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Introduction:

This curriculum has been developed with a purpose of preparing technical workforce in the field of Nepali hand paper making able to get employment in the country. The technical skills incorporated in this curriculum come from the experts who have already worked in field of Nepali hand paper making. Its contents are organized in the form of modules. So it is a tailor made curriculum to be implemented in a modular form.

It is a competency based curriculum too. It is also designed to produce lower level technical workforce in the field of Nepali hand paper making equipped with skills, knowledge and attitudes related to Nepali hand paper making in order to meet the demand of such workforce in the country so as to contribute in the national streamline of poverty reduction in Nepal.

Aims

The main aim of this curricular program is to produce skilled workforce in the field of Nepali hand paper making by providing training to the potential citizen of the country and link them to employment opportunities in the country. The aims of this curriculum are:

- To produce lower level technical workforce in the field of Nepali hand paper making
- To produce such technical workforce who will be able to provide serve through the application of the skills and knowledge of Nepali hand paper making being as an entrepreneur.

Objectives:

After the completion or this training program, the trainees will be able:

- To collect raw materials for making Nepali hand papers
- To prepare ledo / lugdi for making Nepali hand papers
- To make Nepali hand papers
- To perform coloring
- To control/maintain the paper quality
- To follow safety
- To communicate with others
- To develop professionalism

Description:

This curriculum provides skills and knowledge necessary for Nepali hand paper maker. There will be both demonstration by trainers/instructors and opportunity by trainees to carry out the skills/tasks necessary for this level of technical workforce. Trainees will practice and learn skills by using typical tools, materials and equipment necessary for this curricular program.

On successful completion of this training, the trainees will be able to collect raw materials, prepare ledo / lugdi, make Nepali hand papers, perform coloring, control/maintain the paper quality, follow safety precautions, perform communication with others, and develop professionalism necessary for Nepali hand paper making.

Course structure

| | | | Time | e (hrs. |) | Ma | rks | |
|----|--------------------------|--------|------|---------|------|-----|-----|------|
| SN | Modules | Nature | Th. | Pr. | Tot. | Th. | Pr. | Tot. |
| 1. | Safety | Р | 6 | 24 | 30 | 5 | 20 | 25 |
| 2. | Collecting raw materials | Р | 6 | 46 | 52 | 10 | 40 | 50 |
| 3. | ledo / lugdi Preparation | Р | 11 | 66 | 77 | 10 | 40 | 50 |
| 4. | Paper making | Р | 7 | 42 | 49 | 10 | 40 | 50 |
| 5. | Coloring | Р | 8 | 48 | 56 | 10 | 40 | 50 |
| 6. | Paper quality | Р | 8 | 48 | 56 | 10 | 40 | 50 |
| 7. | Communication and | Р | 14 | 56 | 70 | 5 | 20 | 25 |
| | professionalism | | | | | | | |
| | Total : | | 60 | 330 | 390 | 60 | 240 | 300 |

Duration:

The total duration of this curricular program will be three months [390 hours]

Target group:

The target group for this training will be all the interested five class pass individuals of the country

Group size:

The group size of this training program will be not more than 30

Target location:

The target location of this training program will be all over Nepal.

Medium of Instruction:

The medium of instruction for this training program will be Nepali or 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 assessment and final examinations.

Focus of the program:

This is a competency based curriculum. This curriculum emphasizes on competent performance of the task specified in it. Not less than 80% time is allotted to the competencies and not more than 20% to the related technical knowledge. So, the main focus will be on the performance of the specified competencies/tasks /skills included in this curriculum.

Entry criteria:

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

- Five class pass
- Physically and mentally fit
- Age- Minimum of 16 years
- Preference will be given to female, Dalit, Janjati, and Conflict affected people

Follow up suggestion:

This is not a training program only for training sake. The ultimate success of this program will rest on the proficiency of the graduates of this training program in providing services in the community either by wage employment or by self-employment.

In other to assess the success of this program and collect feedbacks/inputs for the revision of the program, a schedule of follow up is suggested as follows:-

- First follow up: Six months after the completion of the training 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 second follow up for five years.

Certificate requirement:

The related training institute will provide the certificate of "Nepali hand paper maker" to those individuals who successfully complete all the tasks with their related technical knowledge specified in this curriculum.

Student Evaluation Details:

- Continuous evaluation of the trainees' performance is to be done by the related instructor/trainer to ensure the proficiency over each competency.
- Related technical knowledge learnt by the trainees will be evaluated through written or oral tests as per the nature of the content
- Trainees must secure minimum marks of 60% in an average of both theory and practical evaluations.

Trainers' Qualification:

- Experienced in the related field as a trainer
- Good communicative & instructional skills.

Trainer – Trainees Ratio:

- 1:10 for practical classes
- Depends on the nature of subject matter and class room situation for theory classes.

Suggestion for instruction

Demonstrate task performance

- Demonstrate task performance in normal speed
- Demonstrate slowly with verbal description of each and every steps in the sequence of activity flow of the task performance using question and answer techniques
- Repeat the above step for the clarification on trainees demand if necessary.
- Perform fast demonstration of the task performance.

Provide trainees the opportunity to practice the task performance demonstrated.

- Provide trainees to have guided practice:- create environment for practicing the demonstrated task performance and guide the trainees in each and every step of task performance
- Provide trainees the opportunity to repeat & re-repeat as per the need to be proficient on the given task performance
- Switch to another task demonstration if and only if the trainees developed proficiency in the given task performance

Evaluation performance of the trainees/ student

- Perform task analysis
- Develop a detail task performance check list
- Perform continuous performance evaluation of the trainees / students by applying the performance check list.

Modules

Module: 1: Safety

Module: 2: Collecting raw materials

Module: 3: ledo / lugdi Preparation

Module: 4: Paper making

Module: 5: Coloring

Module: 6: Paper quality Module: 7: Communication and professionalism

Module: 1: Safety

Description:

This module deals with the knowledge and skills related to the safety precautions to be taken. It consists of tasks related to safety measures to be followed while performing the job. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To apply personal safety measures
- To apply tools/ equipment/ safety measures
- To apply first aid
- To service tools/ equipments
- To monitor tools/ equipment / machine
- To maintain prepared materials (Ledo/Lugdi)

Tasks:

- 1. Apply personal safety measures
- 2. Apply tools/ equipment/ safety measures
- 3. Apply first aid
- 4. Service tools/ equipments
- 5. Monitor tools/ equipment / machine
- 6. Maintain prepared materials (Ledo/Lugdi)

