



Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment



Participant Handbook

Sector
Handicrafts and Carpet

Sub-Sector
Paper Mache

Occupation
Paper Craft Making

Reference ID: HCS/Q4401, Version 3.0
SCPwD Reference ID: PWD/HCS/Q4401, NSQF Level 4



**Paper Mache
Products Artisan
(Divyangjan)**

for Locomotor Disability
for Speech and Hearing Impairment

This book is sponsored by Handicrafts and Carpet Sector Skill Council

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The book caters to the job role aligned to the following disabilities as per the NQR codes mentioned below.

LD - 2022/PWD/SCPWD/06384

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Shri Narendra Modi
Prime Minister of India

“

Skilling is building a better India.
If we have to move India towards
development then Skill Development
should be our mission.

”



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Complying to National Occupational Standards of

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The preparation of this manual would not have been possible without the support of the Handicrafts and Carpet Industry. The industry feedback has been extremely encouraging from inception to conclusion & it is with their inputs that we have tried to bridge the skill gaps existing today in the industry.

This participant manual is dedicated to all the aspiring youth who desire to achieve special skills which would be a lifelong asset for their future endeavours and help them make a bright career in the Handicrafts and Carpet Sector.

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<https://youtu.be/wNAAQlh4si8>

Introduction to HCSSC

About this Book

This book is designed for up grading the knowledge and basic skills to take up the job of 'Paper Mache Artisan' in 'Handicrafts' sector. All the activities carried out by Paper Mache artisan are covered in this course. Upon successful completion of this course, the candidate will be eligible to work as Paper Mache Artisan.

This Participant Handbook is designed to enable training for the specific Qualification Pack (QP). Each National Occupational (NOS) is covered across Unit/s.

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS. The list of NOS covered in this book is given next.

- HCS/N4401 Making of Sakhta (Paper pulp)
- HCS/N9901 Working in a team
- HCS/N9912 Maintain work area & tools
- HCS/N9913 Maintain health, safety and security at workplace

Symbols Used



Key Learning
Outcomes



Steps



Time



Tips



Notes



Unit
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Exercise

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Content for the same can be accessed here:

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Introduction to HCSSC Digital Initiative





1. Introduction

Unit 1.1 – Paper Mache Sector in India

Unit 1.2 – Job role of a Paper Mache Artisan



Key Learning Outcomes



At the end of this module, participant will be able to:

1. Discuss the Paper Mache sub-sector in India.
2. Define the artwork that comes under Paper Mache.
3. Identify artifacts of Paper Mache handicraft.
4. Identify the states that are producer of Paper Mache art.
5. Describe the work area of Paper Mache Artisan.
6. Identify the opportunities for Paper Mache Artisan.

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<https://youtu.be/G-yfJxwvAGw>

Paper Mache Sector in India



<https://youtu.be/C33zJR3cvBE>

Job role of a Paper Mache Artisan

Unit 1.1: Paper Mache Sector in India

Unit Objectives



At the end of this unit, participant will be able to:

1. Discuss the Paper Mache sub-sector in India.
2. Define the artwork that comes under Paper Mache.
3. Identify artifacts of Paper Mache handicraft.
4. Identify the states that are producer of Paper Mache art.

1.1.1 Introduction to Paper Mache Sector

Paper Mache or say Papier Mache is an art in which raw material made by using paper pieces and pulp. Sometimes, fabric is added to the art using glue, starch, or other adhesives to increase strength of the art work. Paper Mache products are also used in animations and visual effects in movies. History of Paper Mache begins from Han dynasty of China in 200 A.D. They used to make masks, helmets, and decorative objects using this art.

1.1.1.1 Applications of Paper Mache

There are many practical applications of Paper Mache in decoration, military, costuming, theatre, and movies. Various applications of Paper Mache are discussed next.

Decorative Items

There are hundreds of types of objects that can be made by paper mache art. In simple terms, if you can visualize and object then you can probably create it using paper mache art. You can make jewellerys, vases, bowls, masks, pinatas, volcanos, or even furniture using this art.



Figure 1.1.1 Paper Mache Bowl



Figure 1.1.2 Paper Mache Vase



Figure 1.1.3 Paper Mache Idols

Military Applications

In past there have been many military applications of paper mache like creating sabot (outer shell of ammunition used to increase accuracy) for bullets, creating drop tanks, creating combat decoy, and so on. Militaries have used fuel tanks made using paper mache during World War II because these tanks were light in weight and could increase the flying range of light air crafts. These fuel tanks were called drop tanks because once the fuel of tank is consumed, they were dropped from the air craft hence reducing the total weight of air craft. During World War I, British had used paper mache figures to act as decoy for finding position of enemy snipers.



Figure 1.1.4 Paper Mache Drop Tank



Figure 1.1.5 Paper Mache decoy for snipers

Carnivals and Promotions

Paper mache art is used to create floats based on selected theme or movie. If there is a promotion of movie then floats of movie characters are made to depict a sequence of movie. For carnivals, various decorative items and floats are create using paper mache based on the theme of carnival.



Figure 1.1.6 Paper Mache Masks

In India, Ravan burnt on Dusshera is a paper mache product.



Figure 1.1.7 Ravan Sculpture

1.1.2 Paper Mache Art in India

In India, the art of paper mache developed during Mughal's era. At that time, this art was used to create utility items like boxes, bowls, and so on. Miniature paintings were used to decorate the surface of these items at that time. There are many locations in India where paper mache art is used to create puppets and other common articles but some places have become famous for their distinctive paper mache art over the time. These places are discussed next.

1.1.2.1 Paper Mache Art of Kashmir

In Kashmir, various utility products as well as ornamental objects are created using this art. Kashmiri paper mache products are famous for their bright colours. Generally, you will find red, blue, orange, brown, green, and yellow colours in these artworks. For premium products, gold and bronze poster colours are also used to enhance the look of artifacts. The facilitator of this art in Kashmir is said to be Zain-ul-Abidin (8th ruler of Kashmir). Some artifacts of Kashmiri paper mache art are shown in next figure.



Figure 1.1.8 Paper mache Napkin rings



Figure 1.1.9 Paper Mache Cup/Glass Coaster



Figure 1.1.10 Paper Mache Jewellery Box

The art of paper mache has evolved generation by generation in Kashmir. It is a traditional art passed down to generations and traditionally named as “Sakthasazi”. Most popular Kashmiri motifs for Sakthasazi are Mughal inspired designs, birds, animals, Chinar trees, Hazara flowers, and many other intricate designs.

1.1.2.2 Paper Mache Art of Madhya Pradesh

In Madhya Pradesh, Ujjain is specially recognized for its paper mache art on realistic birds and decorative paper mache pottery. The craftsmen of Ujjain and Gwalior also make sculptures of animals, gods, and goddesses with bright colours.



Figure 1.1.11 Paper Mache Birds of Ujjain



Figure 1.1.12 Paper Mache Sculpture and Pottery from MP

1.1.2.3 Paper Mache Art of Tamil Nadu

Tamil Nadu paper mache art is famous for its size. The artwork created here is approximately equal to a human in size. Dancing dolls of Tamil Nadu are also famous in paper mache art.



Figure 1.1.13 Paper Mache Dancing Dolls

1.1.2.4 Paper Mache Art of Odisha

The paper mache artwork of Odisha is inspired from Patachitra. Artisans from Odisha make masks and figures using paper and clay.



Figure 1.1.14 Paper Mache masks of Odisha

1.1.2.5 Sanjhi of Mathura and Vrindavan

Sanjhi is a paper craft of Mathura and Vrindavan in which paper is cut using special scissors to depict stories of lord Krishna.



Figure 1.1.15 Paper craft of Mathura

1.1.2.6 Paper Mache Art of Rajasthan

Jaipur is the centre of Paper mache art in Rajasthan. Rajasthani paper mache art includes animals and birds. Bowls made by paper mache art in Banasthali are also famous.



Figure 1.1.16 Banasthali Bowls

1.1.2.7 Paper Mache Art of Bihar

In Bihar, figures of animals and birds are created using paper mache art and Madhubani painting.



Figure 1.1.17 Paper Mache of Bihar

1.1.2.8 Kathakali and Temple Models of Kerala

Artists of Kozhikode use paper mache art to make large models of kathakali and temple figures.



