knowledge and skills of entrepreneurship development skills to bamboo artisans to be an entrepreneur.

### Objectives

After completion of this core module the trainees will be able to:

1. Acquire entrepreneurial skills to be an entrepreneur
2. Promote sales and marketing skills

**Prerequisite:** Specialized modules completed.

**Duration:** 60 hours

### Module Structure (M 3)

S.N.	Code	Sub-modules	Nature	Total hours	Full marks
1	SM 3.1	Entrepreneurial Skills	T+P	30	50
2	SM 3.2	Sales and Marketing Skills	T+P	30	
<b>Total</b>				<b>60</b>	<b>50</b>

## **Module Code: M3**

### ***Sub Module Code: SM3.1***

## **Sub module Title: Entrepreneurial Skills**

### **Description**

This course is designed to equip the trainees with knowledge and skills on Entrepreneurial Skills in order to be an entrepreneur. The course deals with various entrepreneurial competencies, project identification, enterprise management, marketing skills, promotional activities, business scheme preparation and communication skills needed for the occupation.

**Duration:** 30 hours

### **Competencies**

1. Develop entrepreneurial competencies.
2. Select / identify a project.
3. Prepare a business scheme.
4. Develop marketing skill.
5. Conduct promotional activities.
6. Apply communication skills.
7. Manage an enterprise.



# Task Analysis

**Task No: 1 Develop entrepreneurial competencies.**

**Time: 2 hrs**

**Theory: 2 hrs**

**Practical: hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Observe the surrounding environment and entrepreneur's own capabilities.</li> <li>2. Develop entrepreneur's own capabilities.</li> <li>3. Take performance steps for achievement of               <ul style="list-style-type: none"> <li>- Economic objective.</li> <li>- Social objective.</li> <li>- Human objective.</li> </ul> </li> <li>4. Prepare business plans based on ones own findings.</li> <li>5. Develop new profitable business opportunities by combining resources in a new way.</li> <li>6. Produce marketable products.</li> <li>7. Create markets.</li> <li>8. Innovate and develop improved technologies.</li> <li>9. Inspire others.</li> <li>10. Supply quality goods.</li> <li>11. Reduce cost for reducing price of product.</li> <li>12. Provide employment.</li> <li>13. Utilize the scarce resource properly.</li> <li>14. Avoid social nuisances.</li> <li>15. Manage financial problem.</li> <li>16. Develop management skill for all business activities               <ul style="list-style-type: none"> <li>- Production, inventory, purchasing, marketing, research and development, financial and personnel.</li> </ul> </li> <li>17. Satisfy employees / consumers / partners.</li> <li>18. Develop dynamism &amp; risk taking ability according to the situation.</li> <li>19. Make perfect decision.</li> <li>20. Develop confidence.</li> </ol>	<p><b><u>Condition(Given):</u></b> Classroom and reading materials</p> <p><b><u>Task (What):</u></b> Develop entrepreneurial competencies.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Entrepreneurial competencies well developed</p>	<ul style="list-style-type: none"> <li>➤ Introduction to Entrepreneurship</li> <li>➤ Traits of an entrepreneur</li> <li>➤ Concept of employment</li> <li>➤ Concept of business</li> <li>➤ Entrepreneurial competencies</li> <li>➤ Managerial skill</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Task No: 2 Select / identify a project.**

**Time: 5 hrs**

**Theory: 2 hrs**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Make list of projects.</li> <li>2. Classify the projects in group according to               <ul style="list-style-type: none"> <li>- Personal interest / ability.</li> <li>- Possibility of earning profit.</li> <li>- Less risk.</li> <li>- Knowledge and skill needed.</li> <li>- Estimated size and available resources.</li> <li>- Prevailing level of competition.</li> <li>- Chance of expansion in future.</li> <li>- Level of competition.</li> <li>- Rising trend of future demand.</li> <li>- Duration.</li> </ul> </li> <li>3. Investigate the projects.</li> <li>4. Determine               <ul style="list-style-type: none"> <li>- Form of business.</li> <li>- Provision of capital.</li> <li>- Location.</li> <li>- Available staffs according to the project.</li> <li>- Office equipment.</li> <li>- Government policy.</li> </ul> </li> <li>5. Prioritize the projects regarding               <ul style="list-style-type: none"> <li>- Strength, weakness, opportunity, threat.</li> </ul> </li> <li>6. Select right project according to your vision and mission.</li> </ol>	<p><b><u>Condition(Given):</u></b> Site and reading materials</p> <p><b><u>Task (What):</u></b> Select / identify a project.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. A project selected and identified meeting the requirements.</p>	<ul style="list-style-type: none"> <li>➤ Concept of business</li> <li>➤ Introduction to SWOT (Strength, weakness, opportunity and threat)</li> <li>➤ Tips for opportunity selection</li> <li>➤ Reason of business failure</li> <li>➤ Requisites of business success</li> <li>➤ Project selection criteria</li> </ul>