Task structures

| y measures | |
|---|--|
| Terminal performance objective | Related technical knowledge |
| <u>Condition (Given):</u> Work place <u>Task (What):</u> Apply personal safety measures <u>Standard (How well):</u> All task steps carried out in sequential order Personal safety measures identified, enlisted and well followed. | Personal safety measures: Definition of: Safety Personal safety Safety measures Personal safety measures Identifying personal safety measures Enlisting personal safety measures Practicing to follow personal safety measures Keeping activity records |
| Safety/precautions: | |
| | Work place <u>Task (What)</u>: Apply personal safety measures <u>Standard (How well)</u>: All task steps carried out in sequential order Personal safety measures identified, enlisted and well followed. |

| Task Structure | | | | |
|---|---|---|--|--|
| Task: 2 : Apply tools/ Steps1. Receive instruction2. Identify the tools/eq to be handled3. Enlist safety measur taken while handling tools/equipment4. Identify safety measur be taken while hand tools/equipment5. Practice safety measure | Condition (Given): Terminal performance objective Condition (Given): uipment Tools/equipment es to be Task (What): ures to Apply safety measures while handling tools/equipment Cools/equipment | Related technical knowledge Applying safety measures while handling tools/equipment: • Safety measures to be while handling tools/equipment • Keeping activity records | | |
| Fractice safety fields be taken while hand tools/equipment Follow safety precar Keep records | All task steps carried out in | | | |
| Required tools/equipm | ent: Safety/precautions: | | | |

| Task Structure | | | | |
|---|--|--|--|--|
| Task: 3 : Apply first aid Steps | Terminal performance objective | Related technical knowledge | | |
| Receive instruction Define first aid Enlist common cases of first aid Practice to apply common first aid measures Follow safety precautions Keep records | Condition (Given): Cases of first aid Task (What): Apply first aid Standard (How well): All task steps carried out in sequential order First aid measures well applied in common cases that need first aid taking all the necessary precautions. | First aid: Concept and need of first aid First aid kit box Common cases of first aid Principle and procedure for first aid Safety precautions to be followed while carrying out this task Keeping activity records | | |
| Required tools/equipment: | Safety/precautions: | 1 | | |
| First aid kit box | | | | |

| Task Structure | | | | |
|---|--|---|--|--|
| Task: 4 :Service tools/ equipment | | | | |
| Steps | Terminal performance objective | Related technical knowledge | | |
| Receive instruction Enlist tools / equipment to be serviced Practice to service the tools/ equipment Follow safety precautions Keep records | <u>Condition (Given)</u>: Tools / equipment to be serviced <u>Task (What)</u>: Service tools/ equipment <u>Standard (How well)</u>: All task steps carried out in sequential order Servicing of tools/ equipment well carried out taking all the necessary precautions | Servicing tools/ equipment: Concept and need of servicing tools/ equipment Principle and procedure for servicing tools/ equipment Safety precautions to be followed while carrying out this task Keeping activity records | | |
| Required tools/equipment: | Safety/precautions: | | | |
| | • Handle tools and equipment sat | fely | | |

| Task Structure | | | | | |
|--|--|---|---|--|--|
| Т | Task: 5 :Monitor tools/ equipment / machine | | | | |
| 1, | Steps | Terminal performance objective | Related technical knowledge | | |
| 2. 3. 4. 5. | Receive instruction Enlist tools / equipment / machine to be monitored Prepare monitoring schedule/ plan Execute the monitoring schedule/ plan Follow precautions Keep records | Condition (Given): Tools / equipment / machine to be monitored and a sample monitoring schedule/ plan Task (What): Monitor tools/ equipment / machine Standard (How well): All task steps carried out in sequential order Monitoring of tools/ equipment well carried out taking all the necessary precautions as per the sample monitoring schedule/ plan given. | <u>Monitoring tools/</u> <u>equipment / machine</u>: Concept and need of monitoring tools/ equipment / machine Monitoring schedule / plan Principle and procedure for monitoring tools/ equipment / machine Precautions to be followed while carrying out this task Keeping activity records | | |
| R | equired tools/equipment: | Safety/precautions: | • | | |

| | Task Structure | |
|---|---|---|
| Task: 6 :Maintain prepared mat | terials (Ledo/Lugdi) | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain prepared materials (Ledo/Lugdi) Keep prepared materials (Ledo/Lugdi)safely Protect prepared materials (Ledo/Lugdi) Maintain prepared materials (Ledo/Lugdi) Follow safety precautions Keep records | <u>Condition (Given)</u>: Prepared materials (Ledo/Lugdi) <u>Task (What)</u>: Maintain prepared materials (Ledo/Lugdi) <u>Standard (How well)</u>: All task steps carried out in sequential order Prepared materials (Ledo/Lugdi) well maintained taking all the necessary precautions. | Maintaining prepared materials (Ledo/Lugdi): Keeping prepared materials (Ledo/Lugdi)safely Protecting prepared materials (Ledo/Lugdi) Maintainig prepared materials (Ledo/Lugdi) Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| | | |

Module: 2: Collecting raw materials

Description:

This module deals with the knowledge and skills related to collecting raw materials necessary for preparing Nepali paper. It consists of tasks related to collecting raw materials for making Nepali paper. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To test the appropriateness of raw materials
- To cut raw materials
- To keep out the cover of raw materials
- To scratch the outer part of raw materials
- To dry raw material (jute)
- To store raw materials

Tasks:

- 1. Test the appropriateness of raw materials
- 2. Cut raw materials
- 3. Keep out the cover of raw materials
- 4. Scratch the outer part of raw materials
- 5. Dry raw material (jute)
- 6. Store raw materials

Task structures

| Task Structure | | | | |
|--|------------------------------|--|--|--|
| Task: 1: Test the appropriatene Steps 1. Receive instruction 2. Inspect the tree 3. Checks the height of the tree above 1 meter 4. Determine to cut 5. Follow safety precautions 6. Keep records | | Related technical knowledge Testing appropriateness of raw materials: • Concept and need of appropriate raw materials • Concept and need of appropriate raw materials • Principle and procedure for testing appropriateness of raw materials • Safety precautions to be followed while carrying out this task • Keeping activity records | | |
| Required tools/equipment: | Safety/precautions: | | | |
| Tape, paw, apron, mask, hand plaster, salt, tent, salt | • Take precaution from leach | | | |

| Task Structure | | | | |
|---|---|--|--|--|
| Task: 2 : Cut raw materials | | | | |
| Steps | Terminal performance objective | Related technical knowledge | | |
| Receive instruction Collect cutting tools Collect safety materials Wear safety tools Cut the tree as per the instruction given Follow safety precautions Keep records | Condition (Given): Raw materials , cutting tools, safety materials Task (What): Cut raw materials Standard (How well): All task steps carried out in sequential order Raw materials cut safely following all the necessary precautions. | Cutting raw materials: Concept and need to cut raw materials Principle and procedure for cutting raw materials Safety precautions to be followed while carrying out this task Keeping activity records | | |
| Required tools/equipment: | Safety/precautions: | | | |
| Sharp cutting tools, Tent, paw, mask, apron, | Beware from leach bitingBeware while handling cutting | g tools | | |