Figure 1.1.18 Kathakali Model Paper Mache Kerala

1.1.2.9 Kites of India

Kites are famous paper mache products of India craft all across India. These kites are used in specific festivals.



Figure 1.1.19 Paper Kites

Tips



Where can we get the raw material for paper mache product making at low price?

Think about this. Where do you find the maximum production of paper mache art work in India? You need to check paper mache hubs of India like Ujjain, Jaipur, Ahmedabad, Varanasi, and many other cities considered as hub for paper mache artwork.

Unit 1.2: Job Role of Paper Mache Artisan

Unit Objectives

At the end of this unit, participant will be able to:

1. Describe the work area of Paper Mache Artisan.
2. Identify the opportunities for Paper Mache Artisan.

1.2.1 Job of Paper Mache Artisan

The Paper Mache Products Artisan is responsible for making sakhta out of paper pulp passing through various stages of preparation beginning from paper cutting, paper soaking etc. The Sakhta maker should be hard smart working with a flair for creating innovative designs as per buyer's samples and/or self-intuition. He should be keen, patient, having some knowledge of the material, and having steady hands.



Figure 1.2.1 Paper Mache Artisan

If a Paper Mache artisan is planning to sell his items then he should know about marketing and negotiation techniques to sell his work. He should have a fair idea of cost of his product in market and the efforts he has spent to make the product.

1.2.2 Opportunities for Paper Mache Artisan

There are great opportunities of Paper Mache Artisan in India as well as in foreign countries like France, Japan, USA, Italy, and many other countries. A wide range of items are produced using paper mache art like pen holder (kalamdani), jewellery boxes, tissue holding rings, decorative items, ornaments, and so on. A Paper Mache Artisan has following benefits:

- Exclusive paper mache art products have good domestic and export markets
- Versatility in changing designs and texture with minimum investment
- Possibility of more value addition in very small cost

A Paper Mache Artisan also gets job opportunities apart from easy entrepreneurship like, he can be:

- Paper Mache Artisan for both local demand and foreign demand industries.
- Paper Mache Artisan can work as instructor of art and craft in local as well as foreign institutions.

Exercise



1. Which states/regions of India are famous for paper mache art work?

2. Write down a short note on Paper Mache art of Kashmir.

3. What are some common applications of Paper Mache art?

4. What is the job of a Paper Mache Artisan?

5. Write a short note on Paper Mache Art of India.



2. Making of Sakhta (Paper pulp)



Unit 2.1 – Preparation of Paper pulp

Unit 2.2 – Making Paper Mache Products



Key Learning Outcomes



At the end of this module, participant will be able to:

1. Identify and use suitable PPE like rubber hand gloves as required.
2. Put strips of paper in a suitable container (drum).
3. Add sufficient water to the drum to soak the paper.
4. Allow it to soak for 3-4 days.
5. Remove the soaked paper and transfer it to a stone mortar.
6. Pound the paper with a wooden pestle.
7. Put the pounded material under sun/shade to allow it to dry partially under in an open atmosphere.
8. Prepare separately, rice flour (atiji) with dissolving of the rice flour in water and mixing while heating.
9. Mix this atiji with a partially dried semi-solid pounded paste of paper.
10. Identify and mold the design as required.
11. Put ordinary paper as separator for paper mache shape former. The separator is fixed to the mold with the help of atiji.
12. Keep on putting paper pulp over the separator to develop the object of paper mache as per size.

Scan the QR code or click on the link to check related video



<https://youtu.be/ygWS0EfWrOI>
Preparation of Paper Pulp



<https://youtu.be/nzKXWj10I8E>
Making Paper Mache Products

Unit 2.1: Preparation of Paper pulp

Unit Objectives

At the end of this unit, participant will be able to:

1. Identify and use suitable PPE like rubber hand gloves as required.
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2.1.1 Raw Material for Paper Mache

Beauty of paper mache art is in recycling paper waste for high profit. Raw material for paper mache is paper paste which can be extracted from different sources.

2.1.1.1 Paper from Different Sources

Paper used in paper mache art comes from different sources like newspapers, magazines, bill books, new paper bundles, and many other sources. The type of paper source depends on the final product design. These sources are discussed next.

Newspaper

Newspaper is a good source for soft paper pulp. You can find a lot of scrap newspapers near you.



Figure 2.1.1 News paper

Waste Paper from Print or Photocopy

Generally, there is enough waste paper in dustbin near printing or photo copying machines to create a small paper mache art product. This paper creates a harder pulp as compared to newspaper.

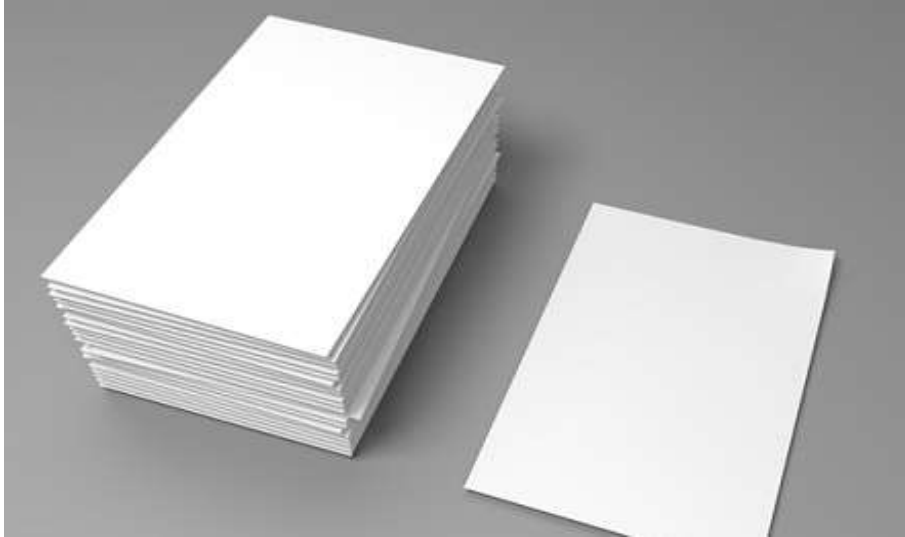


Figure 2.1.2 Printing Paper

Decorative and Stylish Papers

This type of paper is generally acquired from paper gift wraps, paper packings, wall papers, and other sources.



Figure 2.1.3 Wall paper

Tissue Papers

Tissue papers are thin and soft so they produce soft pulp with lesser weight of material. Tissue papers can come in different colours as well.



Figure 2.1.4 Tissue Papers

Parchment and Glossy Papers

Parchment paper is generally found in brown paper bags with one side glossy and other side rough. You can also find glossy papers from cover pages of books and magazines. This type of papers is generally water proof and grease-resistant.



Figure 2.1.5 Parchment Paper

Cardboard papers

Cardboard papers are thick and strong. These types of papers are generally used in making boxes for storage. These papers can have patterns or they can be corrugated.



Figure 2.1.6 Cardboard Papers

Card Stock Papers

This type of paper is generally found in table calendars, greeting cards, business cards, and paperback book covers.



Figure 2.1.7 Card Stock Papers

2.1.1.2 Colours/Paints

There are a wide variety of colours available in market for painting paper mache articles. Major categories of colours/paints used for paper mache are discussed next.

Water Colours/Poster Colours

Poster colours are also referred to as water colours because these colours are mixed with water to form paint on paper mache. These colours are bright and fast drying.



Figure 2.1.8 Poster Colours

Acrylic Colours/Paints

Acrylic colours are water resistant when fully dried. They can be used directly on surface or they can be diluted with water to get lighter shade of colour.



Figure 2.1.9 Acrylic Colours

Spray Paint/Aerosol Colours

Spray paints are colours available in an aerosol container which stores paint in pressurized form.



Figure 2.1.10 Aerosol Paint

2.1.1.3 Glue

Various types of glues are used to form shapes using paper pulp. These glue types are discussed next.

Glue Stick

Glue stick is used to provide adhesive at smaller sections of the product.



Figure 2.1.11 Glue Stick

White Glue/PVA Glue

White glue or PVA Glue is used to provide adhesion at larger surface area. You can dip brush in this glue and then spread it at large surface area.