**Tools/equipment:**

**Safety:**

# Task Analysis

**Task No: 3 Prepare a business scheme.**

**Time: 5 hrs**

**Theory: 2 hrs**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Identify the project standard regarding               <ul style="list-style-type: none"> <li>- Functional.</li> <li>- Technical.</li> <li>- Aesthetic.</li> <li>- Capital cost.</li> <li>- Life cycle cost.</li> </ul> </li> <li>2. Specify the objective of the project.</li> <li>3. Analyze net Working by critical path method               <ul style="list-style-type: none"> <li>- State the master activities of the project.</li> <li>- Evaluate whole activities.</li> <li>- Set up the sequence of activities.</li> <li>- Allocate the Time / duration for each activity.</li> <li>- Study about the cost of activities (labour / material / tools cost).</li> <li>- Prepare tabulation (sequence activities with Time).</li> <li>- Apply project evaluation and review technique.</li> </ul> </li> <li>4. Analyze production               <ul style="list-style-type: none"> <li>- Prepare resource and multi project schedule.</li> <li>- State required men, machine, and materials for each production activities.</li> <li>- Give specification of resources.</li> <li>- Determine Time schedule for each activities.</li> </ul> </li> <li>5. Analyze finance               <ul style="list-style-type: none"> <li>- by undiscounted method                   <ul style="list-style-type: none"> <li>▪ Calculate simple rate of return on investment.</li> <li>▪ Calculate payback period.</li> </ul> </li> <li>- by discounted method                   <ul style="list-style-type: none"> <li>▪ Calculate net present value.</li> <li>▪ Internal rate of return.</li> <li>▪ Benefit cost ratio.</li> </ul> </li> </ul> </li> <li>6. Develop financial plan               <ul style="list-style-type: none"> <li>- Indicate funds need by form for the specified period.</li> <li>- Indicate timing of inflows and outflows.</li> <li>- Indicate sources.</li> <li>- Indicate use of funds for project activities.</li> <li>- Forecast to determine the specific amounts and timing of expenditure and receipts.</li> <li>- Follow the profit and loss account.</li> </ul> </li> </ol>	<p><b><u>Condition(Given):</u></b> Reading materials and field visit report</p> <p><b><u>Task (What):</u></b> Prepare a business scheme.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Business scheme prepared according to the guidelines.</p>	<ul style="list-style-type: none"> <li>➤ Concept and importance of business plan / scheme</li> <li>➤ Guideline for preparing a business plan</li> <li>➤ Production planning</li> <li>➤ Expenses</li> <li>➤ Financial analysis</li> <li>➤ Profit and loss account</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Task No: 4 Develop marketing skills.**

**Time: 4 hrs**

**Theory: 2 hrs**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Set the objectives to be achieved.</li> <li>2. Analyze the market to increase sales volume.</li> <li>3. Formulate the sales budget.</li> <li>4. Evaluate the potential customer's needs and wants.</li> <li>5. Determine marketing plans, procedures and policies to serve the customers demand.</li> <li>6. Interlink demand with supply.</li> <li>7. Co-ordinate between the different constituent elements of the marketing mix               <ul style="list-style-type: none"> <li>- Product.</li> <li>- Price.</li> <li>- Place.</li> <li>- Promotion.</li> </ul> </li> <li>8. Select effective marketing channel.</li> <li>9. Develop effective and smooth marketing communication.</li> <li>10. Apply market research.</li> <li>11. Co-ordinate and control all marketing activities.</li> <li>12. Evaluate performance of sales force periodically.</li> <li>13. Review all plans and policies and change if necessary.</li> <li>14. Motivate the employees properly.</li> <li>15. Plan and develop product to match               <ul style="list-style-type: none"> <li>- Demand of the customer.</li> <li>- Product life cycle.</li> </ul> </li> <li>16. Observe and study buyer's behaviors and their grievances.</li> <li>17. Select effective distribution channels.</li> </ol>	<p><b><u>Condition(Given):</u></b> Products, market, customer and reading materials</p> <p><b><u>Task (What):</u></b> Develop marketing skill.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Marketing skills well developed.</p>	<ul style="list-style-type: none"> <li>➤ Introduction to market and marketing</li> <li>➤ Concept on demand and supply</li> <li>➤ Types of market (on the basis of region)</li> <li>➤ Introduction to marketing mix</li> <li>➤ Introduction to product life cycle</li> <li>➤ Buyers' behavior and its characteristics</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Task No: 5 Conduct promotional activities.**