| | Task Structure | |
|---|---|---|
| Task: 3 : Keep out the cover of Steps 1. Receive instruction 2. Collects tools 3. Takes raw materials 4. Cuts edge of the material 5. Pull the cover of raw materials 6. Throw the stick 7. Follow safety precautions 8. Keep records | Task Structure raw materials Terminal performance objective Condition (Given): Raw materials Raw materials Task (What): Keep out the cover of raw materials Standard (How well): • All task steps carried out in sequential order • The cover of raw materials kept out safely. | Related technical knowledge Keeping out the cover of raw materials: • Concept and need to keep out the outer skin/cover of raw materials • Principle and procedure for removing outer skin/cover of raw materials • Safety precautions to be followed while carrying out this task • Keeping activity records |
| Required tools/equipment: Sharp cutting tools, Tent, paw, mask, apron, | Safety/precautions: Be aware while using sharp cutting | ng tools |

| | Task Structure | |
|--|--|--|
| Task: 4: Scratch the outer part | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Collects tools Takes outer part of raw materials Scratch edge of the material Pulls out cover of raw materials Throw the outer part of the materials Follow safety precautions Keep records | Condition (Given): Raw materials to be scratched Task (What): Scratch the outer part of raw materials Standard (How well): All task steps carried out in sequential order The outer part of raw materials well scratched following all the necessary precautions so well that only hard outer cover removed. | Scratching the outer part of raw materials: Concept and need to scratch the outer part of raw materials Principle and procedure for scratching the outer part of raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Sharp cutting tools, Tent, paw, mask, apron, | Be aware with sharp toolsOnly hard outer cover should | be removed |

| Task Structure | | |
|---|---|--|
| Task: 5: Dry raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Lay the tent in the sun Or Keep raw materials above the firing place Or Keep raw material in the ground and fire around it for drying Follow safety precautions Keep records | Condition (Given): Raw materials to be dried Task (What): Dry raw material Standard (How well): All task steps carried out in sequential order The raw materials well dried taking all the necessary precautions. Raw materials should be dried on dry places Tent should be used to cover the raw materials to protect from rain | Drying raw materials: Concept and need to dry raw materials Principle and procedure for drying raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Tent, paw, mask, apron, | Be aware with fire Raw materials should be dried Tent should be used to cover th from rain | • • |

| Task Structure | | |
|--|--|--|
| Task: 6: Store raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Select open place with roof Lay tent Keep dried raw materials in dry place Follow safety precautions Keep records | <u>Condition (Given)</u>: Raw materials to be stored <u>Task (What)</u>: Store raw materials <u>Standard (How well)</u>: All task steps carried out in sequential order The raw materials well stored taking all the necessary precautions. Store room should be free from water and fire | Storing raw materials: Concept and need to store raw materials Principle and procedure for storing raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Tent, paw, mask, apron, | Be aware with fireStore room should be free from | n water and fire |

Module: 3: Ledo / lugdi preparation

Description:

This module deals with the knowledge and skills related to ledo/lugdi preparation. It consists of tasks related to ledo/lugdi preparation necessary for making Nepali paper. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To test the appropriateness of raw materials (Jute)
- To wet jute (raw materials)
- To clean jute (raw materials)
- To cook jute (raw materials)
- To wash jute (raw materials
- To grind jute (raw materials
- To perform bleaching
- To weight jute (raw materials)
- To perform sizing
- To maintain water ratio to Lugdi
- To prepare Ledo (Lugdi) for hard paper (CMC)

Tasks:

- 1. Test the appropriateness of raw materials (Jute)
- 2. Wet jute (raw materials)
- 3. Clean jute (raw materials)
- 4. Cook jute (raw materials)
- **5.** Wash jute (raw materials
- 6. Grind jute (raw materials
- 7. Perform bleaching
- 8. Weight jute (raw materials)
- 9. Perform sizing
- 10. Maintain water ratio to Lugdi
- 11. Prepare Ledo (Lugdi) for hard paper (CMC)

Task structures

| Task Structure | | |
|--|--|---|
| Steps 1. Receive instruction 2. Check the fungus areas 3. Cut fungus effected area 4. Remove fungus effected part Remove unwanted materials 5. Follow safety precautions 6. Keep records | of raw materials (Jute) <u>Terminal performance objective</u> <u>Condition (Given)</u>: The raw materials to be tested <u>Task (What)</u>: Test the appropriateness of raw materials (Jute) <u>Standard (How well)</u>: All task steps carried out in | Related technical knowledgeTesting appropriateness of raw materials (Jute):• Concept, types, importance, principle and process for testing appropriateness of raw materials• Safety precautions to be followed while carrying out this task• Keeping activity records |
| Required tools/equipment: | sequential order The raw materials well tested for their appropriateness taking all the necessary precautions. Safety/precautions: | records |
| Sharp cutting tools, Tent, paw, mask, apron, | Handle raw materials safely | |

| Task Structure | | |
|---|---|---|
| Task: 2 : Wet raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Clean the tank Fill the water tank to wet raw material Weigh raw materials as per the capacity of the worker Keep raw materials for wet Check the level of water Weight raw material if not drown Keep it up to 12 hrs. Keep out necessary raw materials from the drum Make small piece of 18-20 inch Follow safety precautions Keep records | Condition (Given): Raw materials to be wetted Task (What): Wet jute (raw materials) Standard (How well): All task steps carried out in sequential order The raw materials well wetted taking all the necessary precautions. | Wetting raw materials: Concept, importance, duration, principle, and procedure for wetting raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Tank/vat, Bucket, Mug, water pipe, Water pump Sharp cutting tools, paw, mask, apron, | • Handle raw materials carefully | and safely |

| Task Structure | | |
|--|---|--|
| Task: 3 : Clean raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Clean raw material Thin stripe (चिर्ने) raw material Throw wastage Follow safety precautions Keep records | <u>Condition (Given)</u>: Raw materials to be cleaned <u>Task (What)</u>: Clean raw materials <u>Standard (How well)</u>: All task steps carried out in sequential order The raw materials well cleaned taking all the necessary precautions. | Cleaning raw materials: Concept, importance, and procedure for cleaning raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Cleaning table, Tank, Bucket, Mug, water pipe, Water pump Sharp cutting tools, paw, mask, apron, wastage box | • Handle raw materials carefully | y and safely |