Figure 2.1.12 PVA Glue

2.1.1.4 Tapes

Tapes are useful for many purposes in paper mache. Transparent tapes can make small sections of product water proof. They can increase the binding strength of product. Tapes can hide some sections like seams on the paper mache product. Common types of tapes used in Paper Mache are discussed next.

Transparent Tapes

Transparent tapes are actually cellophane tapes better known as sellotapes. These tapes are used to attach paper or other material to main body. You can see through these tapes.



Figure 2.1.13 Transparent Tape

Masking Tapes

Masking tapes are used to hide or mark sections of the part. These tapes are generally removed after their intended purpose if achieved.



Figure 2.1.14 Masking tape

Duct Tapes

Duct tapes are strong and water proof. These tapes are used for strong adhesion and binding.



Figure 2.1.15 Duct tape

2.1.1.5 Water

Water is used to make pulp from shredded paper. Any plain water without colour contaminants will do the job.

2.1.2 Tools and Equipment

Paper mache artisan does not require heavy machinery or large setup of tools to perform the job. Common household tools can be used to create paper mache artwork. Some of the common tools and equipment for paper mache work are discussed next.

2.1.2.1 Safety Equipment

When working on mixing ingredients for paper mache, gloves should be worn by artisan.



Figure 2.1.16 Gloves

When performing cutting operations of hard papers, glasses/safety goggles are important and should be worn by artisan.



Figure 2.1.17 Safety Goggles

When working on perfumes or chemical solutions that can be dangerous if inhaled in large quantity then mask should be worn by artisan.



If there is a hand sewing work involved then artisan should wear a thimble.



Figure 2.1.18 Thimble

2.1.2.2 Cutting Tools

Starting from scissors to needles there are various cutting tools used by paper mache artisan to get paper designs of desired shapes and sizes. These tools are discussed next.

Scissors

Scissors are used to cut papers into smaller pieces. Note that cutting hard paper can blunt the edges of scissors so you need to keep them sharp.



Figure 2.1.19 Scissors

Knife and Paper Cutting Blade

Sharp knife and paper cutting blades are used to cut the paper at desired markings.



Figure 2.1.20 Paper Cutting Blade

Mat or Flat Cardboard Base

Rubber mats or cardboard pieces are placed below paper so that table surface does not get spoiled.



Figure 2.1.21 Rubber Mat

Paper Punch

Paper punch is used to cut desired shapes from the paper to modify surface design of paper mache artwork.



Figure 2.1.22 Paper Punch

Needles

Heavy needles are used to sew together pieces of paper for forming artwork.



Figure 2.1.23 Needles

Stapler

Stapler is used to join paper pieces using staple pins.



Figure 2.1.24 Stapler

2.1.2.3 Measuring and Marking Tools

Measuring tools are needed to check the dimension of pieces to be put together for making art work. Marking tools in combination with masking tape help to identify locations where cuts are to be made in paper. Various common measuring and marking tools are shown in the next figures.

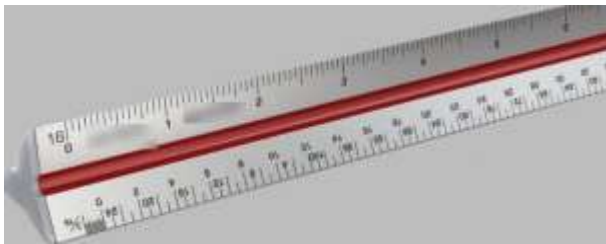


Figure 2.1.25 Measurement Scale



Figure 2.1.26 Measurement Tape



Figure 2.1.27 Pencil

2.1.2.4 Electrical Items

Various electrical equipment like dryer, heater, electric stove, hot glue guns are not mandatory but can be useful for faster operations in paper mache art.



Figure 2.1.28 Electrical Equipment

2.1.2.5 Mixing Apparatus

Common kitchen containers can be used to mix paper, water and other ingredients for making pulp (sakhta).



Figure 2.1.29 Kitchen containers and wooden spoon

2.1.2.6 Painting Tools

Various sizes of paint brushes are used to colour paper mache product depending on size of artwork.



Figure 2.1.30 Paint Brush and Foam Brush

2.1.3 Preparing Paper Pulp



Preparation of paper pulp involves two major processes: preparing paper strips to half wet conditions and preparing natural adhesive using rice flour or other sticky flour. The steps to prepare paper pulp are discussed next.

2.1.3.1 Preparing Paper Chunks

1. Take newspapers or other paper scraps earlier collected for paper mache work. Make sure there are enough depending on the size of your artwork.



Figure 2.1.31 News Paper Pieces

2. Tear them into small strips. You can cut papers into any shapes depending on final product required. For example, if you want to create a sphere like paper mache art then you should have thick paper strips for enhances symmetry when placing the strips on base.



Figure 2.1.32 Cutting Papers to strips

3. Fill a bucket or container with paper strips up to at least $\frac{1}{4}$ level.



Figure 2.1.33 Filling container with paper strips

4. Put some hot water in the bucket. It should be enough to cover all the strips in bucket (above $\frac{1}{4}$ level of bucket).



Figure 2.1.34 Adding water to paper strips

5. Allow the water in bucket to cool down and then mesh the pieces together using wooden spoon.



Figure 2.1.35 Meshing water-soaked paper

6. Put the paper chunks in food processor/mixer to get finer paper chunks.



Figure 2.1.36 Putting paper chunks in mixer

At this point paper is ready to meet with adhesive. You can use commercial PVA adhesives like Fevicol or you can create natural adhesive using rice flour also called atiji. The procedure to prepare atiji glue is given next.

2.1.3.2 Preparing Atiji Glue

1. If you have access to Blender and have rice instead of rice flour then put rice in blender with water. For 1 ½ cup of rice, you will need 2 ½ cup of water. If you have rice flour the mix



Figure 2.1.37 Blending water and rice

2. After blending, put the paste in a heating pan and simmer for 5 minutes. When the paste is thick and translucent, it is ready as a glue.



Figure 2.1.38 Simmering Rice paste

3. Allow it to cool down and then you can put the glue on small paper to test adhesion.

2.1.3.3 Mixing Atiji Glue with Paper Chunks

1. Using a wooden pestle, pound the paper chunks in wet paper chunks under Sun until they are partially dried.
2. Put the partially dried paper chunks in a bowl with atiji glue earlier prepared and mix them well using wooden spoon. The final product is called paper pulp and it is naturally adhesive.



Figure 2.1.39 Paper Pulp

Unit 2.2: Making Paper Mache Products

Unit Objectives



At the end of this unit, participant will be able to:

1. Identify and mold the design as required.
2. Put ordinary paper as separator for paper mache shape former. The separator is fixed to the mold with the help of atiji.
3. Keep on putting paper pulp over the separator to develop the object of paper mache as per size.

2.2.1 Making Paper Mache Products

The process of making Paper mache product depends on the type of product to be made. Some products require mould like sculptures. Some products require balloons acting as base for gluing pulp like decorative eggs. Some products need handwork without base objects like ornaments. Here we will work on some common paper mache designs, rest is up to your creativity.

2.2.1.1 Creating Paper Mache Bowl (Mould type)



1. Take a bowl to be used as mould for paper mache.



Figure 2.2.1 Bowl to be used as mould

2. Apply a thin plastic sheet on the bowl so that once paper mache product has dried, it can be extracted easily.



Figure 2.2.2 Wrap bowl with plastic sheet

3. Prepare the paper strips and apply atiji glue on it.



Figure 2.2.3 Applying glue to paper

4. Stick the first layer on bowl and let it dry for up to 2 hours.



Figure 2.2.4 After sticking papers to bowl

5. Once the first layer has dried, apply more layers of paper until you get desired thickness of product.



Figure 2.2.5 Applying multiple layers of paper

6. Once all the layers have dried completely, remove the mould and plastic sheet from product.



Figure 2.2.6 Removing mould and Plastic sheet

7. Trim the edges of paper mache bowl and decorate it as desired.



Figure 2.2.7 After trimming and decorating

8. You can apply varnish to surface of bowl for increasing its strength.

2.2.1.2 Creating Vase using Paper Mache (Using Balloon)

Flower vases can be easily created using a balloon as base for paper mache. You can later pop the balloon when structure is secure. The procedure to create vase is given next.