**Time: 5 hrs**

**Theory: 2 hrs**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Select promotion mix as advertising according to               <ul style="list-style-type: none"> <li>- Promotion objectives.</li> <li>- Nature of the product.</li> <li>- Nature of the target market.</li> <li>- Stage of product life cycle.</li> <li>- Size of the promotion budget.</li> <li>- Promotion strategy.</li> </ul> </li> <li>2. Identify target audience.</li> <li>3. Select objective regarding               <ul style="list-style-type: none"> <li>- Informative.</li> <li>- Persuasive.</li> <li>- Reminding.</li> <li>- Reinforcing.</li> </ul> </li> <li>4. Make decision for the budget.</li> <li>5. Choose the message.</li> <li>6. Liaison with the advertising agency.</li> <li>7. Supervise advertising and marketing research.</li> <li>8. Select the media               <ul style="list-style-type: none"> <li>- Print media.</li> <li>- Visual media.</li> <li>- Audio media.</li> <li>- Audio visual media.</li> </ul> </li> <li>9. Keep in touch with representatives of important media.</li> <li>10. Coordinate with the sales and other departments.</li> <li>11. Distribute advertising material.</li> <li>12. Administer the project.</li> <li>13. Evaluate impact</li> </ol>	<p><b><u>Condition(Given):</u></b> Products, market, customers, and reading materials</p> <p><b><u>Task (What):</u></b> Conduct promotional activities.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Promotional activities conducted.</p>	<ul style="list-style-type: none"> <li>➤ Concept of promotion</li> <li>➤ Communication model</li> <li>➤ Concept of advertisement</li> <li>➤ Purpose of advertising</li> <li>➤ Advertising media</li> <li>➤ Features of advertising</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Task No: 6 Apply communication skills.**

**Time: 5 hrs**  
**Theory: 2 hrs**  
**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Determine the receiver to whom to communicate.</li> <li>2. Specify the objective of communication.</li> <li>3. Select appropriate channel of</li> <li>4. Communication (downward, upward, broadcast horizontal, grape-vine, and committee).</li> <li>5. Solve the barriers in communication.</li> <li>6. Design the contents according to the receiver               <ul style="list-style-type: none"> <li>- Role of receiver.</li> <li>- History leading to communication.</li> </ul> </li> <li>7. Apply suitable method of communication.</li> <li>8. Apply suitable language.</li> <li>9. Listen and understand the feelings of receiver.</li> <li>10. Clarify the communication.</li> <li>11. Apply appropriate media.</li> </ol>	<p><b><u>Condition(Given):</u></b> Enterprises and communication media</p> <p><b><u>Task (What):</u></b> Apply communication skills.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Communication skills well applied.</p>	<ul style="list-style-type: none"> <li>➤ Concept and importance of communication</li> <li>➤ Elements of communication</li> <li>➤ Types of communication (oral and written, formal and informal, upward, downward and horizontal)</li> <li>➤ Barriers to communication</li> <li>➤ Means of communication</li> <li>➤ Listening technique</li> <li>➤ Communication process</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**Task No: 7 Manage an enterprise.**

**Time: 4 hrs**

**Theory: 2 hrs**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Establish and regulate industry / business by                             <ul style="list-style-type: none"> <li>- selection of business / business form.</li> <li>- investigation and research.</li> <li>- select location, office equipment.</li> <li>- manage capital.</li> <li>- study of legal formalities.</li> </ul> </li> <li>2. Follow all management process to achieve goal of an enterprise.</li> <li>3. Apply planning process                             <ul style="list-style-type: none"> <li>- determine the objectives.</li> <li>- formulate policies, procedure, programs, strategies and standard.</li> <li>- develop scheduling.</li> <li>- develop budgeting.</li> </ul> </li> <li>4. Apply organizing process                             <ul style="list-style-type: none"> <li>- division of work.</li> <li>- placement of personnel into works.</li> <li>- establishing relationships.</li> <li>- delegation and decentralization of authority.</li> </ul> </li> <li>5. Apply staffing process                             <ul style="list-style-type: none"> <li>- determine manpower requirements.</li> <li>- recruit, select, and train the personnel.</li> <li>- promote and transfer the personnel.</li> </ul> </li> <li>6. Co-ordinate the efficient organization within a team by                             <ul style="list-style-type: none"> <li>- leading.</li> <li>- communicating.</li> <li>- motivating.</li> </ul> </li> <li>7. Apply horizontal, vertical, external internal, diagonal co-ordination.</li> <li>8. Apply controlling process                             <ul style="list-style-type: none"> <li>- establish standard of performance for office work.</li> <li>- measurement of actual performance.</li> <li>- compare actual performance with standard.</li> </ul> </li> </ol>	<p><b><u>Condition(Given):</u></b> Enterprises and reading materials</p> <p><b><u>Task (What):</u></b> Manage an enterprise.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Enterprises well managed.</p>	<ul style="list-style-type: none"> <li>➤ Establishment and regulation of business / industry</li> <li>➤ Concept of management</li> <li>➤ Role of management</li> <li>➤ Managerial functions (planning, organizing, co-ordination and controlling)</li> <li>➤ Method of planning</li> <li>➤ Co-ordination in operating business</li> </ul>

**Tools/equipment:**

**Safety:**

## **Module Code: M 3**

### ***Sub Module Code: SM3.2***

## **Sub module Title: Sales and Marketing Skills**

### **Description**

This sub module is designed to equip the trainees with knowledge and skills on sales and marketing skills of the related occupation. This course deals with market identification, demand determination, market network, product deliberation and monitoring.