| Task Structure | | |
|--|--|---|
| Task: 4 : Cook raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Collect tools and materials Make improved stove Obtain drum Cut drum Clean the drum Perform firing Keep water in the drum While boiling keep half of raw material into the boiling water Put casting soda Keep half of raw material into the boiling water Cook raw material for 3 - 4 hours Stir it Check it appropriateness of cooking Leave it for 12 hours. Follow safety precautions Keep records | Condition (Given): Wet raw materials, caustic soda Task (What): Cook raw materials Standard (How well): All task steps carried out in sequential order The raw materials well cooked taking all the necessary precautions. | Cook raw materials: Concept, importance, and procedure for cooking raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Cleaning table, Tank, Bucket, Mug, water pipe, Water pump Sharp cutting tools, paw, mask, apron, wastage box | Caustic soda should be 10% of cooked Handle raw materials carefully | |

| Task Structure | | |
|---|---|---|
| Task: 5 : Wash raw materials Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Prepare net Clean net Keep out raw material form the drum and keep into the net Pour clean water(निचोर्ने) Again keep in the water Make round ball of raw materials (डल्ला बनाउने) Keep in a big pot Follow safety precautions Keep records | <u>Condition (Given)</u>: Raw materials to be washed and clean net <u>Task (What)</u>: Wash raw materials <u>Standard (How well)</u>: All task steps carried out in sequential order The raw materials well washed taking all the necessary precautions | Washing raw materials: Concept, need, importance, and procedure for washing raw materials Handling of net Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Net, gloves and masks | Handle raw materials carefully Wash nicely to make the paper Ware gloves and masks | • |

| Task Structure | | |
|--|--|--|
| Task: 6 : Bit raw materials | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Clean bucket Keep Material balls in the bucket Clean biting place Put off the ball Bit raw material until it can be dilute in the water Clean knife edged bitter machine Keep water up to half level in the bitter machine Put it in the biting place Switch on the machine to bit raw material until it can be dilute in the water Put it in the biting place Switch on the machine to bit raw material until it can be dilute in the water Put necessary water time to time Follow safety precautions Keep records | Condition (Given): Raw materials to be bitten Task (What): Bit raw materials Standard (How well): All task steps carried out in sequential order The raw materials well bitten taking all the necessary precautions. | Biting raw materials: Concept, need, importance, and procedure for biting raw materials Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Knife edged bitter machine | Handle raw materials carefully and | 1 safely |

| Task Structure | | |
|--|---|--|
| Task: 7 : Perform bleaching | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain necessary tools and materials Keep water in a clean bucket Pour bleaching powder as needed Stir the bleaching powder until it dilutes Prepare net for filter Filter the bleached water Put it in the pulp (either in the machine or in the bucket where the pulp is kept) Switch on the machine until 5-7 minutes Switch off the machine Keep 12 hours Clean the pulp Follow safety precautions Keep records | Condition (Given): Bleaching powder and the pulp/paper to be bleached Task (What): Perform bleaching Standard (How well): All task steps carried out in sequential order The pulp well bleached taking all the necessary precautions. | Bleaching: Concept, need, importance, and procedure for bleaching Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Bucket, net for filter, machine for bleaching, glove and mask | Handle bleaching powder, mac carefully Ware glove and mask | hine, and pulp safely and |

| Task Structure | | |
|--|---|---|
| Steps 1. Receive instruction 2. Collect tools and materials 3. Weigh caustic soda 4. Weigh phatkari (फट्किरी) 5. Weigh Khoto (खोटो) 6. Boil all 7. Make cool | | Related technical knowledge Preparing mix pulp for sizing: • Concept, need, importance, and procedure for preparing mix pulp for |
| 8. Mix with pulp 9. Keep it for 12 hours 10. Wash the mixture 11. Follow safety precautions 12. Keep records | Prepare mix pulp for sizing Standard (How well): All task steps carried out in sequential order The mix pulp well prepared taking all the necessary precautions. | procedure for preparing mix pulp for sizing Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Balance, boiling tools/equipment, containers | Take care while boiling | |

| | Task Structure | |
|---|---|---|
| Task: 9: Maintain water ratio to | Lugdi | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain tools and materials Calculate the ratio of water and lugdi Put the pulp in the drum/bucket Pour water Stir the mixture Follow safety precautions Keep records | <u>Condition (Given)</u>: Water and Lugdi <u>Task (What)</u>: Maintain water ratio to Lugdi <u>Standard (How well)</u>: All task steps carried out in sequential order The water ratio to Lugdi well maintained taking all the necessary precautions. | Water ratio to Lugdi: Concept, need, importance, and procedure for maintaining water ratio to Lugdi Ratio calculation Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Drum/bucket, stirrer | Handle drum/bucket, and stirrer sa | afely |

| Task:10 : Prepare Ledo (Lugdi) for Steps 1. Receive instruction 2. Obtain tools and materials 3. Obtain CMC 4. Clean bucket 5. Fill clean water 6. Put CMC in the prepared lubdi 7. Follow safety precautions 8. Keep records | Task Structure or hard paper (CMC) Terminal performance objective Condition (Given): Ledo (Lugdi)to be prepared for hard paper (CMC) Task (What): Prepare Ledo (Lugdi) for hard paper (CMC) Standard (How well): • All task steps carried out in sequential order • The Ledo (Lugdi) for hard paper (CMC)well prepared taking all the necessary precautions. | Related technical knowledge Preparation of Ledo (Lugdi) for hard paper (CMC): • Concept, need, importance, and procedure of preparing Ledo (Lugdi) for hard paper (CMC) • Safety precautions to be followed while carrying out this task • Keeping activity records |
|---|--|--|
| Required tools/equipment: CMC, bucket | Safety/precautions:Handle CMC, bucket safely | |

Module: 4: Paper making

Description:

This module deals with the knowledge and skills related to paper making. It consists of tasks related to Nepali paper making. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To inspect water
- To prepare water (Keep water in vat)
- To tighten frame net
- To prepare Nuri water
- To keep Lugdi in frame
- To dry frame
- To keep out paper from frame

Tasks:

- 1. Inspect water
- 2. Prepare water (Keep water in vat)
- 3. Tighten frame net
- 4. Prepare Nuri water
- 5. Keep Lugdi in frame
- 6. Dry frame
- 7. Keep out paper from frame