1. Collect all the items needed to create paper mache vase.



Figure 2.2.8 Items for Vase

2. Cut the newspapers and papers into strips.



Figure 2.2.9 Paper and Newspaper strips

3. Inflate the balloon to its $\frac{3}{4}$ stretching point and cut the extra end point of balloon.



Figure 2.2.10 Inflated balloon

4. Tie the balloon end points at its centre to form an elliptical shape.



Figure 2.2.11 Balloon tied at centre

5. Using paint brush and glue, stick the newspaper strips on the balloon



Figure 2.2.12 Sticking papers with glue

6. Stick a cardboard tube at the top of paper covered balloon.



Figure 2.2.13 Adding cardboard tube

7. Glue paper strips over the newspaper strips earlier glued and apply paint designs as desired.



Figure 2.2.14 Paper glued to newspaper strips

8. Use a pin to slowly deflate the balloon once the vase surface has hardened.



Figure 2.2.15 Painted vase

Activity



Objectives

- Prepare paper scraps and atiji for creating products
- Take a bowl and prepare for paper mache products
- Create a paper bowl and decorate it

Activity Name	Resources
Create a paper mache bowl and decorate it with paint	Ceramics bowl, thin plastic sheet, newspaper strips, atiji glue, decorative paper, acrylic paints, scissors, varnish

Steps



- Take a bunch of newspapers and cut them into thin strips.
- Make a thick solution of rice paste, boil it, and cool it down to create atiji.
- Take a bowl and apply a thin plastic sheet on the bowl so that once paper mache product has dried, it can be extracted easily.
- Prepare the paper strips and apply atiji glue on it.
- Stick the first layer on bowl and let it dry for up to 2 hours.
- Once the first layer has dried, apply more layers of paper until you get desired thickness of product.
- Once all the layers have dried completely, remove the mold and plastic sheet from product.
- Trim the edges of paper mache bowl and decorate it as desired.

Exercise



1. Write a short note on general process of creating paper mache products.

2. Write down the steps to create a flower vase using paper mache art.

3. Write down the steps to create paper mache bowl.





3. Work Area Management

Unit 3.1 – Work Area Management



Key Learning Outcomes



At the end of this module, participant will be able to:

1. Handle materials and tools safely and correctly
2. Use materials to minimize waste
3. Maintain a clean and hazard free working area
4. Maintain the tools
5. Carry out maintenance and/or cleaning within one's responsibility
6. Dispose of waste safely in the designated location
7. Store cleaning equipment safely after use
8. Carry out cleaning according to schedules and limits of responsibility

Scan the QR code or click on the link to check related video



<https://youtu.be/WWp30glVGrM>

Work Area Management

Unit 3.1: Work Area Management

Unit Objectives

At the end of this unit, participant will be able to:

1. Describe the importance of managing work area properly.
2. Describe the benefits of work area management.
3. Describe how to build a good housekeeping plan
4. Identify the elements of housekeeping
5. Handle materials and tools safely and correctly
6. Use materials to minimize waste
7. Maintain a clean and hazard free working area
8. Maintain the tools
9. Carry out maintenance and/or cleaning within one's responsibility
10. Dispose of waste safely in the designated location
11. Store cleaning equipment safely after use
12. Carry out cleaning according to schedules and limits of responsibility

3.1.1 Reasons to Manage Workplace

Cleaning work place does not mean just shining floors and walls, it safe and healthy environment as well for workers. When working conditions are hazardous then it becomes more important to keep workplace healthy. If you want to avoid workplace induced injuries then here are some guidelines to be followed.

1. Do not leave floors wet.

Keeping your floors dry is important to avoid accidents caused by slippery floors. There are various types of floor cleaners available in market. You can use alkaline cleaners when there is high foot-fall of people. If your work place is rusty then you can use acidic cleaners. Some floor cleaners can contain harmful chemicals that might not be suitable for your specific working conditions. For example, if you are working on clothes then make sure acids do not touch the clothes. You can also use other materials like mats, carpets, rubber rolls, and so on to keep your floor dry and clean. Although, it may cause to increase the initial cost because in such cases, vacuum cleaners are required for cleaning.



Figure 3.1.1 Using Mop on floor

2. Kill the germs and infection causing bugs.

Killing germs, bacteria, and viruses is important for healthy conditions at work place. In recent years, we have seen what single virus Covid-19 can do to the world.



Figure 3.1.2 Applying Disinfectants on work area

3. Air cleaning.

Most of the time air contains dusts and various other particles which if left unchecked can cause health issues. A good ventilation design can help in reducing airborne transmission of respiratory infections. If you work in environment where cutting and grinding of metal, ceramics, and other materials is performed then having a good ventilation must be your top priority considering health of your workers. If you have installed an HVAC system in your work area then regularly cleaning it is

important to increase efficiency of HVAC system as well as prevent growth of moulds and bacteria in the system. If you want to specifically remove fine dust particles in your work area then you can use a vacuum cleaner which has HEPA filters. General value of healthy humidity is 30 to 50 percent. You can maintain this humidity by using a dehumidifier if your work area has dry air based on geographical location. Humid air is heavy and it eliminates air pollutants hence providing clean air in the workplace.



Figure 3.1.3 Air Filtration

4. Good lighting system.

Do not keep your lights dirty or it will reduce this effectiveness. Good light is important for working with concentration. Also, stairways and aisles should always have clear visibility by lights to preventing accidents.



Figure 3.1.4 Cleaning Light Bulbs

5. Use eco-friendly products.

These days just cleaning your work place is not enough. It is important to use environment friendly solutions for cleaning. If we do not start using eco-friendly products now, then Earth will reach to the point of pollution where there is no turning back.



Figure 3.1.5 Eco-friendly cleaning

6. Use properly marked dust bins.

Categorise your dust bins based on the wastage you produce at your work place. You can use separate dust bins for wet and dry garbage. If your waste materials include papers, glass, plastic, or metal then you can use same number of dust bins so that recycling these materials becomes easy and efficient.



Figure 3.1.6 Trash Bin Types

3.1.2 Benefits of Maintaining Workplace

Properly maintained work place means:

- Reduction in material handling time and effort.
- Lesser slips that can cause fatal accidents.
- Reduction in possible fire accidents.
- Lower frequency of illness in your workers due to respiratory problems
- Better management of tools and raw material

- Easy cleaning and maintenance of equipment.
- Improved health of workers due to hygienic conditions.
- Better utilization of your space.
- Reduction in property damage.
- Improvement in mood and morale of workers
- Increase in productivity of workers.



Figure 3.1.7 Growth representation

3.1.3 Planning a Housekeeping program

When you are creating a housekeeping program then you should consider easy and efficient storage of tools and raw materials. You should also try to reduce the movements of tools and raw materials from point A to B in your work area. For example, if your work includes cutting of a part then you should try to place cutting tools and related raw materials nearby and put a garbage bin of related type near your work area.



Figure 3.1.8 Planning

If you are worried about the extra cost caused by housekeeping then note that this cost will be overshadowed by increase in efficiency at your work place. Storages that are not planned properly can results in accidents due to improper materials handling. If you have access to layout of your plant then this can reduce the time required for housekeeping planning.

Training your workers in housekeeping is important if you want to increase efficiency using a good housekeeping plan. If your workers do not follow the plans then there is no point in even making a housekeeping plan.

Housekeeping is not a one-time affair. Housekeeping is a continuous cycle and it should be maintained every day. You should plan the job of your workers in such a way that housekeeping gets integrated in their daily activity. A good housekeeping program should assign:

- Cleaning workplace between shifts
- Day wise clean up
- Disposing the waste material
- Returning unused material to its storage
- Inspection by a supervisor for proper maintenance

Keep not of the places that are not used regularly and hence get ignored by workers when performing housekeeping maintenance. You should assign a days and workers to maintain those areas as well. Such areas can include boiler room, furnaces, generators, water tanks, and so on.

Creating a housekeeping program is just the beginning of improving your work place. You should always check for deficiencies in your program and update it accordingly based on feedbacks.