**Duration:** 30 hours

### **Competencies**

1. Envelop products
2. Determine price
3. Identify distributor
4. Identify market place
5. Organize exhibition
6. Advertise products for sales
7. Deliver products
8. Evaluate products



## Task Analysis

**TASK NO. 1 Envelop products.**

**Time: 4 hrs**  
**Theory: 2 hrs**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist importance of packing.</li> <li>3. Enlist packing materials.</li> <li>4. Collect materials.</li> <li>5. Envelop products.</li> <li>6. Restore enveloped products.</li> <li>7. Keep records.</li> </ol>	<p><b><u>Condition(Given):</u></b>            Product and enveloping materials</p> <p><b><u>Task (What):</u></b>            Envelop product</p> <p><b><u>Standard (How well):</u></b>            All the steps followed in sequence.            Product well enveloped.</p>	<ul style="list-style-type: none"> <li>➤ Concept of packing</li> <li>➤ Importance of packing.</li> <li>➤ Types of packing materials</li> <li>➤ Enveloping techniques</li> <li>➤ Safety precaution.</li> </ul>

**Tools/equipment:** Paper, plastic, glue, staple, scissor, knife, tape

**Safety:** Handle products safely

## Task Analysis

**TASK NO. 2 Determine price.**

**Time: 3 hrs**

**Theory: 1 hr**

**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist materials.</li> <li>3. Enlist quantity.</li> <li>4. Find rate of materials.</li> <li>5. Find rate of labour charge.</li> <li>6. Calculate indirect cost.</li> <li>7. Add profit.</li> <li>8. Sum up price.</li> <li>9. Keep records.</li> </ol>	<p><b><u>Condition(Given):</u></b> Specification, bill of quantity, format and calculator</p> <p><b><u>Task (What):</u></b> Determine price.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Price determined as per rule</p>	<ul style="list-style-type: none"> <li>➤ List of materials</li> <li>➤ Bill of quantity.</li> <li>➤ Cost analysis procedure.</li> <li>➤ Safety precaution</li> </ul>

**Tools/equipment:** Paper, pencil, eraser, calculator

**Safety:**

## Task Analysis

**TASK NO. 3 Identify distributor.**

**Time: 3 hrs**  
**Theory: 1 hr**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist distributor.</li> <li>3. Find market share.</li> <li>4. Research competitiveness.</li> <li>5. Enlist challenges.</li> <li>6. Make strategy.</li> <li>7. Identify distributor.</li> <li>8. Keep records.</li> </ol>	<p><b><u>Condition(Given):</u></b> List of distributors</p> <p><b><u>Task (What):</u></b> Identify distributor.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Distributor identified.</p>	<ul style="list-style-type: none"> <li>➤ Identification of distributor</li> <li>➤ List of distributor</li> <li>➤ Finding market share</li> <li>➤ Concept of competition</li> <li>➤ Concept of Challenges</li> <li>➤ Identification strategy</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 4 Identify market place.**

**Time: 3 hrs**  
**Theory: 1 hr**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Define the market.</li> <li>3. Enlist the marketing techniques.</li> <li>4. Observe and identify market place.</li> <li>5. Keep records.</li> </ol>	<p><b><u>Condition(Given):</u></b>                      List of market and phone address</p> <p><b><u>Task (What):</u></b>                      Identify the market place.</p> <p><b><u>Standard (How well):</u></b>                      All the steps followed in sequence.                      The market place identified.</p>	<ul style="list-style-type: none"> <li>➤ Concept of market.</li> <li>➤ Marketing techniques</li> <li>➤ Identification of market place</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 5 Organize exhibition.**

**Time: 7 hrs**  
**Theory: 1 hr**  
**Practical: 6 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instruction.</li> <li>2. Define exhibition.</li> <li>3. Determine the products to be displayed.</li> <li>4. Collect products.</li> <li>5. Deliver products at exhibition venue.</li> <li>6. Specify venue.</li> <li>7. Organize exhibition.</li> <li>8. Display product.</li> <li>9. Sell products.</li> <li>10. Keep records.</li> </ol>	<p><b><u>Condition(Given):</u></b> Venue, product, and stall</p> <p><b><u>Task (What):</u></b> Organize exhibition.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Exhibition well organized.</p>	<ul style="list-style-type: none"> <li>➤ Definition of exhibition</li> <li>➤ Organizing exhibition</li> <li>➤ Displaying product</li> <li>➤ Exhibition organizing procedure</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 6 Advertise products for sales.**