Task structures

| Task Structure | | |
|---|---|--|
| Task: 1 : Inspect water Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Check dust Check sand Check saltiness Follow safety precautions Keep records | <u>Condition (Given)</u>: Water to be inspected <u>Task (What)</u>: Inspect water <u>Standard (How well)</u>: All task steps carried out in sequential order Water well inspected taking all the necessary precautions. | Inspecting water: Concept, need, and process of water inspection Hardness of water Relation between water and paper quality Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | - |
| Bucket, Mug, Water motor, Pipe, | | |

| | Task Structure | |
|--|--|--|
| Task: 2: Prepare water (Keep v | vater in vat) | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Clean vat Close outlet of water Put clean water near to fill Follow safety precautions Keep records | Condition (Given): Water to be prepared Task (What): Prepare water(Keep water in vat) Standard (How well): All task steps carried out in sequential order Water well prepared (kept in vat) taking all the necessary precautions | Preparing water (Keep water in vat): Vat selection criteria Vat painting to remove rusting Daily use of fresh water Use of pressed lugdi to close Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Bucket, mug, Tank | | |

| Task Structure | | |
|---|--|---|
| Task: 3 : Tighten frame net | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain Frame Check the tightness of the net Tighten the net Follow safety precautions Keep records | Condition (Given): Frame net to be tightened Task (What): Tighten frame net Standard (How well): All task steps carried out in sequential order The frame net well tightened taking all the necessary precautions. | Tighten frame net: Need to tighten the frame net Procedure for tightening the net Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Nail, Hammer, | | |

| Task Structure | | |
|--|--|---|
| Task: 4 : Prepare Nuri water Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain Bucket / water tank up to 50 ltrs. Clean the than / bucket Fill clean water in the tank Obtain Nuri Measure nuri as per calculation Keep nuri and shake the water in small unit Keep 12 hrs. Mix nuri in lugdi (Pulp) Stir the pulp Follow safety precautions Keep records | Condition (Given): Nuri Task (What): Prepare Nuri water Standard (How well): • All task steps carried out in sequential order • Nuri water well prepared taking all the necessary precautions. | Preparing Nuri water: Concept, need, and importance of Nuri water Principle, process, and application of Nuri water Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Bucket / water tank, Nuri, shaking stick | | |

| | Task Structure | |
|---|--|---|
| Task: 5 : Keep Lugdi in frame | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain frame Clean frame Wet the frame in vat Obtain pulp in a small pot Pour the pulp in the frame Spread out the pulp in the frame balancing by hand Follow safety precautions Keep records | Condition (Given): Lugdi and frame Task (What): Keep Lugdi in frame Standard (How well): All task steps carried out in sequential order The lugdi well kept in the frame taking all the necessary precautions. | Keep Lugdi in frame: Cleaning frame Wetting the frame in vat Obtaining pulp in a small pot Pouring the pulp in the frame Spreading out the pulp in the frame balancing by hand Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Bucket / water tank, Nuri, shaking stick | | |

| | Task Structure | |
|---|--|--|
| Task: 6 : Make frame drying place | e | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Collect materials Make uniform length of the sticks Erect the sticks Make frame drying place Follow safety precautions Keep records | Condition (Given): Space Task (What): Dry frame Standard (How well): • All task steps carried out in sequential order • The frame drying place well made taking all the necessary precautions. | Making frame drying place: Concept, need / importance of making frame drying place Collecting materials Making uniform length of the sticks Erecting the sticks Making frame drying place Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Sticks, hammers, rope | | |

| Task Structure | | |
|--|---|--|
| Task: 7 : Dry frame | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Take out the frame from the vat (पानी तऱ्याउने) Make the pile of the frame Take out the frames in the sunny place / prepared place Follow safety precautions Keep records | Condition (Given): The frame to be dried Task (What): Dry frame Standard (How well): All task steps carried out in sequential order Frames well dried following al the necessary precautions. | Drying the frame: Taking out the frame from the vat(पानी तऱ्याउने) Making the pile of the frame Taking out the frames in the sunny place / prepared place Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Frame, Bucker, Jug | | |

Module: 5: Coloring

Description:

This module deals with the knowledge and skills related to coloring paper. It consists of tasks related to coloring Nepali paper. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To prepare color
- To prepare Nature color
- To maintain water- color ratio
- To prepare sample
- To color readymade paper
- To color Lugdi (Ledo)
- To prepare paper drying Sheet
- To dry color paper

Tasks:

To meet the objectives the trainees are expected to get proficiency on the following tasks:

- 1. Prepare chemical color solution
- 2. Prepare Nature color solution
- 3. Maintain water- color ratio
- 4. Prepare colored paper sample
- 5. Color readymade paper
- 6. Color Lugdi (Ledo)
- 7. Prepare paper drying Sheet
- 8. Dry color paper

Task structures

| Task Structure | | |
|---|--|--|
| Task:1 : Prepare chemical color solution | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Identify color Decide/ get the water and color ratio Weight the required color Measure required volume of water Mix the water and the color Mix the water color ratio Stir the solution well Check whether the color powder has completely mixed or not Give heat to the solution (if required) Filter the solution through filter cloth / Nylon net Follow safety precautions Keep records | <u>Condition (Given)</u>: Chemical color powder and water: color ratio <u>Task (What)</u>: Prepare chemical color <u>Standard (How well)</u>: All task steps carried out in sequential order The prepared chemical color solution should be as per the ratio given / determined. | Preparation of chemical color: Concept, need, types, importance, and uses of chemical colors in Nepali paper industry Water color ratio Principle and procedure for preparing chemical color solution Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Weighing machine, measuring jug, filter cloth | Don't forget to maintain water Don't forget to check whether completely mixed or not | |

| Task Structure | | |
|--|---|--|
| Task: 2 : Prepare Natural color Steps | solution Terminal performance objective | Related technical knowledge |
| Receive instruction Identify materials for making natural color (okhar, mazito, chaku khayar etc,) Collect the materials Peel the materials Dry the peels in sunlight Crush the sun dried peels into pieces Weight the required amount of peel Measure required volume of water Boil the mixture Filter the peel particles Follow safety precautions Keep records | Condition (Given): Materials for making natural color. Task (What): Prepare naturel color solution Standard (How well): All task steps carried out in sequential order The prepared natural color mixture should be of better color | Preparation of Natural color: Concept, need, types, importance, and uses of natural colors in Nepali paper industry Principle and procedure for preparing natural color solution Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Weighing machine, measuring jug, filter cloth, knife, open plastic bucket | Don't forget to handle tools anDon't forget to boil the mixture | • |

| Task Structure | | |
|--|--|---|
| Task: 3: Maintain water color ra Steps | atio Terminal performance objective | Related technical knowledge |
| Receive instruction Estimate total volume of water color solution Weight the required color Measure the required volume of water Mix the color into water Stair the mixture Boil the mixture if necessary Follow safety precautions Keep records | <u>Condition (Given)</u>: Water & color ratio <u>Task (What)</u>: Maintain water color ratio <u>Standard (How well)</u>: All task steps carried out in sequential order The prepared color mixture should be prepared by maintaining the given water color ratio | Maintaining water color ratio: Concept, need, importance, and uses of water color ratio in paper industry Procedure for maintaining water color ratio Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Weighing machine, measuring jug, filter cloth, knife, open plastic bucket | Don't forget to handle tools anDon't forget to maintain the rational statement of the state | • |