Notes

Exercise



1. Discuss some important reasons to manage workplace properly.

2. What are the benefits of managing workplace?

3. What are the factors for planning good housekeeping program?





4. Health and Safety

Unit 4.1 – Safety, Health, and Hygiene

Unit 4.2 – First Aid



Key Learning Outcomes



At the end of this module, participant will be able to:

1. State some common reasons of accidents at site.
2. State common accidents and prevention techniques
3. State ways to stay healthy and hygienic (personal hygiene)
4. Perform First-Aid for emergency

Scan the QR code or click on the link to check related video



<https://youtu.be/w9TbAwkx71I>

Health and Safety



https://youtu.be/-h1HFXM_ScE

First Aid

Unit 4.1: Safety, Health, and Hygiene

Unit Objectives

At the end of this unit, participant will be able to:

1. State some common reasons of accidents at site.
2. State common accidents and prevention techniques
3. State ways to stay healthy and hygienic (personal hygiene)

4.1.1 General Safety Rules

General safety rules are applicable in all types work places which are discussed next.

4.1.1.1 Work intelligently

- Substitute safer materials when possible.
- It is better to water-based products over solvent-based chemical products.
- Try to use products that do not generate dust.
- Do not put brushes or tools in your mouth it can cause injury.
- Do not eat, drink, or smoke in studios.
- Put the tools at their designated places.
- Read the labels on your materials. If you cannot get a specific smell from a toxic material then it does not mean it is safe. You can leave the smelling part to more suitable animals.
- Never use materials in unintended ways. For example, don't use standard paint for skin-painting.

4.1.1.2 Keep studio space neat and orderly

- Keep floors clean and dry.
- Arrange extension cords, pipes, hoses in such a way that to do not become obstruction for passing by people.
- Keep dangerous items in enclosed areas with proper markings.
- Keep your working area separate for pantry, janitor room, and other sections.

4.1.1.3 Ensure appropriate ventilation

- The mouth, nose, and skin can absorb hazardous materials. Ensure ventilation provides fresh air activity to decrease exposures to dusts, fumes, gases, mists, and vapours. Adequate ventilation means that clean air is flowing toward the artist and contaminated air is flowing away. Blowing air around with a fan without a source of clean air is not adequate ventilation, and can actually increase exposures to harmful substances.
- Prevent the accumulation of flammable vapours or spray mists to limit fire hazards with proper ventilation.

4.1.1.4 Have proper protective gear and cleaning supplies available

- Keep your dress separate from your regular clothes. Your work dress can have contaminants that require special care.
- Cleaning supplies should be placed at designated area.
- Always try to clean spillage immediately, even if it is a small spill. If there is a chemical spill then clean it properly.
- If the material spilled can catch fire then you can use activated charcoal, sand, or deodorant-free cat litter.
- If there is a possibility of accidental exposure to poisonous chemicals then you should rush to hospital or call an ambulance.

4.1.1.5 Wash hands when working with chemicals or hazard material

- Avoid using toluene, turpentine, kerosene, or other solvents to clean your skin.
- Use soap and water or baby oil or a skin cleanser.
- Wash under fingernails. Keep nails trim and do not bite nails.

4.1.1.6 Maintain your physical and mental health

- Recognize your physical, emotional, and mental limits.
 - o Alertness decreases with hunger and fatigue.
 - o Anger, sadness, hurrying and frustration increase chances of accidents and mistakes.

- Have regular health check-ups.
- Make sure your health care provider is familiar with the art and craft materials you use, your level of exposure, and your studio environment.

4.1.2 What is an Accident?

An **accident** is a specific, unpredictable, unusual, and unintended external action which occurs in a particular time and place, with no apparent and deliberate cause but with marked effects.

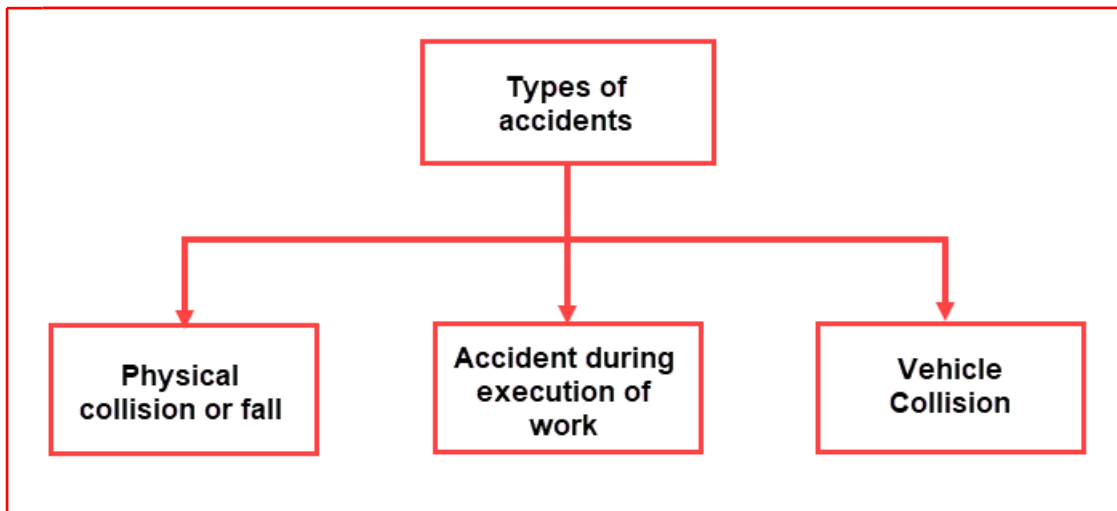


Figure 4.1.1 Types of accidents

4.1.2.1 Frequently occurring accidents/hazards in Workshop

Some of the more frequently encountered hazards include:

- Electrical hazards
- Hazard due to scissors and needle
- Falling object hazards
- Equipment failure
- Fire Hazard
- Slipping on Floor
- Missing steps and falling on stairs

4.1.3 What is a Fire Extinguisher?

Fire extinguishers are a fire protection device used to extinguish or control small fires.



Figure 4.1.2 Fire Extinguisher

4.1.3.1 How does a fire Extinguisher Work?

Fire extinguishers contain carbon dioxide, which is the chemical that creates the pressure over the extinguishing agent. Once the lever is pushed, Carbon dioxide will push the agent and project it through the hose.

Types of Fire Extinguishers

Fire extinguishers are classified based on the type of burning material. This classification is shown in next figure.



Figure 4.1.3 Classification of Fire Extinguisher

4.1.3.2 General method to operate a Fire Extinguisher

P A S S

Pull the Pin at the top of the extinguisher. The pin releases a locking mechanism and will allow you to discharge the extinguisher.

Aim at the base of the fire, not the flames. This is important - in order to put out the fire, you must extinguish the fuel.

Squeeze the lever slowly. This will release the extinguishing agent in the extinguisher. If the handle is released, the discharge will stop.

Sweep from side to side. Using a sweeping motion, move the fire extinguisher back and forth until the fire is completely out. Operate the extinguisher from a safe distance, several feet away, and then move towards the fire once it starts to diminish. Be sure to read the instructions on your fire extinguisher - different fire extinguishers recommend operating them from different distances. Remember: Aim at the base of the fire, not at the flames!!!!

4.1.4 What is Health?

Traditionally, health is defined as the absence of illness. WHO defines health in this positive way:

Health is a state of complete physical, mental and social well-being – and not merely the absence of disease or infirmity.

Maintaining clean environment at work:

- Designate storage space for everything.
- Provide sufficient housekeeping tools, including brooms, clean rags, and spill absorbers.
- Define areas for scrap storage and schedule regular collection, removal, and disposal.
- Assign clean-up responsibilities and make sure work sites are cleaned and cleared before quitting time.

Hygiene – It is a set of practices performed for preservation of health. It is maintained in personal, home, food and workplace.

Personal Hygiene - The cornerstone of hygiene. The body is the source and entry point of many illnesses. Appropriate personal hygiene can prevent all sorts of diseases

Hygiene at home – When you spend your time at home you may as well maintain hygiene as the air you breathe can affect your breath.

Food - Whether in the home, in industry or in catering, food hygiene should be second nature at this time when new food risks are sharply on the increase

Instilling hygiene rules and basics - These should rapidly become second nature and act as a safeguard for the health of the population at large. Setting an example, repetition and education are most important in successfully applying personal, domestic, food or pet hygiene. Likewise, vaccination is an invaluable preventive measure, and should be undertaken at the appropriate time, and booster schedule adhered to.

Each of us has a contribution to make to health, and this starts with basic day-to-day ground rules for hygiene.