**Time: 3 hrs**  
**Theory: 1 hr**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
1. Receive instructions. 2. Define advertisement. 3. Enlist types of advertisement. 4. Find market segment. 5. Enlist appropriate season for advertisement. 6. Find advertising cost.	<p><b><u>Condition(Given):</u></b>            Poster, pamphlet, website, and other media</p> <p><b><u>Task (What):</u></b>            Advertise products for sales</p> <p><b><u>Standard (How well):</u></b>            All the steps followed in sequence.            Products advertised through various media for sale.</p>	<ul style="list-style-type: none"> <li>➤ Definition of advertisement</li> <li>➤ Types of advertisement</li> <li>➤ Market segment</li> <li>➤ Season of advertisement</li> <li>➤ Advertising cost</li> </ul>

**Tools/equipment:**

**Safety:**

## Task Analysis

**TASK NO. 7 Deliver products.**

**Time: 4 hrs**

**Theory: 1 hr**

**Practical: 3 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist schedule of product delivery.</li> <li>3. Enlist transport media.</li> <li>4. Prepare documentation.</li> <li>5. Handle correctly the product.</li> </ol>	<p><b><u>Condition(Given):</u></b> Product and transportation</p> <p><b><u>Task (What):</u></b> Deliver products.</p> <p><b><u>Standard (How well):</u></b> All the steps followed in sequence. Products delivered to the market.</p>	<ul style="list-style-type: none"> <li>➤ Schedule of product delivery</li> <li>➤ Importance of transport</li> <li>➤ Importance of documentation</li> <li>➤ Importance of handling products</li> </ul>

**Tools/equipment:** marker, duster,

**Safety:**

## Task Analysis

**TASK NO. 8 Evaluate products.**

**Time: 3 hrs**  
**Theory: 1 hr**  
**Practical: 2 hrs**

Performance steps	Terminal Performance Objectives	Related Technical Knowledge
<ol style="list-style-type: none"> <li>1. Receive instructions.</li> <li>2. Enlist importance of evaluation.</li> <li>3. Enlist element of evaluation.</li> <li>4. Enlist process of evaluation.</li> <li>5. Examine product.</li> <li>6. Conduct evaluation of product.</li> </ol>	<p><b><u>Condition(Given):</u></b>            Follow up report, workshop and meeting.</p> <p><b><u>Task (What):</u></b>            Evaluate products.</p> <p><b><u>Standard (How well):</u></b>            All the steps followed in sequence.</p> <p>Feedback from customers obtained.            Product well evaluated.</p>	<ul style="list-style-type: none"> <li>➤ Importance of evaluation</li> <li>➤ Element of evaluation</li> <li>➤ Process of evaluation</li> <li>➤ Preparing checklist</li> <li>➤ Conducting evaluation</li> </ul>

**Tools/equipment:**

**Safety:**



# OJT for Bamboo Artisan

## Overview of OJT

On the Work Training is an individual approach designed to train the learner to perform certain task while working in the work. It creates appropriate Working environment for the teaching learning activities. Training is relevant as the learner is being trained in a real work setting. The aim of the On the Work Training (OJT) is to provide the learner the maximum experience & exposure of "The World of Work".

*In one occupational set up, it is not possible to expose the trainees for all required competencies that they have to master to perform their future work. Moreover, trainers and institution management should take precaution while planning for the OJT placement. Therefore, it is suggested to plan the OJT placement on rotating modality so that the trainees will have enough opportunity to practice the skills enlisted for OJT exposure.*

## Objectives of OJT

After completion of OJT the trainees will be able to:

1. To practice/ apply the skills/ knowledge developed by the trainees through institutional training in the real world of the related occupation
2. To practice the skills gained through institutional training that the trainees have not got enough opportunity to practice and apply them due to the institutional constraints and or limitation
3. To gain world of work experiences
4. To acquire skills and knowledge developed in the related field of occupation
5. To make trainees familiar with the future occupation/ work they are going to hold
6. To provide trainees with supporting skills and knowledge necessary for the related occupation
7. To make trainees familiar with the day to day administrative / management activities applicable in their related occupation.

## OJT placement

The related training institute needs to perform the followings for OJT placement of the trainees.

Make list of the employing agencies:

1. Make list of the Employing agencies:
  - (a) Bamboo based handicraft centers run by the government / Private agencies
  - (b) Bamboo based handicraft centers run by NGOS / INGOS
  - (c) Bamboo based handicraft projects
  - (d) Others
2. Select the employing agencies / related industries:
  - (a) Obtain the curriculum
  - (b) Match the skills specified in the curriculum with the occupational activities being conducted by industries.
  - (c) Select the employing agency for OJT which: -
    - Is well equipped and can provide maximum opportunity to practice /develop / apply the skills and knowledge included in the curriculum
    - Can provide recently developed knowledge / skills in the related occupation
    - Has the possibility to offer work for the trainees having satisfactory work performance after the completion of OJT.