| Task Structure | | |
|---|---|---|
| Task: 4: Prepare colored paper Steps Receive instruction Obtain water color solution Cut an appropriate piece of paper Immerse the piece of paper to the water color solution for 1-3 second Put the wet paper onto the plain galvanized sheet Brush the wet piece to stick of sheet Dry the paper piece along with sheet Check whether the required color is obtained on the sample or not. Follow safety precautions Keep records | Terminal performance objective Condition (Given): Color of paper demanded Task (What): Prepare sample of colored paper Standard (How well): • All task steps carried out in sequential order • The color of the sample paper should be as per the color demanded. | Related technical knowledge Sample of color paper: Concept, need, importance, and uses of sample of colored paper Procedure for preparing sample of colored paper. Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: Weighing machine, measuring jug, filter cloth, knife, open plastic bucket, plain galvanized sheet. | Safety/precautions: Don't forget to handle tools and Don't forget to check whether to obtained on the sample or not. | • |

| Task Structure | | |
|--|--|--|
| Task: 5: Color readymade paper Steps 1. Receive instruction 2. Prepare the paper to be colored 3. Obtain water color solution 4. Immerse the whole sheet of paper one by one into the color for 1-3 second 5. Put the wet paper on the plain galvanized sheet 6. Brush the paper to stick on sheet 7. Dry them well 8. Follow safety precautions 9. Keep records | | Related technical knowledge Coloring the ready made paper: • Concept, need, importance, and uses of coloring ready made paper • Procedure for coloring ready made paper. • Safety precautions to be followed while carrying out this task • Keeping activity records |
| Required tools/equipment: Brush, plain galvanized sheet. | Safety/precautions: Don't forget to test different w different intensity of color. Don't forget to make same col | C |

| Task Structure | | |
|--|--|---|
| Task: 5: Color Lubdi (Ledo) Steps 1. Receive instruction 2. Put the required weight color into the pulp 3. Put the mixture in the container 4. Stir and heat the mixture 5. Put the color pulp unto the frame 6. Dry color pulp 7. Follow safety precautions 8. Keep records | Terminal performance objective Condition (Given): Pulp to be colored and the color Task (What): Color Lubdi (Ledo) Standard (How well): All task steps carried out in sequential order The color intensity should be same for all colors. | Related technical knowledge Coloring lubdi (Lado): • Concept, need, importance, and uses of coloring lubdi. • Procedure for coloring lubdi. • Safety precautions to be followed while carrying out this task • Keeping activity records |
| Required tools/equipment: | Safety/precautions: | 1 |
| Woolen frame with nylon net. | • Don't forget to carry out colori | ng the pulp safely |

Module: 6: Paper quality

Description:

This module deals with the knowledge and skills related to paper quality. It consists of tasks related to maintaining Nepali paper quality. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To perform paper grading
- To perform paper calendar
- To design paper (leaf/flower etc.)
- To washout color
- To perform paper recycling work
- To perform Storing
- To maintain safety
- To manage safety measures for storing

Tasks:

To meet the objectives the trainees are expected to get proficiency on the following tasks:

- 1. Perform paper grading
- 2. Perform paper calender
- 3. Design paper (leaf/flower etc.)
- 4. Washout colour
- 5. Perform paper recycling work
- 6. Perform storing
- 7. Maintain safety
- 8. Manage safety measures for storing

Task structures

| | Task Structure | |
|---|---|---|
| Task: 1 : Perform paper grading | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Enlist paper grading criteria Check whether the paper is uniformly balanced or not Check whiteness of the paper Check roughness of the paper Check weight of the paper Check whether the paper is torn or not Grade the paper as per the criteria Follow safety precautions Keep records | Condition (Given): Papers to be graded and grading criteria Task (What): Perform paper grading Standard (How well): All task steps carried out in sequential order The given paper grading should be as per the paper grading criteria given. | Paper grading: Concept, need, importance, and uses of paper grading Criteria for paper grading Procedure for paper grading Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Papers | • Don't forget to carry out paper grading criteria. | r grading basing on its |

| Task Structure | | |
|---|--|--|
| Task: 2 : perform paper caland | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Put the paper in between plain galvanized sheets Insert it in calander machine Calander the paper to get its smoothness and shininess Follow safety precautions Keep records | Condition (Given): Papers to be calandered Task (What): Perform paper calander Standard (How well): All task steps carried out in sequential order The calandered paper should be smooth and shinny. | Paper calander: Concept, need, importance, and uses of calandering the paper Procedure for calandering the paper Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Calander machine, plain galvanized sheets | • Don't forget to check smoothn paper. | ess and shininess of the |

| Task Structure | | |
|---|---|--|
| Task: 3 : Design paper | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Put different flowers on the frame with pulp to get flower paper Put different leaf on the colored paper with plain galvanized sheet while drying to get leaf image Remove leaf after drying the paper. Follow safety precautions Make various design on paper Keep records | <u>Condition (Given)</u>: Paper designs <u>Task (What)</u>: Design paper <u>Standard (How well)</u>: All task steps carried out in sequential order The papers designed should be as per the given paper designs. | Paper design: Concept, need, importance, and uses of obtaining designs on paper Procedure for making designed papers Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Frame, plain galvanized sheet | • Handle frame and galvanized | sheet carefully and safely |

| Task Structure Task:4 : Washout color | | |
|--|---|--|
| | | |
| Receive instruction Obtain the things/materials of which to washout colors (e.g. galvanized sheet, brush, frame etc.) Prepare for washing out the colors Carry out the washing of colors Washout the previous color from the galvanized sheet, brush, frame etc. each time using next color Follow safety precautions Keep records | <u>Condition (Given)</u>: Things of which to washout colors (e.g. galvanized sheet, brush, frame etc.) <u>Task (What)</u>: Washout colors <u>Standard (How well)</u>: All task steps carried out in sequential order The washed out materials/things should be clean devoid of the color. | Washing out colors : Concept, need, importance, and uses of washing out colors How, what's, and when to washout colors Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Galvanized sheet, brush, frame etc | Perform washing carefully and | d safely |