Effective hygiene should be instilled in us from a young age so that it becomes second nature. Hygiene is essentially a healthy attitude towards life in general, including a balanced diet, a well-ordered lifestyle, balanced sleeping patterns and avoiding smoking, alcohol and drugs. Living hygienically is the first step towards a healthier society.

4.1.5 Working with People having Disabilities

There are a lot of misconceptions when people with disabilities are involved in Team. It is generally assumed that they will need help in doing their work from other team members. If one can understand that people with disabilities are people just like any other team members then it would be more productive for the team. It is better to focus on the abilities of PwD (People with Disabilities) rather than focusing on their disabilities. There are a few etiquettes to be followed when interacting with People with Disabilities:

4.1.4.1 Golden Rule for Interaction

The golden rule for interacting with anyone including People with Disabilities is the simplest to understand. "You should treat everyone in the same way as you want to be treated when placed in their situation." Imagine what you would want to hear when you had the disabilities similar to the person in front of you.

4.1.5.2 Ask before Assisting

Just because someone has disabilities does not mean he/she will need your assistance in doing their work. Most of the time people cause problems for person with disabilities rather than helping them. It is also a rude gesture when helping PwD without asking them first. Most of the time People with Disabilities have unique ways to do the same work which you may not even imagine.

4.1.5.3 Do not Label

You should not use label language with interacting with PwD. Example of label are deaf, dumb, insane, dwarf, and so on. In place of using labels, it is better to use People First language. The people first language equivalent to insane is "person with mental illness". You can also use survivor language which can also boost morale of PwD like you should say, "person is survivor of xxxx mental illness".

4.1.5.4 Do not show Pity or Patronize

After assigning label, this is the second most common mistake anyone does when interacting with PwD. Always keep in mind that person with disabilities deserves same dignity and respect as any other abled person. Person with disability is not a victim, he/she is survivor and you should treat them in the same manner.

4.1.5.5 Make Eye Contact

It is first nature of human to see the differences in people rather than seeing similarities. When interacting with PwD, you should keep eye contact with the person when talking. This gesture shows that you take them equal to yourself. If the person in front of you uses wheel chair, then you should talk to them while sitting in chair hence making same eye level. Kneeling before wheel chaired person will make them look like child in their eyes.

Sometimes people avoid to eye contact with person with disabilities because they fear that they may say something offensive to that person. This behaviour is misinterpreted as ignoring by them

hence causing more disrespect because no one in a group would like to be ignored. Always try to find common ground if you are hesitant in interactive with PwD.

4.1.5.6 Understanding Abilities of Disabled Person

Disabled persons generally add new ideas and ways to perform tasks in a team. You should understand their way of working on the projects before assigning jobs to them. If you are a team leader then you should always assign the most appropriate and safe job to disabled person based on their abilities.

4.1.5.7 Speak Direct First

If the disabled person is accompanied by a caregiver, then you should first try to talk directly with disabled person and once it is established that the person cannot communicate directly then only you can switch to caregiver for interaction. Doing this makes the disabled person understand that you see him/her as your equal.



Figure 4.1.1 Persons with disabilities

4.1.6 Gender Sensitisation

Gender sensitisation refers to the process of making people aware about gender equality and making people understand that there are no predefined task limits for men and women. It is written in our constitution that equal status and opportunities are legal right of every man and woman as citizen of India. Note that gender is not sex here. Sex is the biological state of human. A person will be male, female or intersex due to biological conditions and genitals. Sex defines anatomical and physiological property of human. Gender is the role and expectations defined based on one's sex. Due to these social definitions defined on the basis of sex; dress codes, routines, freedom of expression, rights and opportunities are also divided between genders.

4.1.6.1. Gender Construction in Society

The root of gender construction begins in boys and girls as soon as they become aware to them self. They will be constantly bombarded with statement when growing up that a boy and a girl are different and they play different roles in society. There are various levels in society at which gender inequality is taught:

- Family Level
- School Level
- Religion Level

- Local Society Level
- Community Level

Once you place this bias against questions given next then you will understand how baseless this inequality is:

- What will happen if a girl is not taught household work and caring others?
- What will happen if a girl is taught to perform all the tasks which are reserved by society for boys?
- What happens if a boy is taught to perform household works and caring other rather than giving him tasks reserved for boys?
- Does being born as girls makes you learn household works automatically?
- Does being born as boy makes you learn outdoor activities automatically?

Answers to all these questions can be summed up in one line: It is the upbringing by parents and society that determines how a child grows and what he/she becomes.

4.1.6.2 Patriarchy

Patriarchy is the social system derived from gender biasness which considers men superior to women in social status. Due to this social system men are generally considered as head of family even if they are incompetent. Due to this system, men are considered as the one who will carry family name, inherit property and make all the family decisions. Patriarchy is a double edge sword because it also puts the burden of expectations on men and limiting this freedom of choices. For example, boy is expected to become dancer, musician, tailor or cook. Women are the biggest victim of this patriarchy system because they are limited in almost all their choices starting from their dressing to their interaction in society.

Although the society is changing and women are coming forward to become scientists, drivers, pilots, athletes, entrepreneurs but the pace of this change is very slow.

4.1.6.3. Gender Equality

Gender equality is not sex equality. It does not mean men and women are same. It means that there should be no constraint/restriction in access to social opportunities and decisions based on gender for men and women. Following are the steps to achieve gender equality in society:

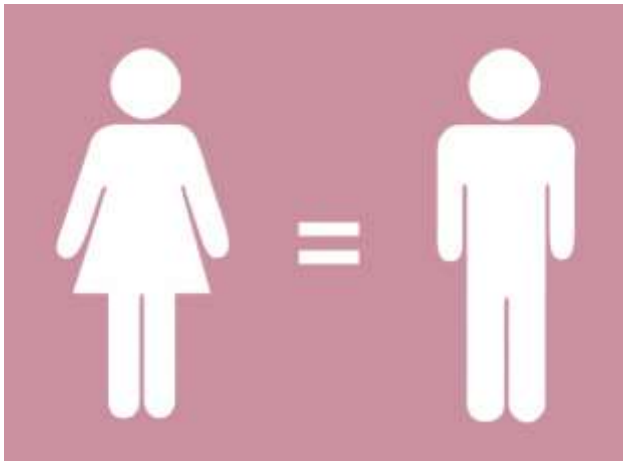


Figure 4.1.2 Gender equality

- Changing regressive norms: Our social system is full of such norms like women is paid less than a man for same work, household work is the primary work of women, and so on. These norms should be removed from our society for establishing equality.
- Equal Access: For establishing gender equality, women/girl should have equal rights in inheritance, family assets, loans, credits, opportunities, and so on.
- Changing Mindset: From centuries it has been the mindset of society that girl/woman is inferior to man. This has generated many secondary problems in society. Common examples of such mindset are like; a girl cannot choose her life partner, a women cannot leave home town for job, and so on.
- Changing Biased Social Practice: Social practice like dowry, restricted dress codes, Child birth selection, and so on put the girl/woman at disadvantage in society. Such social practice must be changed.

4.1.6.4 How to Promote Gender Equality

- In daily life, all the adult members should share the household chores. Do not think that kitchen work and other household work are responsibilities of females only.
- Do not ignore comments that discourage women to come forward and take a stand against them.
- If you see violence against women or harassment then provide support and help them.
- Consider female candidates equal to male candidates when voting.
- To achieve equality at work, be fair in hiring process and do not eliminate female from race.
- Provide equal wages to women for same work.
- Encourage a safe and healthy environment for working women in your organization.
- Do not allow offensive jokes and comments against female workers in your organization.