- Can offer facilities to the trainees during OJT.
3. Contact employing agency for OJT
  4. Make agreement with employer agency regarding OJT.
  5. Orient the employer regarding supervision & evaluation of the trainees on OJT.
  6. Assign the trainees who have passed institutional training to the selected employer agencies
  7. Orient the trainees for OJT (Objectives, curriculum, activities in which they have to be involved, recording, supervision & evaluation etc.)
  8. Send Trainees with official letter for OJT.
  9. Manage / provide salary (at least to cover the living cost) to the trainees.
  10. Have initial supervision to help socialize and guide the trainees sent for the JOT.
  11. Have periodic supervision and evaluation of the trainees at least three Times at an interval of two months during the period of OJT.
  12. Collect feedback as inputs for the revision of the curriculum for future.
  13. Keep records.

### **Orientation to the Trainees for OJT**

The trainees who are placed on OJT are to be oriented by the related institute about the followings:

1. OJT Activities
2. OJT Evaluation
3. OJT curriculum

### **Suggestion for Trainees for OJT**

1. Receive orientation for OJT provided / delivered by the related Training institute
2. Obtain curriculum
3. Obtain official letter for Joining OJT
4. Contact the assigned organization
5. Maintain attendance
6. Manage Accommodation
7. Obtain Work description
8. Visit / observe the activities related
9. Study critically the related units of industry
10. Obtain curriculum
11. Match the tasks specified in the curriculum with the actual tasks / activities being carried in the industry.
12. Make lists of tasks:
  - (a) You need to practice for confidence building
  - (b) You need to practice the skills that are not covered in the institutional Training
  - (c) You need to practice the skills that are not included in the curriculum but need to perform in the real world of the occupation for successful OJT performance.
  - (d) Recently developed skills through research applicable to your level of work after OJT.
13. Finalize the Task list consulting with:
  - (a) Your supervisor &
  - (b) Instructor
14. Practice / perform / develop as many related skills as possible related to your level of work.
15. Perform related administrative functions.
16. Perform / develop skills on cue the duties and tasks specified in the work description provided by the employer during OJT.
17. Get help form the senior (s) / supervisor (s) to perform the tasks \develop skills as maximum as possible.
18. Develop daily diary / Log book

19. Fill the daily diary / Log book
20. Get signed by your supervisor regularly
21. Seek & follow suggestion from seniors
22. Show excellent work performance to influence your senior (s) / supervisor so that they could recommend to the employer to offer you the work after OJT.
23. Develop professionalism.

### OJT Evaluation

The OJT will be evaluated by:

- a. Related supervisor of organization
- b. Related instructor/supervisor of the training institute
- c. CTEVT (representative or assigned expert if needed)

The marks distribution for the OJT evaluation of the trainees will be as follows:

S.N.	Evaluators	Marks Distribution	
		Full Marks	Percentage
1.	Related Supervisor of the industries / Organization	200	50%
2.	Related supervisor / instructor of the training institute	100	25%
3.	External expert	100	25%
<b>Total</b>		<b>400</b>	<b>100%</b>

### Competencies to be performed during OJT

Trainees are suggested to perform all the critical competencies mentioned above under each module of this **Bamboo Artisan** curricular program

## References

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औद्योगिक शिक्षा, बेतबाँस कक्षा १०, श्री ५ को सरकार, शिक्षा मन्त्रालय, पाठ्यक्रम विकास केन्द्र, सानोठिमी, भक्तपुर, २०५७ ।

पूर्व व्यावसायिक शिक्षा कक्षा ७, श्री ५ को सरकार, शिक्षा तथा खेलकुद मन्त्रालय, पाठ्यक्रम विकास केन्द्र, सानोठिमी, भक्तपुर, २०६२ ।

बाँस तथा निगालोका वस्तुहरूको नमूना पुस्तिका, संकलन तथा विकास, श्री ५ को सरकार, उद्योग वाणिज्य तथा आपूर्ति मन्त्रालय, घरेलु तथा साना उद्योग विकास समिति, त्रिपुरेश्वर, काठमाडौं, २०६१ ।

**Basketry from Nepal**, Trade Promotion Centre, Export Service Center, KTM

**Textile and Bamboo Crafts of the North Western Region**, Aditi Shirali, National Institute of Design, Mumbai, India

## Physical Facilities

The theory class rooms at least should have area of 10 square feet per trainee and in the workshop it should be at least of 30 square feet per trainees. All the rooms and laboratory should be well illuminated and ventilated.