| Task Structure | | | | |
|--|---|---|--|--|
| Task: 5 : Perform paper recycling work | | | | |
| Steps | Terminal performance objective | Related technical knowledge | | |
| Receive instruction Collect thura (paper to be recycled) Mix thura with water Cut it in bitter machine until it becomes pulp. Put water in vat Pour the pulp in vat Mix them Make wet recycled paper with the help of net and frame of Japanese prabidhi Put ply- wood on the table. Put jute- bora onto the ply- wood. Put cotton cloth covering the jute- bora. Pile-up the wet recycled paper and cotton cloth one after another in turn on to the cotton cloth Put Jute- bora, ply- wood and heavy materials on the top of the all. Leave it for 12- hrs Press the whole pile using the press machine (by pressing, paper will attach with cloth). Put the attached paper and cloth on plain sheet making cloth face upside. Brush them well Take out the cloth Dry the paper Follow safety precautions Keep records | Condition (Given): Papers to be recycled Task (What): Recycle papers Standard (How well): All task steps carried out in sequential order Paper recycling work well done following all the necessary safety/ precautions in right time and manner. | Paper recycling : Concept, need, importance, and uses of paper recycling How and when to recycle papers Safety precautions to be followed while carrying out this task Keeping activity records | | |
| Required tools/equipment: | Safety/precautions: | | | |
| Vat, net and frame of Japanese prabidhi, ply- wood, table, jute- bora, cotton cloth, heavy materials, press machine, plain sheet, brush | • Handle vat, net and frame of Ja table, jute- bora, cotton cloth, hea sheet, brush etc carefully and safely | | | |

| Task Structure | | |
|---|---|--|
| Task:6 : Perform storing | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Receive papers to be stored Make the store room clean and safe Store the final product in the clean and safe room Avoid fire and water Follow safety precautions Keep records | <u>Condition (Given)</u>: Final products to be recycled <u>Task (What)</u>: Store the final product <u>Standard (How well)</u>: All task steps carried out in sequential order Paper recycling work well done following all the necessary safety/ precautions in right time and manner. | Storing : Concept, need, importance, and uses of storing final products How and when to store the products Safety precautions to be followed while carrying out this task Keeping activity records |
| Required tools/equipment: | Safety/precautions: | |
| Safe and clean store | Handle final product carefully and | safely |

| Task Structure | | |
|---|---|---|
| Task: 7 : Maintain safety Steps 1. Receive instruction 2. Apply personal safety measures 3. Wear gloves while dealing with chemicals 4. Beware of cutting machine, knife, harmful chemicals 5. Wash hand properly after finishing the work 6. Follow safety precautions 7. Keep records | Terminal performance objective Condition (Given): Safety rules and procedures Task (What): Maintain safety Standard (How well): • All task steps carried out in sequential order • Safety well maintained as per the safety rules and | Related technical knowledge Safety: • Concept, need and, importance of safety • How and when to maintain safety • Safety rules and procedures to be followed • Keeping activity records |
| Required tools/equipment: Gloves, washing powder | procedures supplied. Safety/precautions: Beware of cutting machine, kn Wash hand properly after finis | |

| | Task Structure Task: 8 : Manage safety measures for storing | | |
|----|---|--|---|
| Τŧ | | | |
| | Steps | Terminal performance objective | Related technical knowledge |
| 3. | Put fire extinguisher near the store room Put store room away from water and fire Paper can be arranged on steel paper holder step by step Store room should be free from dust Follow safety precautions | <u>Condition (Given)</u>: Final products to be recycled <u>Task (What)</u>: Store the final product <u>Standard (How well)</u>: All task steps carried out in sequential order Safety measures for storing well maintained following all the necessary precautions in right time, place, and manner. | Storing : Concept, need, importance, and uses of safety measures for storing. How and when to apply safety measures for storing Safety precautions to be followed while carrying out this task Keeping activity records |
| Re | equired tools/equipment: | Safety/precautions: | |
| ho | e extinguisher, steel paper lder, broom/brush/vacuum eaner etc. | Put fire extinguisher near the st Store room should be free from Put store room away from wate | n dust |

Module: 7: Communication and professionalism

Description:

This module deals with the knowledge and skills related to communication and professional growth. It consists of tasks related to communication and professionalism development. Each task structure consists of performance steps, terminal performance objective, and minimum technical knowledge necessary to know related to the task.

Objectives:

After its completion the trainees will be able:

- To communicate with boss
- To communicate with supervisor
- To communicate with client
- To communicate with suppliers
- To communicate with seniors
- To communicate with juniors
- To communicate with peers
- To attend training
- To seek for higher education
- To study for higher training
- To consult with colleagues
- To consult with seniors
- To affiliate with trade union
- To study related magazine & papers

Tasks:

To meet the objectives the trainees are expected to get proficiency on the following tasks:

- 1. Communicate with boss/ supervisor/ seniors
- 2. Communicate with client
- 3. Communicate with suppliers
- 4. Communicate with juniors
- 5. Communicate with peers
- 6. Attend training
- 7. Seek for higher education
- 8. Attend higher training
- 9. Consult with colleagues
- 10. Consult with seniors
- 11. Affiliate with trade union
- 12. Study related magazine & papers

Task Structure

| Task Structure | | |
|--|--|---|
| Task: 1: Communicate with seniors 1. Receive instruction 2. Obtain list of seniors 3. Prepare massages / information to be communicated 4. Communicate with seniors 5. Show good mannerism 6. Take precautions 7. Keep records | | Related technical knowledge Communicating with seniors: • • Communication: • Massage / information • Barriers • Mannerism of communicating with |
| 7. Keep records | Standard (How well): All the task steps carried out in sequential order. The massage / information communicated should be in an understandable form by the receiver exactly as the sander intended to communicate. | |
| Required Tools/equipment: | Safety/precautions: | · |
| Massage, telephone, and other means of communication | Take care to prepare massage/i understandable form by the rec Take care to avoid communicate | eiver |

| Task Structure Task:2: Communicate with Juniors | | |
|---|--|--|
| | | |
| Receive instruction Obtain list of Juniors Prepare massages / information to be communicated Communicate with Juniors Show good mannerism Take precautions Keep records | <u>Condition (Given)</u>: Massages / information to be communicated <u>Task (What)</u>: Communicate with Juniors <u>Standard (How well)</u>: All the task steps carried out in sequential order. The massage / information communicated should be in an understandable form by the receiver exactly as the sander intended to communicate. | <u>Communicating with</u> <u>Juniors:</u> Communication: Massage / information Barriers Mannerism of communicating with Juniors Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Massage, telephone, and other means of communication | Take care to prepare massage/ i understandable form by the rec Take care to avoid communication | eiver |

| | Task Structure | |
|---|--|--|
| Task:3: Communicate with peers / co workers | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain list of peers / co workers Prepare massages / information to be communicated Communicate with peers / co workers Show good mannerism Take precautions Keep records | Condition (Given): Massages / information to be communicated Task (What): Communicate with peers / co workers Standard (How well): All the task steps carried out in sequential order. The massage / information communicated should be in an understandable form by the receiver exactly as the sander intended to communicate. | <u>Communicating with</u> <u>peers / co workers:</u> Communication: Massage / information Barriers Mannerism of communicating with peers / co workers Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Massage, telephone, and other means of communication | Take care to prepare massage/ i understandable form by the rec Take care to avoid communication | eiver |