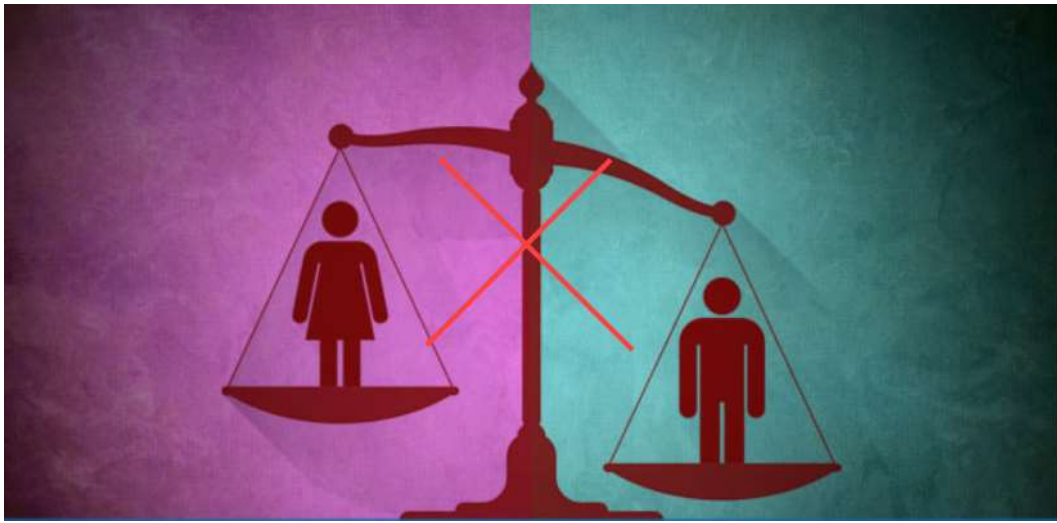


Figure 4.1.3 No to gender bias

Unit 4.2: First Aid

Unit Objectives

At the end of this unit, participant will be able to:

1. Know the common components of First Aid Kit.
2. Perform emergency procedures of First Aid in different situations
3. Report hazards and potential risks/ threats to supervisors or other authorized personnel
4. Participate in mock drills/ evacuation procedures organized at the workplace
5. Undertake first aid, fire-fighting and emergency response training, if asked to do so
6. Take action based on instructions in the event of fire, emergencies or accidents

4.2.1 First Aid and First Aid Kit

First aid is the assistance given to any person suffering a sudden illness or injury with care provided to preserve life, prevent the condition from worsening, or promote recovery.

4.2.1.1 Components of First Aid kit

Kits vary in contents but most kits have the following items:

- Band-aids / Adhesive bandages
- Gauze pads and tape
- Scissors, cold pack
- Wound bandage / compress
- Eye pads / eye wash solution
- First aid / burn cream
- Antibiotic ointment
- Face shield or barrier mask for providing CPR
- Forceps / tweezers
- Disposable thermometers
- First aid instruction booklet



Figure 4.2.1 First aid box



4.2.2 Common Procedures for First Aid in various situations

4.2.2.1 Adult / Child Choking: Severe Airway Blockage



Quickly ask, “are you choking?”

- If the victim nods yes, or is unable to talk, speak, or cough – act quickly.
- Stand behind the victim.
- Make a fist and place the thumb side of that hand against the victim’s abdomen, just above the navel and below the ribs. Grasp fist with the other hand.
- Quickly thrust inward and upward into the abdomen.
- Repeat thrusts until object is expelled or victim becomes unresponsive.



Figure 4.2.2 Choking illustration

Victim is unresponsive:

- If needed, help the victim to the ground and call an ambulance.
- Begin chest thrusts as you would with CPR. Each time the airway is opened look for the object in the victim’s throat and if you can see it, remove it – being careful not to lodge the object further into the victim’s throat.
- Continue chest thrusts until EMS / Paramedics arrive, or the victim shows signs of breathing /responsiveness.

4.2.2.2 Minor Wounds

Signs and Symptoms:

- Break, cut or opening in the skin
- Bleeding – may be minor, moderate or severe
- Bruising and pain
- Infection
- Progressing shock

First Aid:

- If bleeding, apply direct pressure with a clean cloth or absorbent pad.
- Wash area with antibacterial soap and clean until there appears to be no foreign matter in the wound.
- Cover area with an adhesive bandage or gauze wrap.



Figure 4.2.3 Minor wound

4.2.2.3 Bruising

It is caused by broken blood vessels leaking blood under the skin. Bruising can be minimal or large and severe.



Figure 4.2.4 Bruising

Signs and Symptoms:

- Pain and swelling
- Discoloration: new bruising will be dark purple / older bruising will fade to greenish yellow

First Aid:

- Apply ice to injury to reduce pain, bleeding and swelling.
- To prevent frost bite to the injured area, place a thin towel or cloth between the skin and ice. Limit ice application to 20 minutes on, 20 off.

4.2.2.4 Shock

Shock develops when not enough blood flows to the vital organs of the body. Victims with shock may stop responding.

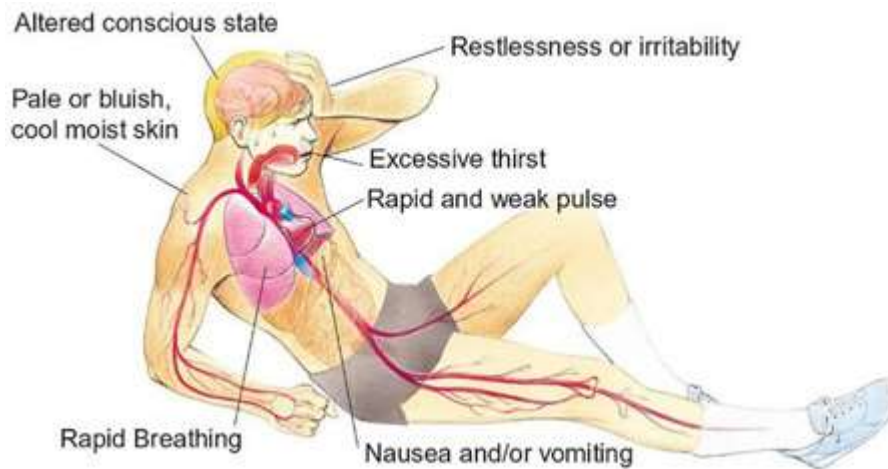


Figure 4.2.5 Shock

Signs and Symptoms:

- Dizziness, faint or weak feeling
- Rapid, shallow breathing
- Anxiety, restlessness, agitation, or confusion
- Cool and clammy to the touch
- Pale or grayish skin
- Thirst
- Nausea or vomiting

First Aid:

- Help person lie on their back.
- Keep victim lying flat with feet slightly elevated if possible.
- Cover person to keep him/her warm, but prevent overheating.
- Ensure an open airway for victim and adequate breathing.
- Monitor victim and administer CPR if necessary.

4.2.2.5 Burns

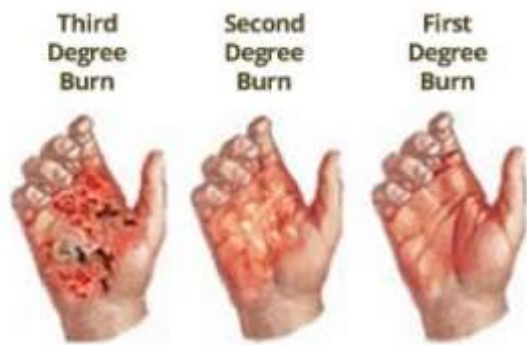


Figure 4.2.6 Burn

Signs and Symptoms:

- Pain, Redness
- Swelling, Blisters

First Aid:

- Expose the burn.
- Cool burns with cold water and continue until pain lessens.
- After cooling, cover with a dry, sterile bandage or clean dressing.
- Protect from friction /pressure
- Do not pop blisters or apply any ointment.

4.2.2.6 Bites and Stings First Aid



Figure 4.2.7 Bite or sting

General Signs and Symptoms:

- Redness
- Swelling
- Pain
- Itching
- Nausea
- Problems breathing

First Aid:

- Remove jewellery and constrictive clothing
- Wash the area with soap and clean water
- Cover the area with an adhesive bandage or gauze wrap
- Apply ice if needed to reduce pain and swelling

4.2.2.7 Heat Exhaustion First Aid

Figure 4.2.8 Heat Exhaustion

Signs and Symptoms:

- Cool, moist skin with goose bumps when in the heat
- Heavy sweating
- Faintness
- Dizziness
- Fatigue
- Weak, rapid pulse
- Low blood pressure upon standing
- Muscle cramps
- Nausea
- Headache

First Aid:

- Stop all activity and rest.
- Move to a cooler place.
- Drink cool water or sports drinks.
- Contact your doctor if your signs or symptoms worsen or if they don't improve within one hour. Seek immediate medical attention if your body temperature reaches 104°F (40°C) or higher.