- Workshop (General) - 1
- Class room -1
- Office room -1
- Principle room -1
- Faculty room -1
- Reception room -1
- Library - 1
- Store room -1
- OHP -1

## *Tools and Equipment:*

- |                                   |                                |
|-----------------------------------|--------------------------------|
| 1. Blow- lamp                     | 23. Leather pad                |
| 2. C-clamp                        | 24. Mallet                     |
| 3. Chisel                         | 25. Measuring tape             |
| 4. Chisel -Round chisel           | 26. Metal ruler                |
| 5. Circular machine               | 27. Oil stone                  |
| 6. Claw hammer                    | 28. Plane chisel               |
| 7. Clips                          | 29. Pliers                     |
| 8. Compressor machine             | 30. Rasp                       |
| 9. Cotton cloth                   | 31. Reamer                     |
| 10. Drill bit                     | 32. Scissor                    |
| 11. Drill machine with cutter bit | 33. Scratch awl                |
| 12. Drilling machine              | 34. Scratching brush           |
| 13. Electric mini power saw       | 35. Screwdriver                |
| 14. File- metal                   | 36. Sharpening stone           |
| 15. File – wooden                 | 37. Small grinder              |
| 16. Glove                         | 38. Small nails                |
| 17. Hack saw                      | 39. Spray machine for painting |
| 18. Hammer                        | 40. Steel file                 |
| 19. Hand saw                      | 41. Try- square                |
| 20. Khurpa                        | 42. Vice                       |
| 21. Khukuri                       | 43. Working board              |
| 22. Knives                        | 44. Working table              |

**DACUM (Work Analysis)**  
of  
**Junior Bamboo Artisan**

**DACUM Panel**

Ms Sarita Kharel  
Hetauda

Mr. Ram Kumar Rai  
Hetauda

Mr. Rajan Rai  
Hetauda

Mr. Suresh Thing  
Hetauda

Mr. Birju Rai  
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Mr. Hem Karna Nagarkoti  
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Mr. Rajesh Rai  
Hatiya, Makwanpur

Mr. Ram Chandra Rai  
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Ms. Samjhana Rai  
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**March, 2006**



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**Training for Employment Project**  
**Pulchowk, Lalitpur**

## DUTIES & TASKS for Junior Bamboo Artisan

### A Plan works

A1. Plan for place	A2. Plan for production	A3. Plan for budget	A4. Plan for materials	A5. Plan for tools/ equipment	A6. Plan for helper
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### B Sketch decorative articles

B1. Sketch pen stand	B2. Sketch letter box	B3. Sketch boat/ship	B4. Sketch photo frame	B5. Sketch flower base	B6. Sketch lamp set	B7. Sketch dust bin
B8. Sketch coaster set	B9. Sketch basket	B10. Sketch tips box	B11. Sketch soap case	B12. Sketch file rack	B13. Sketch tooth peg tray	B14. Design tray
B15. Sketch house	B16. Sketch temple					

### C Handle tools/ equipment

C1. Take measurement	C2. Clamp work piece	C3. Saw work piece	C4. Cut work piece into size	C5. Apply bottom square	C6. Chisel hole	C7. Drill hole
C8. Handle blow lamp	C9. Apply scissors	C10. Sharpen cutting tools				

### D Prepare/ Make frames

D1. Make photo frame	D2. Make triangle tray frame	D3. Make basket frame	D4. Make lamp set frame	D5. Make in beetle leaf shape	D6. Make temple frame
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### E Prepare stripes (choya)

E1. Prepare thick stripe	E2. Prepare thin stripe	E3. Prepare wide stripe	E4. Prepare narrow stripe	E5. Prepare four side stripe	E6. Bend stripe
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### F Make joints

F1. Make butt joint	F2. Make flat joint	F3. Make lap joint	F4. Make square joint	F5. Make round joint	F6. Make dove tail joint	F7. Make tennon and mortise joint
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### G Make roofs

G1. Make plain roof	G2. Make round roof	G3. Make slant roof	G4. Make two side slant roof	G5. Make butterfly roof	G6. Make pagoda roof
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### H Make Bases

H. Make clock base	H. Make flower basket base	H. Make table lamp base	H. Make boat base	H. Make temple base
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### I Make boarders

I1. Make lamp boarder	I2. Make glass fitting boarder	I3. Make letter box boarder	I4. Make boat boarder	I5. Make frame boarder	I6. Make roof boarder
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### J Perform carving patterns

J1 Skin off w/p	J2 Carve in square shape	J3 Carve in flower shape	J4 Carve in half size shape	J5 Carve in snake shape	J6 Carve in irregular shape	J7 Carve in Gajur
J8 Carve in different size						