| Task Structure Task:4: Communicate with suppliers | | |
|---|---|--|
| | | |
| Receive instruction Obtain list of suppliers Prepare massages / information to be communicated Communicate with suppliers Show good mannerism Take precautions Keep records | Condition (Given): Massages / information to be communicated Task (What): Communicate with suppliers Standard (How well): All the task steps carried out in sequential order. The massage / information communicated should be in an understandable form by the receiver exactly as the sander intended to communicate. | <u>Communicating with</u> <u>suppliers:</u> Communication: Massage / information Barriers Mannerism of communicating with suppliers Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Massage, telephone, and other means of communication | Take care to prepare massage/ i understandable form by the rec Take care to avoid communication | eiver |

| Task Structure | | |
|---|--|--|
| Task:5: Communicate with cus | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Obtain list of customers Prepare massages / information to be communicated Communicate with customers Show good mannerism Take precautions Keep records | <u>Condition (Given):</u> Massages / information to be communicated <u>Task (What):</u> Communicate with customers <u>Standard (How well):</u> All the task steps carried out in sequential order. The massage / information communicated should be in an understandable form by the receiver exactly as the sander intended to communicate. | <u>Communicating with</u> <u>customers:</u> Communication: Massage / information Barriers Mannerism of communicating with customers Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Massage, telephone, and other means of communication | Take care to prepare massage/ understandable form by the rec Take care to avoid communication | eiver |

| Task Structure | | |
|--|---|--|
| Task: 6: Consult with seniors | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Identify seniors Consult with seniors Gain professional information Acquire skills/knowledge related to the profession Get help/suggestions for professional development Show good mannerism Take precautions Keep records | Condition (Given):Seniors to be consultedTask (What):Consult with seniorsStandard (How well):• All the task steps carried out in sequential order.• Consulted with seniors showing good mannerism and acquired skills/knowledge/ help/ suggestions for professional development. | Consulting with seniors: Concept, need, and importance of professional development Role of consulting with seniors for professional development Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Means of transport and communication | Show good mannerism | |

| Task Structure | | |
|---|-----------------------|--|
| Professionalism development Task:7: Seek for higher education Steps 1. Receive instruction 2. Identify institutes for higher education 3. Contact the institutes 4. Get detail information about education delivered by the institutes 5. Select appropriate institute for higher study 6. Enroll / acquire certificates that enhance professional development 7. Take precautions 8. Keep records | | Related technical knowledge Seeking for higher education: • Concept, need, and importance of higher education • Role of higher education for development • Precautions to be taken • Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | 1 |
| Inter net, means of transport and communication | • Show good mannerism | |

| Task Structure Task:8: Attend workshops/seminars | | |
|---|--|---|
| | | |
| Receive instruction Identify related workshop/seminars Attend workshops/seminars Make notes Add in professional development Maintain the professional ethics Take precautions Keep records | Condition (Given): Opportunity for attending workshops/seminars Task (What): Attend workshops/seminars Standard (How well): All the task steps carried out in sequential order. Related workshops/seminars attended and professional skills / knowledge well gained. | <u>Attending</u> workshops/seminars: Concept, need, and importance of workshops/seminars Role of workshops/seminars for professional development Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Paper, pen, related reading materials | Always add skills/knowledge professionalism | that enhance |

| Task Structure | | |
|--|---|--|
| Task:9: Read professional journa | | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Identify related professional journals/manuals Obtain the professional journals/manual Read the professional journals/manual Interpret the professional journals/manual Analyze the professional journals/manual Analyze the professional journals/manual Add skills / knowledge for professional development Take precautions Keep records | <u>Condition (Given)</u>: Source of related professional journals/manuals <u>Task (What)</u>: Read professional journals/manuals <u>Standard (How well)</u>: All the task steps carried out in sequential order. Related professional journals/manuals obtained red, interpreted, analyzed skimming out the skills and knowledge that enhance professional development. | Professional journals and manuals Concept, need, and importance of professional journals/manuals Role of professional journals/manuals for professional development Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Paper, pen, professional journals/manuals | Form habit of reading profess enhance professional develop | |

| Task Structure | | |
|---|---|---|
| Task: 10: Participate in related t | rainings | |
| Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Identify institutes for training Search training institutes Contact the institutes Get detail information about training delivered by the institutes Select appropriate institute for training Enroll / acquire training certificates that enhance professional development Take precautions Keep records | Condition (Given): List of training institutes Task (What): Participate in related trainings Standard (How well): All the task steps carried out in sequential order. The training participated should add in the development of professionalism. | Trainings: Concept, need, and importance of training Role of training for professional development Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | |
| Related teaching learning materials | Participate in trainings that en development. | nhance professional |

| Task Structure Task: 11: Participate/ consult professional organization | | |
|---|---|--|
| Task: 11: Participate/ consult pro Steps | Terminal performance objective | Related technical knowledge |
| Receive instruction Identify institutes for training Search training institutes Contact the institutes Get detail information about training delivered by the institutes Select appropriate institute for training Enroll / acquire training certificates that enhance professional development Take precautions Keep records | Condition (Given): Professional organization Task (What): Participate/ consult professional organization Standard (How well): All the task steps carried out in sequential order. The professional organizations consulted to enhance the development of professionalism. | Professional organization Concept, need, and importance of professional organization Role of professional organization for professional development Precautions to be taken Keeping activity records |
| Required Tools/equipment: | Safety/precautions: | 1 |
| Related teaching learning materials | • Participate in trainings that er development. | hance professional |

Reading materials

- Instructor selected textbooks/ reference books / manuals/ journals and articles available in the marker
- Instructor prepared books, handouts, notes and manuals

Facilities

Building with sufficient facilities

- Administrative rooms
- Equipped adequate Class rooms
- Adequate working space for making Nepali paper
- Small industry (typical Nepali paper making industry) or available to use
- Library
- Store
- Telephone
- Computer
- OHP
- Teaching Learning materials

Optional

- Vehicle
- Canteen
- Hostel

Tools, materials and equipment

- Different types of knives
- Different sizes wooden frame
- Bhyat (Dunda) / Water tank for paper making
- Bitter machine
- Weighing Machine
- Water tank
- Caustic soda
- Paper cutting machine
- Cooking stove
- Cooking puts for raw material cooking
- Lugdi preparing put
- Drum
- Fuel (Wood)
- Bleaching power
- Post scale
- Plain sheet
- Brush

- Traditional / Modern Japanese frame
- Mug
- Bucket
- Comb
- Vat stand
- Frame stand
- Nuri
- Calendar machine
- Net (bamboo/ nylon)
- Needle / resign
- Hammer
- Nails
- Scrim machine
- Pipe
- Water pump
- Plastic bag
- Cutter
- Scissor