4.2.3 Personal Protective Equipment (PPE)

Personal protective equipment (PPE) refers to **protective** clothing, helmets, goggles, or other garments or **equipment** designed to protect the wearer's body from injury or infection. The hazards addressed by **protective equipment** include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.



Figure 4.2.9 Personal Protective Equipment components

Exercise



1. Discuss some general safety rules for working in the workshop.

2. What is PPE and are the common components of PPE?

3. What is an accident and what are the types of accidents?

4. Discuss the types of fire-extinguishers and their uses.

5. Write a short note on health and hygiene.

6. What are the common components of First-Aid kit?

7. What are the symptoms of shock and what should be the first-aid?

8. What are the symptoms of heat exhaustion and what should be the first-aid?





5. Team Work

Unit 5.1 – Working in a Team



Key Learning Outcomes



At the end of this module, participant will be able to:

1. Know the benefits of team work.
2. Understand the stages of team building.
3. Understand the methods of working in a team effectively.
4. Work effectively and efficiently at workplace
5. Properly communicate about organization policies
6. Talk politely with other team members and colleagues
7. Adjust in different work situations
8. Give due importance to others' point of view
9. Avoid conflicting situations
10. Develop new ideas for work procedures

Scan the QR code or click on the link to check related video



<https://youtu.be/HEkGrPDCu2k>

Team Work

Unit 5.1: Working in a Team

Unit Objectives



At the end of this unit, participant will be able to:

1. Describe the benefits of team work.
2. Identify the stages of team building.
3. Identify the methods of working in a team effectively

5.1.1 Why work in teams?

There are several good reasons:

- Everyone learns by imitating. Hence, those who are slow to learn will eventually come at same level as rest of the team.
- When working on complex job, a team can do individually do collective tasks.
- Teamwork helps in developing interpersonal skills like coping with conflict.

5.1.2 Effective teams

Why do some groups accomplish very little, while others achieve much more?

This difference is caused by internal compatibility of team members and their vision for common goal. The features of an effective team include:

- every team member giving their best
- clear vision of their goal
- each group member willing to learn
- trusting each other and supporting each other
- Free flow of knowledge within team
- Open feedback system.

5.1.3 Making the most of your team

There are many advantages of working collaboratively with other team members. To make the most of your experience as a team member, remember to:

- Not wait for others to pull you. You should take initiatives.
- Share your ideas with other team members.
- Cooperate with your team members and follow the instructions.
- Respect your team members and try to build a healthy competitive environment.
- Use your time efficiently towards achieving the common goal.
- Always be positive for your hard work.
- Keep note of your team members regularly.
- Ask your team leader for frequent feedback.
- Try to be gentle with other.
- During hard times, do not blame others. Keep calm and help others achieve the goal.

5.1.4 Group development Process

There are five stages of a group development. These are sometimes defined as:

- Forming, or coming together
- Storming, or conflict
- Norming, or working out the rules
- Performing, or getting the job done
- Mourning, or breaking up.

The length of time different groups take to pass through each of these developmental stages will vary, but you cannot get a high performance until your group has passed through at least the first three stages. The duration of each stage will depend on factors such as individual and team maturity, task complexity, and so on.

5.1.4.1 Forming

At this stage new members are found by possible team leader and they get together to know each other.

The objectives to be considered when finding people for team are:

- Grasp of goals and objectives by people
- tasks and roles to be performed by team members
- clear idea about work plan
- understanding in behavioural pattern of people

They will:

- demonstrate excitement
- participate hesitantly
- show tentative attachment to the group
- discuss problems peripheral to the task
- be uncomfortable and anxious about the new situation
- accomplish minimal work

This stage is complete when new members start thinking of themselves as part of a group.

5.1.4.2 Storming

At this stage of newly recruited members of team can become hostile or over-conscious about themselves as individual and resist group formation.

They will express:

- infighting, defensiveness and competition
- doubts about success
- low group morale
- polarisation of group members
- concern over excessive work
- disunity and increased tension

Many groups do not go beyond this stage if they lack the ability to listen to each other and overcome the issues.

5.1.4.3 Norming

At this stage members start accept the team, create the team norms and their own roles. At this stage there will be a few emotional conflicts.

Group members will try to:

- achieve maximum harmony by avoiding conflict

- develop a high level of trust and respect for others in the group
- discuss group dynamics constructively
- form friendships
- develop a sense of team cohesion with a common spirit and goals
- have high group morale
- establish and maintain group boundaries
- accomplish a moderate amount of work

At this stage, the real leader of team will emerge or should be agreed upon who can focus the group resources to solve problems.

5.1.4.4 Performing

A properly grouped team at this stage is capable of diagnosing and solving problems. This stage is not always reached by all teams.

Group members at this stage will:

- be willing to sort through group problems
- develop high conflict resolution skills
- understand members' strengths and weaknesses
- undertake constructive self-change
- accomplish a great deal of work

Groups reaching this stage will be effective and will devote energy to maintain good group relations.

5.1.4.5 Mourning

This is the final stage of teams that were developed temporarily as task groups or committees.

Exercise



1. Why should we work in a team?

2. What are the features of an effective team?

3. Discuss the group development process.

4. How can we get the maximum output from a team?

Scan the QR code or click on the link to check related video

Employability and Entrepreneurship



<https://youtu.be/3gNbKtZXcco>



<https://youtu.be/IK7cxNsH2W4>



<https://youtu.be/aGrEKVOoJug>




6. Annexure


Annexure 1 – Details of QR codes given in the Units



Annexure 1: Details of QR codes given in Units

Sr. No.	Module Name	Unit Name	Name of Topic	URL	Page No.	QR Code
1.	Module 1. Introduction	Unit 1.1: Paper Mache Sector in India	1.1.1 Introduction to Paper Mache Sector 1.1.2 Paper Mache Art in India	https://www.youtube.com/watch?v=G-yfJxwvAGw	2	 Paper Mache Sector in India
		Unit 1.2: Job Role of Paper Mache Artisan	1.2.1 Job of Paper Mache Artisan 1.2.2 Opportunities for Paper Mache Artisan	https://www.youtube.com/watch?v=C33zJR3cvBE	2	 Job Role of Paper Mache Artisan
2.	Module 2. Making of Sakhta (Paper pulp)	Unit 2.1: Preparation of Paper pulp	2.1.1 Raw Material for Paper Mache 2.1.2 Tools and Equipment 2.1.3 Preparing Paper Pulp	https://www.youtube.com/watch?v=ygWSOEfWrOI	17	 Preparation of Paper pulp
		Unit 2.2: Making Paper Mache Products	2.2.1 Making Paper Mache Products	https://www.youtube.com/watch?v=nzKXWj10I8E	17	 Making Paper Mache Products
3.	Module 3. Work Area Management	Unit 3.1: Work Area Management	3.1.1 Reasons to Manage Workplace 3.1.2 Benefits of Maintaining	https://www.youtube.com/watch?v=Ztk6PXD1EjU	47	 Work Area

			Workplace 3.1.3 Planning a Housekeeping program			Management
4.	Module 4. Health and Safety	Unit 4.1: Safety, Health, and Hygiene	4.1.1 General Safety Rules 4.1.2 What is an Accident? 4.1.3 What is a Fire Extinguisher? 4.1.4 What is Health?	https://www.youtube.com/watch?v=5n-ZpBo7cHI	57	 Safety, Health, and Hygiene
		Unit 4.2: First Aid	4.2.1 First Aid and First Aid Kit 4.2.2 Common Procedures for First Aid in various situations 4.2.3 Personal Protective Equipment (PPE)	https://www.youtube.com/watch?v=dCi5fP9D7hM	57	 First Aid
5.	Module 5. Team Work	Unit 5.1: Working in a Team	5.1.1 Why work in teams? 5.1.2 Effective teams 5.1.3 Making the most of your team 5.1.4 Group development Process	https://www.youtube.com/watch?v=Q62UwEPPnrg	81	 Working in a Team

6	Module 6 Employability and Entrepreneurs hip	Unit: Employability and Entrepreneurship	6.1.1 Employability and Entrepreneurship	https://youtu.be/3gNbKtZXxco	87	
				https://youtu.be/IK7cxNsH2W4		
				https://youtu.be/aGrEKVOoJug		





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Skill Council for Persons with Disability

Skill Council for Persons with Disability

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