### K Make Decorative articles

K1. Make triangular tray	K2. Make photo frame	K3. Make square tray	K4. Make letter box (five Angled)	K5. Make square letter box	K6. Make flower base	K7. Make flower base (table)
K8. Make flower base (wall)	K9. Make pen stand	K10. Make churi stand	K11. Make tips box	K12. Make dust bin	K13. Make hair clip	K14. Make soap case
K15. Make hair comb	K16. Make hand fan	K17. Make pipe (Bansuri)	K18. Make drum (Madal)	K19. Make sprayer	K20. Make napkin holder	K21. Make tooth peg
K22. Make ship	K23. Make gate	K24. Make Pooja basket	K25. Make wall lamp	K26. Make table lamp	K27. Make phone stand	K28. Make cassette rack
K29. Make wall stand clock	K30. Make towers	K31. Make helicopter	K32. Make house	K33. Make temple		

### L Finish decorative articles

L1 Apply put tings	L2 Apply sand papers	L3 Clean w/p	L4 Apply chopra	L5 Apply varnish	L6 Season w/p	L7 Store w/p
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### M Market products

M1. Envelope product	M2. Determine price	M3. Identify distributor	M4. Identify market place	M5. Organize exhibition	M6. Advertise through electronic media	M7. Supply product
M8. Evaluate product						

### N Communicate with other

N1 Communicate with Employer	N2 Communicate with Artisan	N3 Communicate with Supplier	N4 Communicate with Visitor	N5 Communicate with Client	N6 Communicate with Colleagues	N7 Communicate with Instructor
N8 Communicate with Supervisor	N9 Receive Phone calls					

### O Develop Professionalism

O1. Seek Training Places	O2. Attend Training	O3. Read Books / Journals	O4. Browse WWW sites	O5. Watch AV media	O6. Visit fare	O7. Visit Shops / equipped places
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### Additional Information for Junior Bamboo Artisan

<b>Worker Traits</b> <ul style="list-style-type: none"> <li>• Neat &amp; tidy</li> <li>• Punctual</li> <li>• Friendly</li> <li>• Eager to learn</li> <li>• Polite</li> <li>• Disciplined</li> <li>• Service oriented</li> <li>• Honest</li> <li>• Hard Working</li> <li>• Interested towards work</li> <li>• Patience</li> <li>• Intelligent</li> <li>• Cooperative</li> <li>• Curious</li> <li>• Alert</li> <li>• Ethical</li> </ul>	<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Minimum age 16 yrs.</li> <li>• Five class pass</li> <li>• Physically fit (Eyes and hands in good condition)</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Duration of training</li> <li>• Six months</li> </ul>	<b>Career Paths</b> <ul style="list-style-type: none"> <li>• Senior Artisan</li> <li>• Senior Technician</li> <li>• Instructor</li> </ul>	<b>Future Concerns</b> <ul style="list-style-type: none"> <li>• Highly Competition</li> <li>• Bright future</li> </ul>
<b>Related Technical Knowledge</b>		<b>Tools &amp; Equipment</b>	
<ul style="list-style-type: none"> <li>• Raw material bamboo</li> <li>• Method of work</li> <li>• Rules &amp; regulation of workshop</li> <li>• Necessity tools &amp; equipments their needs</li> <li>• Measurement in general length, width &amp; method</li> <li>• General knowledge about size &amp; shape</li> <li>• Weaning structures simple wean, twill, twine etc.</li> <li>• Name of main products</li> <li>• Wetting process</li> <li>• Types of Angled</li> <li>• Boarder making process</li> <li>• Type of frame</li> <li>• Type of carving</li> </ul>		<ul style="list-style-type: none"> <li>Blow- lamp</li> <li>C-clamp</li> <li>Chisel</li> <li>Chisel -Round chisel</li> <li>Circular machine</li> <li>Clips</li> <li>Compressor machine</li> <li>Cotton cloth</li> <li>Drill bit</li> <li>Drill machine with cutter bit</li> <li>Drilling machine</li> <li>Electric mini power saw</li> <li>File- metal</li> <li>File – Wooden file</li> <li>Glove</li> <li>Hack saw</li> <li>Hammer</li> <li>Hand saw</li> <li>Khukuri</li> <li>Knives</li> <li>Leather pad</li> </ul>	<ul style="list-style-type: none"> <li>Mallet</li> <li>Measuring tape</li> <li>Metal ruler</li> <li>Oil stone</li> <li>Plane chisel</li> <li>Pliers</li> <li>Rasp</li> <li>Reamer</li> <li>Scissor</li> <li>Scratch awl</li> <li>Scratching brush</li> <li>Screwdriver</li> <li>Sharpening stone</li> <li>Small grinder</li> <li>Small nails</li> <li>Spray machine for painting</li> <li>Steel file</li> <li>Try- square</li> <li>Vice</li> <li>Working board</li> <li>Working table</li> </ul>

# Experts Involved

## **Content Experts**

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## **Process Experts**

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